

Millersville University Curriculum

2026-2027 Edition

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Colleges

Overview

Millersville University offers a wide range of learning opportunities perfect for all of our students.

Explore these colleges and discover the endless opportunities available at MU!

- College of Arts, Humanities and Social Sciences
- The Lombardo College of Business
- College of Education and Human Services
- College of Science and Technology
- University College

Colleges

College of Arts, Humanities and Social Sciences

Overview

The **College of Arts, Humanities and Social Sciences** is known for its broad range of majors and interdisciplinary programs. We invite you to explore these exciting possibilities! Our faculty pride themselves on high quality teaching and deep commitment to student success. AHSS' programs are built on a strong foundation of liberal arts education, which we believe prepares our students for a wide variety of successful career paths.

We offer a transformative curriculum that enables our graduates to reason effectively, write clearly, speak persuasively, think critically and ethically, express themselves creatively, work collaboratively and have a broad perspective on diverse cultures and contexts. Many of our programs offer unique opportunities for hands-on learning in our state-of-the-art facilities, for example, art studios, music recording facilities, performance spaces, TV studio, language labs and others. All of our programs incorporate numerous opportunities for internships with regional companies, research with faculty, service learning projects, participation in professional conferences and competitions, and study abroad. Our graduates leave equipped with a wide array of transferrable skills as well as breadth and depth of knowledge that will allow them to adapt and evolve as life-long learners.

View all programs within the College of Arts, Humanities and Social Sciences

Departments

- African-American Studies
- Art & Design
- Communication & Theatre
- Criminology, Sociology and Anthropology
- English & World Languages
- Entrepreneurship
- Government, Law, and International Relations
- History and Philosophy
- International Studies
- Latina/o Studies
- Military Science
- Tell School of Music
- Women's, Gender and Sexuality Studies

Colleges

The Lombardo College of Business

Overview

The Lombardo College of Business launched in 2019 and is the fastest growing college at Millersville University. The college consists of four departments: Accounting & Finance, Economics, Management & Marketing, and Wellness & Sport Science. We offer a wide variety of degrees that connect with students' diverse interests. These include the Bachelor of Science (B.S.) degrees in accounting, finance, information technology, management marketing, business administration, and sport administration, with concentrations in general business, international business, cybersecurity, HR management, wealth management, and sport business. We have interdisciplinary degrees in business analytics and entrepreneurship. We also offer a Bachelor of Arts (B.A.) degree in economics. For advanced degrees, we have a Master of Education in Sport Management, with concentrations in Athletic Coaching and Athletic Management.

Our programs are designed to provide study in the areas that will help our graduates thrive in their respective disciplines. Our B.S. programs in Business Administration, Management, and Marketing are offered in-person and online formats. The College's program has a diverse faculty with extensive academic training and private-sector experience.

Our curriculums also provide excellent preparation for graduate and professional studies leading to degrees such as the M.B.A., M.S., Ph.D. and the J.D. Accounting students have available all the necessary coursework to sit for either the CPA or CMA, CIA, or the CFE examination.

Internships are an integral part of our program and link students with local and regional industry. Our degree programs are designed to easily integrate with minor programs. Studies in disciplines outside our college are required to help develop the well-rounded and liberally educated person employers seek.

Admission into our programs from other departments of the University is always possible. Those interested should apply to the relevant chairperson. Transfers from other institutions should check with the Office of Admissions. Please contact our college or the appropriate chairperson for an application. Students who are interested in online degree options should contact the Office of Online Programs.

View all programs within The Lombardo College of Business

Departments

- Accounting and Finance
- Management, Marketing and Information Technology
- Economics
- Wellness & Sport Sciences

Non Credit Certificate Programs (NCD)

Applied AI Mastery
19 Week Program (non credit)

Program Overview

- Total Hours (clock): 475 total hours = 25 hours/week *19 weeks
- Duration: 19 weeks
- Modality: Online
- Tuition: $23,000
- Prerequisites: Technical Foundations Assessment

Course Description
This program provides a hands-on education in applied artificial intelligence — from AI foundations through workflow automation, agentic systems, software architecture, security, and system analysis and consulting. Through a mastery-based approach, students develop and demonstrate actual competency by building real AI systems, deploying them to production, and proving measurable business value for real clients.

The program is designed to transform beginners into job-ready AI professionals, positioned to serve the 90% of the economy that has not yet adopted AI. The primary outcome of the program is a portfolio of deployed projects, a real-business capstone with measured ROI, and the skills to assess needs and create value with AI in various business settings.

Students will develop technical proficiency across AI tools, automation platforms, agentic architectures, and secure software deployment. Students will also learn to analyze business workflows and systems, diagnose opportunities for acceleration and complete capstone projects demonstrating real ROI.

Program Deliverables

Learning Objectives

Upon successful completion of the program, students will be able to:

1. Set up and customize an AI-powered development environment with integrated tools, agents, and automated workflows tailored to their specific work context.

2. Analyze a business's existing workflows and systems to identify inefficiencies, manual bottlenecks, and opportunities where AI-driven solutions would deliver measurable impact.

3. Build and deploy custom software using AI as a force multiplier throughout the entire development lifecycle.

4. Design and implement automations and AI agent workflows that replace manual, repetitive business processes with reliable, scalable systems.

5. Evaluate proposed solutions in business terms — calculating ROI, cost savings, capacity gains, and revenue impact — to build a compelling case for implementation.

6. Develop and present a professional case study that documents a real business problem, the solution implemented, stakeholder engagement, and measurable outcomes achieved.

7. Gain practical job-seeking skills, as well as technical interview experience.

Curriculum Breakdown

Topics Covered

Level	Topic	Hours (theory)
Level 1	Problem Solving Frameworks, Approaches, and Methodologies	40
	AI Fundamentals	35
Level 2	How the Internet & Software Systems Work	35
	AI Tools & Workflow Customization	40
Level 3	Automations, AI Agents, and Agentic Workflows	60
Level 4	AI Assisted Software Development	35
	Security	30
	Deployment & Operations	25
Level 5	Business Systems Analysis	40
	Business Economics & ROI	35
Level 6	Case Study Development & Presentation	75
Throughout Program	Job Search Fundamentals	25
TOTAL		**475**

Application and Program Requirements & Expenses

There is no application fee. Students must complete a free preliminary evaluation prior to enrolling in this program. Students are required to have an Apple or Windows Laptop computer no older than 2022 and **at least** 8 Gb of RAM. Students will be required to have at least 1 paid LLM subscription and should budget approximately $100/month for personal AI tools and licenses.

Attendance

All students are required to maintain consistent weekly engagement. Because these programs are delivered online and self-paced, attendance is measured through learning management system (LMS) activity. Indicators of attendance include:

- Completion of curriculum modules, exercises, and projects
- Submissions to required assessments
- Progress toward weekly benchmarks (approximately 25 hours per week of designed curriculum engagement)

Students who do not demonstrate measurable progress for one consecutive week will receive a written warning. Students who do not demonstrate measurable progress for two consecutive weeks will be withdrawn from the program.

Student Progress

Student progress is monitored through the learning management system (LMS) and evaluated at regular intervals by Millersville instructors. Students are assessed on two dimensions:

1. Curriculum completion — completing all assigned modules, exercises, and projects within the program timeline.
2. Competency demonstration — passing required technical assessments that verify mastery of program material.

Assessment methods include quizzes, technical interviews, project reviews, and presentations/demos.

The program is graded on a Pass/Fail basis. Students must pass all required assessments to earn the certificate.

Students who fall behind the expected pace will be contacted by their instructor to develop a plan for getting back on track. Students who do not meet progress requirements may be placed on academic probation or withdrawn per the attendance policy above.

Instructors

Bob Ziroll, B.A., Brigham Young University, 2011; 12 years industry experience

Academic Calendar for 2025-26 Academic Year

This program has one start date each month.

Start Date	Refund Deadline	End Date
7/1/2025	7/11/25	11/13/25
8/5/2025	8/15/25	12/18/25
9/2/2025	9/12/25	1/16/26
10/7/2025	10/17/25	2/24/26
11/4/2025	11/14/25	3/23/26
12/2/2025	12/12/25	4/16/26
1/6/2026	1/16/26	5/19/26
2/3/2026	2/13/26	6/16/26
3/3/2026	3/13/26	7/15/26
4/7/2026	4/17/26	8/19/26
5/5/2026	5/15/26	9/17/26
6/2/2026	6/12/26	10/15/26

IT & Cybersecurity Fundamentals

19 Week Program (non credit)

Program Overview

- Total Hours (clock): 475 total hours = 25 hours/week *19 weeks
- Duration: 19 weeks
- Modality: Online
- Tuition: $23,000
- Prerequisites: Cybersecurity Foundations Assessment

Course Description

This course provides adult career changers a strong foundation in essential Cybersecurity concepts, tailored for individuals seeking to enter various cybersecurity or IT fields. With a mastery-based approach, participants will develop and be required to demonstrate actual competency of relevant skills and concepts, empowering them to pursue a successful career in the ever-growing Cybersecurity industry.

Students will have the opportunity to earn globally recognized IT and cybersecurity certifications. The program's primary outcome is the ability to obtain the professional-level CompTIA A+, Security+ and CySA+ certifications, significantly enhancing career prospects in the field. Obtaining each of these certifications shows a very strong foundational understanding of modern technology, network environments, cybersecurity best practices, and applied security operations and analysis.

Program Deliverables

Learning Objectives

Upon successful completion of the course, students will:

1. Develop and demonstrate a comprehensive understanding of essential Cybersecurity concepts and skills.
2. Obtain a Millersville University IT & Cybersecurity Fundamentals Certificate
3. Obtain CompTIA's A+ Certification
4. Obtain CompTIA's Security+ Certification
5. Obtain CompTIA's CySA+ Certification
6. Gain practical job-seeking skills tailored to the tech industry, as well as technical interview experience.

Course Curriculum Breakdown

Topics covered

Level	**Topic**	**Hours (theory)**
Level 1	Hardware Troubleshooting / A+ Core 1	75
Level 2	Software & Scripting / A+ Core 2	60
Level 3	Network Administration & Fundamentals: Segmentation, DHCP & DNS, Network Architecture	80
Level 4	Cyber Essentials: Attack Methodology Frameworks, Threat Intelligence & Threat Hunting, Incident Response	60
Level 5	CompTIA Security+ (SY0-701)	90
Level 6	CompTIA CySA+ (CS0-003)	90
Throughout program	Job Search Fundamentals	20
TOTAL		**475**

Application and Program Enrollment Requirements & Expenses

There is no application fee. Students must complete a free preliminary evaluation prior to enrolling in this program. Students are required to have an Apple or Windows Laptop computer no older than 2022 and at least 8 Gb of RAM. Students will be required to have at least 1 paid LLM subscription and should budget approximately $100/month for personal AI tools and licenses.

Attendance

All students are required to maintain consistent weekly engagement. Because these programs are delivered online and self-paced, attendance is measured through learning management system (LMS) activity. Indicators of attendance include:

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Students who fall behind the expected pace will be contacted by their instructor to develop a plan for getting back on track. Students who do not meet progress requirements may be placed on academic probation or withdrawn per the attendance policy above.

Instructors

Jacob Ramirez, B.S., Western Governer's University, 2017; CCSP; CISM; CompTIA Security+, Cloud Admin, Secure Cloud, Cloud+, Cloud Essentials, Secure Infrastructure, IT Operations Specialist, Project+, Networking+, A+

Academic Calendar for 2025-26 Academic Year

This program has one start date each month.

Start Date	Refund Deadline	Last day of course
7/1/2025	7/11/25	11/13/25
8/5/2025	8/15/25	12/18/26
9/2/2025	9/12/25	1/16/26
10/7/2025	10/17/25	2/24/26
11/4/2025	11/14/25	3/23/26
12/2/2025	12/12/25	4/16/26
1/6/2026	1/16/26	5/19/26
2/3/2026	2/13/26	6/16/26
3/3/2026	3/13/26	7/15/26
4/7/2026	4/17/26	8/19/26
5/5/2026	5/15/26	9/17/26
6/2/2026	6/12/26	10/15/26

Colleges

College of Education and Human Services

Overview

The **College of Education and Human Services** inspires students to fulfill their dreams of becoming teachers, school leaders, psychologists, social workers and more.

Together we partner with students to provide them with the knowledge and skills needed to become strong, independent professionals in their fields.

Since 1855, when Millersville University became Pennsylvania’s first Normal School, our education programs have been at the forefront in the region. Education and educator preparation have certainly evolved since then, so we have integrated 21st century approaches to teaching and learning into our early childhood, middle level, secondary and special education programs.

The Department of Psychology develops responsible citizens applying psychological principles in work, study and life. We also prepare graduate students for careers in clinical psychology, school psychology and school counseling.

Our School of Social Work offers bachelor's, master's and doctoral programs to begin or continue your career to be a positive agent of social change.

In the classroom, in the community and abroad, together we will achieve the remarkable. Your passion will be guided by some of the nation's top professors leading to a 95 percent employment rate. We invite you to visit our campus, meet our faculty and students, and become a Millersville Marauder.

View all programs within The College of Education and Human Services

Departments

- Early, Middle & Elementary Education
- Educational Foundations
- Psychology
- School of Social Work
- Special Education

Colleges

College of Science and Technology

Overview

In the **College of Science and Technology** excellence in teaching and learning is our highest priority.

Our departments have a long history of providing students with the depth and breadth of education needed for success in contemporary fields of science and technology. Several important points you should know about our College faculty are:

- We are experienced educators, with approximately 98 percent of the full-time faculty in the College holding doctoral degrees.
- We are active scholars who conduct research and bring our passion and knowledge into the classroom.
- We embrace the use of high-impact educational practices in the curriculum to help facilitate your education and the development of skills necessary for you to be an independent, life-long learner. Various forms of experiential learning can be found throughout the curriculum, from faculty-mentored research and internship experiences to the opportunity for students to communicate their work to members of the public as well as to the professionals within their respective disciplines.

At Millersville, we encourage our students to work TOGETHER to be STRONG, capable learners!

As you research the science and technology programs at Millersville University through our website, be sure to read the brief highlights of our departments, our student research and internship experiences, student club opportunities, as well as alumni accomplishments. After your virtual online tour, we invite you to visit our campus in person, to meet our faculty and students, see our modern facilities, and learn more about our exceptional programs.

View all programs within The College of Science and Technology

SCIENCE AND TECHNOLOGY FACILITIES

The Millersville University Argires Science Complex includes the 88,000-square-foot Caputo Hall (constructed in 1999), the 55,000-square-foot Roddy Hall (renovated in 2001), Brossman Hall and Nichols House. The complex includes 42 teaching laboratories, 39 individual student research laboratories, specialized support laboratories, 11 classrooms, four lecture halls, a student study lounge, a student café and lounge, seminar and conference rooms, and faculty offices. Classrooms are all outfitted with multimedia technology. The Department of Computer Science has two computer teaching laboratories: the human-computer interaction laboratory and the graphics, virtual reality and haptics laboratory. This is one of the finest science facilities in the region; it houses programs in biology, chemistry, computer science, earth sciences, physics and nursing.

Wickersham Hall, home of the Department of Mathematics, houses departmental and faculty offices, as well as a mathematics computer laboratory with 36 networked PCs, each loaded with an array of mathematical software, including the Mathematica computer algebra system and the Minitab and SAS statistical software packages. Wickersham also has student study areas, a conference room, dedicated space for mathematics tutoring and eight classrooms. It was completely renovated in 2006.

Facilities for the Department of Geography, housed in McComsey Hall, include the Environmental Geography Lab and the Geo-Graphics Lab. The Environmental Geography Lab was recently completed and is the primary classroom for staging laboratory and field exercises in a variety of environmental and physical geography courses. Additionally, the facility is utilized by faculty and students as they conduct independent research projects. The Geo-Graphics Lab is the teaching classroom for GIS-based courses. The Geo-Graphics Lab is also the common study and workspace for students in all geography courses and for scheduled group tutoring. The Geo-Graphics Lab houses approximately 20 PC work stations, a large-format plotter, and color and B&W printers. Instruction in all GIS-based courses utilizes the latest software, ArcGIS and ArcGIS Pro.

Osburn Hall is a 70,000-square-foot facility designed exclusively to house programs offered by the Department of Applied Engineering, Safety & Technology at Millersville. Osburn Hall provides laboratories, classrooms, offices, research areas and other spaces that support programs in applied engineering, engineering technologies, occupational safety and environmental health, technology and engineering education, and integrative STEM education.

The lower level of Osburn Hall includes an electronics lab; an energy, power & transportation lab; and an automation and robotics lab. The main floor includes our production laboratories (manufacturing & construction), along with an innovation lab, an integrative STEM laboratory for studying technology & engineering education at the elementary level, an administrative office complex, and a 60 seat multipurpose room. The upper level of Osburn hall is dedicated to graphic communications and packaging, drafting and design, and occupational safety and environmental health (OSEH). It includes an advanced CADD lab with a rapid prototyping area, an additional CADD lab, a desktop publishing laboratory, a graphics lab a CNC packaging lab, and a series of laboratories associated with the OSEH program, including fire science, confined space, safety engineering and industrial hygiene.

Millersville University has an extensive inventory of modern instrumentation that students use in classroom work and for independent study and research. Included are four large environmental chambers, autoclaves, optical microscopes, an atomic force microscope, an optical polarizing microscope, a scanning electron microscope, several types of spectrophotometers (FT infrared, visible-ultraviolet, 400 MHz FT nuclear magnetic resonance, and atomic adsorption), a gas chromatograph/mass spectrometer, a Raman spectrometer, a scintillation counter, phase contrast microscopes, optical bench components, a vibration-isolating table for holography and optical interferometry, a cryogenics unit, an excimer laser, an X-ray spectrometer, a cosmic ray muon detector, electrophoresis equipment, thermocyclers, ultramicrotomes, high-speed and tabletop centrifuges and microfuges, laminar flow hoods, CO2 incubators for tissue culture, ultralow freezers, an ultracentrifuge, several gas chromatographs, an electrochemical oxygen analyzer, an auto-analyzer, a high-vacuum system, equipment for microwave behavior study, and hardware/software for data capture. Field equipment includes dissolved oxygen probes, flow meters, a backpack electroshocker, PIT tagging equipment, active infrared monitors, a fluorometer, digital cameras, video cameras, turbidity meters, a microbalance and extensive air-sampling equipment. Additional science facilities include botanical glasshouses, a limnological research pond, the Keever ecological study area, several microcomputer-based laboratories, photographic darkrooms, and cold rooms. There are museum reference collections of mammals, birds, fishes, insects and other invertebrates, and modern animal-care facilities, including special aquatic “wet” rooms for maintenance of animals and research. There is an extensive botanical collection.

Millersville University meteorology has assembled a suite of instruments and associated equipment in support of boundary layer (BL) and atmospheric chemistry research and education. The BL component of this facility, referred to as the Millersville University Atmospheric Boundary Layer (MABL) facility, is mobile and has been deployed for several field projects from Philadelphia to California. MABL consists of the following: Rawinsonde and Tethered Balloon Sounding systems; Scintec MFAS Acoustic Sodar with radio acoustic sounder; Sigma Space micropulse LiDAR with cross-polarization; a 10-meter flux tower; trace gas analyzers and particle-scattering instruments; and trailer. Millersville also has its own Weather Research and Forecasting (WRF) Modeling System that is used for operational forecasting and in support of the observational studies and throughputs over 100 Gb per day of satellite, radar, model, upper air, and surface data and data products. Millersville meteorology supports a modern weather center, complete with an electronic map wall and streaming video production.

The geology program has a license for RockWorks software. Geophysical equipment includes a proton precession magnetometer, an Earth resistivity meter and a stacking seismograph with multiple geophones. The program has a sand-tank groundwater flow model and GMS-MODFLOW numerical groundwater modeling. The program also maintains a broadband seismograph that is part of the Lamont-Doherty Earth Observatory’s Cooperative Seismic Network. The Earth Surfaces Processes Laboratory maintains equipment needed for preparing rock and soil samples for chemical and mineralogical

analyses. A full suite of field water-sampling equipment is available for studies involving the chemistry and sediment of surface water. This includes handheld pH and conductivity meters. A total surveying station is available for topographic studies requiring accurate determination of elevation and distance, such as is used in hydrologic and geophysical studies and for LiDAR-derived elevation validation.

The ocean science and coastal studies program maintains a dedicated remote sensing laboratory equipped with ENVI/IDL software and state-of-the-art LiDAR processing hardware and software, including Terrasolid, LP360, Global Mapper, LasTools and Microstation. The program also maintains two CTDs, including a Seabird SBE 25 equipped with LiCor light sensors, a backscattering sensor, a YSI oxygen sensor, a fluorometer, an acoustic current meter and a newly acquired portable weather station. Millersville University is a senior full member of the Chincoteague Bay Field Station (CBFS) at the Marine Science Center at Wallops Island, Virginia, with full access to facilities, including two monitor boats, the R.V. Flatfish and R.V. Mollusk. Both are approximately 45 feet in length and are used primarily in the tidal creeks and backbay areas for trawling and sampling. The R.V. Phillip N. Parker is a 47-foot. crew vessel used mostly for cruises beyond the inlet and up to 25 miles offshore. CBFS also maintains a fleet of kayaks that allow access to cypress swamps, shallow tidal creeks and flats, and other areas where our motorized vessels cannot go.

The department also maintains two rotating tables to conduct experiments in geophysical fluid dynamics for teaching and research, a hydrogen-alpha solar telescope, a National Acid Deposition Program sampling site off campus, and a Geo-Graphics Lab running ARCView, ARCGIS (3-D Analyst, Spatial Analyst, Geostatistical) and Watershed Modeling System.

Departments

- Applied Engineering, Safety & Technology
- Biology
- Chemistry
- Computer Science
- Environment, Geosciences, and Emergency Management
- Environmental Studies
- Math and Physics
- Wehrheim School of Nursing

Colleges

University College

Overview

University College is comprised of offices and departments whose missions are committed to inclusive student success, engagement, and achievement, agency in student learning, and ongoing professional and personal development for sustained academic excellence.

View all programs within University College

VISION STATEMENT

The University College is committed to inclusive student success, engagement, and achievement, agency in student learning, and ongoing professional and personal development for sustained academic excellence.

MISSION

University College embraces MU's EPPIIC values in support of student academic, personal, and professional journeys to program completion and graduation by:

1. Advocating and supporting holistic needs to foster a sense of belonging, connectedness, awareness of opportunity, and equity in opportunity within the college and beyond. [COMPASSION]*
2. Empowering self-efficacy and agency to advance student outcomes. [INTEGRITY]
3. Offering high impact experiences and access to high quality resources to facilitate critical thinking and the discovery of knowledge. [EXPLORATION]
4. Providing individualized academic planning. [PROFESSIONALISM]

5. Delivering best practice guidance in career advising, career planning, and career-building experiences. [PROFESSIONALISM]
6. Fostering a safe, inclusive, and culturally responsive environment where all individual views, backgrounds, abilities, and identities are respected and valued. [INCLUSION]
7. Promoting participatory citizenship, leadership, mentorship, community-engaged scholarship, and service. [PUBLIC MISSION]

*Mapping to EPPIIC values

Offices and resources of University College are centrally located in McNairy Library with additional college departments located in Franklin House, Lyle Hall and McComsey Hall.

Our entire team is here to champion your achievement, foster opportunities, and promote work/life balance for sustained success. Connect with our resources early and often!

For more information visit: https://www.millersville.edu/universitycollege/

Departments

- Exploratory Studies and Student Development
- Center for Civic Engagement
- Center for Public Research
- Francine G. McNairy Library and Learning Forum
- Integrated Studies
- Multi-Disciplinary Studies (MDST)
- Office of Learning Services
- Starfish
- Success Coaching
- The Career Center
- University Honors College
- Writing Center

About MU

An Introduction to Millersville University

Millersville University of Pennsylvania, located in scenic Lancaster County, is one of the state-owned institutions of higher education that make up Pennsylvania's State System of Higher Education.

Millersville University does not discriminate on the basis of race, color, religion, national origin, ancestry, sex, age, or disability in admission or access to, or treatment or employment in, its programs and activities. This includes Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, and the Americans with Disabilities Act of 1990.

For questions or concerns about Millersville University's discrimination policy, contact the Human Resource department.

HISTORY

In the early 1850s, a group of private citizens in Lancaster County decided to sponsor a three-month summer school program that would provide more education for local pupils than what was then available in public schools. The immediate success of that initial program prompted its sponsors to propose that a permanent academy be established. The decision eventually led to the founding of what is now Millersville University.

The academy began in 1854 with the construction of a three-story building containing a small auditorium, two classrooms and housing for 50 students, located on seven-and-one-half acres at the corner of West Frederick and George streets in Millersville. In 1855, just as the building was nearing completion, the trustees saw an opportunity to promote the new school by offering its free use to J.P. Wickersham, the superintendent of Lancaster County Schools, who was searching for a place to hold a three-month teachers' institute. Wickersham opened his Lancaster County Normal Institute on April 17, 1855, with 147 students each paying $34 for room, board and tuition for the three-month term. Before the term was over, both Wickersham and the academy trustees agreed that the school should become a permanent normal school.

The Lancaster County Normal School, the first school of its kind in the state, opened on November 5, 1855, in Millersville with approximately 100 students. The original academy building, soon known as “Old Main,” was expanded and enlarged over the years and served the college in many capacities until it was razed in 1970. The University’s 11-story Francine G. McNairy Library and Learning Forum at Ganser Hall now stands on that site. Two years after the school’s opening, the Normal School Law of Pennsylvania was enacted. It divided the state into 12 normal school districts, with Lancaster, York and Lebanon counties forming the second district. The law also established certain minimum requirements for facilities and curricula. The state legislature, however, enacted no funds for the development of the schools. The trustees at Millersville raised $20,000 from gifts and subscriptions of stock, at $25 a share, to finance the expansion necessary to meet the requirements of the law.

On December 2, 1859, Millersville was approved as the first State Normal School. When the school passed completely under the control of the state in 1917, all shares were redeemed at the par value of $25, ending 62 years of private control.

In 1927, Millersville became a State Teacher’s College and was empowered to grant the Bachelor of Science in Education degree. In 1959, the College’s name was changed to Millersville State College and a master’s program in education was added. In 1962, the College was authorized to grant the Bachelor of Arts degree. The Senate Bill proposed the state system. Act 188, 1982, created the Pennsylvania State System of Higher Education (PASSHE) system comprised of 10 state-owned universities, including Millersville University. On that date, Millersville State College became Millersville University of Pennsylvania.

In 1988, Millersville began offering courses at several sites in the city of Lancaster. Both credit courses and continuing education opportunities were provided to serve the educational needs of Lancaster city residents, area businesses and nontraditional students. In 2011, a downtown Lancaster location opened at the Ware Center. In 2012, the Winter Visual and Performing Arts Center was opened to provide a creative hub for students, faculty and the surrounding community in music, art and theatre. Also in 2014, Millersville University initiated its first doctoral programs, a Doctor of Education in Educational Leadership and a Doctor of Social Work. Millersville University offered its first fully-online undergraduate degree completion program in fall 2015.

Today, Millersville is proud of its beautiful, well-maintained 250-acre campus abounding with reminders of a long history. The bell from Old Main has been carefully preserved and hung in a dramatic tower. The original library, a lovely brick building built around the turn of the century with turrets, stained glass windows and extensive oak woodwork, has been carefully restored and is now Biemesderfer Center, “the centerpiece of the campus,” which overlooks a scenic pond with two resident swans.

MISSION

Millersville University’s mission statement is: We are a community dedicated to high quality education at an exceptional value. Our vision states that we will inspire learners to change the world. As a community we are dedicated to our **EPPIIC Values**: Exploration, Public Mission, Professionalism, Inclusion, Integrity and Compassion.

CURRICULUM AND PROGRAMS

Millersville University offers a wide array of undergraduate degree programs in art, business, education, humanities, social sciences, mathematics and sciences. All Millersville undergraduate degree programs require completion of a general education component designed to develop student communication skills and critical-thinking abilities, as well as provide a broad foundation in the liberal arts, humanities, fine arts, and natural and social sciences.

A number of special educational opportunities are provided, including honors programs, independent study, internships, study at other institutions and abroad, student-designed majors and academic remediation.

Millersville also offers three doctoral programs and a range of master’s degree programs in education, humanities, social sciences, sport management, and science and technology, as well as selected certification programs.

Millersville University’s faculty, staff and services reflect the University’s concern for student growth and development. There are approximately 300 full-time faculty members available to advise and counsel students on academic and career-related matters. There are also counseling, career planning and placement, and tutorial services, as well as services for nontraditional students. A wide range of cocurricular and extracurricular activities and cultural events are offered.

ACCREDITATION

Millersville University is accredited by the:

- Middle States Commission on Higher Education
  1007 North Orange Street
  4th Floor, MB #166
  Wilmington, DE 198014th Floor
- the Pennsylvania Department of Education;
- and is approved by the American Association of University Women.

The applied engineering and technology management program is accredited by the:

- Association of Technology, Management, and Applied Engineering (ATMAE)
  8865 Norwin Ave STE 27, PMB 219
  North Huntingdon, PA 15642

The art and design programs are accredited by the:

- National Association of Schools of Art and Design (NASAD)
  11250 Roger Bacon Drive, Suite 21
  Reston, VA 20190-5248.

The Bachelor of Science programs in Accounting, Business Administration, Finance, Management, and Marketing are accredited by the:

- Accreditation Council for Business Schools & Programs (ACBSP)
  11520 West 119th Street
  Overland Park, KS 66213.

The Center for Counseling and Human Development is accredited by the:

- International Association of Counseling Services (IACS)
  101 S. Whiting Street, Suite 211
  Alexandria, VA 22304.

The chemistry programs are recognized by the:

- American Chemical Society (ACS)
  1155 16th Street NW
  Washington, D.C. 20036.

The computer science program is accredited by the:

- Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)
  415 N. Charles Street
  Baltimore, MD 21201.

The music programs are accredited by the:

- National Association of Schools of Music (NASM)
  11250 Roger Bacon Drive, Suite 21
  Reston, VA 20190-5248.

The Bachelor's Degree in Nursing, Master's Degree in Nursing, Post-Graduate Certificate in Nursing, and Doctor of Nursing Practice programs are accredited by the:

- National League for Nursing Commission for Nursing Education Accreditation
  (NLN CNEA)
  2600 Virginia Avenue, NW
  Washington, DC 20037

The occupational safety and environmental health program is accredited by the:

- Applied and Natural Sciences Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)
  415 N. Charles Street
  Baltimore, MD 21201.

The respiratory therapy program is accredited by the:

- Commission on Accreditation for Respiratory Care (CoARC)
  264 Precision Blvd.
  Telford, TN 37690.

The school psychology certification program is in full compliance with the:

- National Association of School Psychologists (NASP)
  4340 East West Highway, Suite 402
  Bethesda, MD 20814.

The bachelor's and master's social work programs are accredited by the:

- Council on Social Work Education (CSWE)
  333 John Carlyle Street, Suite 400
  Alexandria, VA 22314.

Teacher education programs are accredited by the:

- Council for the Accreditation of Educator Preparation (CAEP)
  1140 19th Street, NW, Suite 400
  Washington, D.C. 20036
- Millersville University is a member of the:
  - American Association of Colleges for Teacher Education (AACTE)
    1602 L Street, NW, Suite 601
    Washington, DC 20036.

The technology education program is in full compliance with the:

- International Technology and Engineering Educators Association (ITEEA)
  1908 Association Drive, Suite C
  Reston, VA 20191

THE STUDENT BODY

Millersville University enrolls approximately 7,000 students; 65% are full-time undergraduates, 17% are part-time undergraduates and 18% are graduate students. Approximately 58 percent of undergraduates are women, and one in 10 is at least 25 years old. Eighty percent (80%) percent of Millersville's undergraduates come from southeastern Pennsylvania. Millersville University admits about 88% of more than 7,500 first-year students who apply each year.

Over 2,100 students live in University residence halls, with the remainder of the student body commuting from homes and nearby apartments.

RIGHT TO KNOW

A member of Pennsylvania's State System of Higher Education.

All requests to Millersville University of Pennsylvania under the Right-to-Know Law must be submitted in writing to:
Agency Open Records Officer
Millersville University of Pennsylvania
P.O. Box 1002
Millersville, PA 17551-0302
Phone: 717-871-5742
Email: agencyopenrecords@millersville.edu

About MU

Admissions

Admission to Millersville University

Admission to Millersville University is granted without regard to race, color, national origin, gender, ancestry, age, handicap, marital status, lifestyle or religious creed.

UNDERGRADUATE ADMISSION

Students may be admitted to Millersville University to work toward an undergraduate degree or to take college-level courses for self-enrichment or career development. Students already holding a bachelor's degree may wish to pursue a second undergraduate degree. For more information on any of Millersville's undergraduate admission programs, contact the Office of Admissions in the Lombardo Welcome Center at 717-871-4625, or visit the Millersville website at **www.millersville.edu**.

GENERAL ADMISSION POLICIES FOR ALL APPLICANTS TO UNDERGRADUATE DEGREE PROGRAMS

QUALIFYING FOR ADMISSION

To be considered for admission to Millersville University, one must be a graduate of an approved secondary school or hold a General Educational Development (GED) high school equivalency diploma. Traditional students applying directly from high school must have completed a college preparatory curriculum. Generally, the student's academic program should include four units of academic English; three units or more of academic mathematics, minimally including algebra I, algebra II and geometry; three units or more of academic science, including two or more units of laboratory science, biology and chemistry with lab and any other inquiry-based lab or technical science; and three or more units of academic social science coursework. Foreign language coursework at the secondary level is recommended but not required for admission consideration.

Millersville University is test-optional for applicants seeking admissions for 2026 and 2027. Any home-schooled applicant wishing to be considered for admission to Millersville University should be a graduate of an approved home school association program. A GED issued by the Pennsylvania Department of Education is preferred if the student has not completed an approved program of study.

Applications from qualified out-of-state students are welcomed; requirements for Pennsylvania resident status appear under the Expenses and Financial Aid section of this catalog.

All courses are taught in English, and students are expected to have demonstrated English language proficiency.

HOW TO APPLY

Prospective students are encouraged to apply electronically by following the undergraduate application instructions on the Millersville University website at **www.millersville.edu/apply**. For an application to be complete, the following must be submitted:

1. Completed application
2. An official high school transcript

Personal statements, letters of recommendation, and standardized test scores are recommended, but not required.

DEADLINES FOR APPLICATIONS

Millersville has a rolling admissions policy and usually notifies applicants of a decision within a month after completed forms and supporting credentials are received. High school students are encouraged to submit applications as early in their senior year as possible. Applicants may apply for admission to begin coursework in the fall, spring or summer semester. Those applying too late for the admission date of their preference will have their application considered for the next available admission date.

ACCEPTING AN OFFER OF ADMISSION

Applicants admitted to the fall semester at Millersville must pay a nonrefundable advance matriculation deposit no later than May 1, or 15 days after the date of the admission letter, whichever is later. Students admitted to University residence halls must also pay an advance housing deposit. These deposits are explained in the Expenses and Financial Aid section of this catalog.

Students must enroll in the semester for which they are admitted. Students who do not enroll must submit a written request for the deposit to be applied to the next semester. This request must be submitted prior to the first day of classes in the term for which admission was offered. Failure to enroll and/or submit the written request will result in withdrawal of the admission offer and forfeiture of the deposit.

PART-TIME STUDENTS

Full- and part-time degree-seeking applicants must meet the same admission requirements.

SPECIAL ADMISSIONS PROGRAMS FOR DEGREE SEEKING APPLICANTS

GATEWAY SCHOLARS PROGRAM

This program provides students with resources to increase their likelihood of success and to thrive as students at the university. While most required components take place in the first semester, programs and services continue to support students until they graduate. Students who enroll at the university through this program have the same pathway to degree completion as every other student: four years of fulltime study.

INTERNATIONAL ADMISSIONS

In addition to completing general admission requirements, international applicants must submit a copy of their passport, proof of financial support and proof of English language proficiency if the applicant is from a non-majority English-speaking country. For regular admission (not through the English Language Institute), students must score a minimum of “70” on the TOEFL IBT or “6.0” on the IELTS. If the applicant takes and submits SAT scores that meet the University’s general admission standards, then the student does **not** also need to submit TOEFL/IELTS scores.

International transfer applicants with academic credentials from within the U.S. need to fulfill the general transfer admission criteria in addition to the documents previously mentioned for international applicants. If a transfer student completes the equivalent of Millersville’s English Composition 110 course with a “C” or better, they do not need to submit TOEFL/IELTS scores. Students transferring from a foreign higher education institution need to submit official transcripts with certified English translations (if applicable).

CONDITIONAL ADMISSION

International applicants who do not meet the minimum English language requirement may be conditionally admitted to Millersville University through the English Language Institute (ELI). Upon arrival to campus, the ELI will administer a placement test to students to determine in which of the six levels they will begin their coursework.

TRANSFER APPLICANTS

Students who have completed a minimum of 12 transferable credits of coursework at another regionally accredited institution with an overall academic average of 2.0 or higher may be considered for admission as a transfer student. Applicants must submit an official college transcript from each institution previously attended. Transfer applicants with fewer than 12 transferable credits or less than 2.0 GPA must also submit a high school transcript.

HARRISBURG AREA COMMUNITY COLLEGE (HACC)/READING AREA COMMUNITY COLLEGE (RACC) AND MILLERSVILLE UNIVERSITY DUAL-ADMISSIONS PROGRAMS

These are dual-advisement programs designed to assist students who begin their studies at the community college and earn an associate degree prior to transferring to Millersville University. Partnership community college students can enter into an intended agreement for eventual transfer by submitting an intention form to the dual-admissions program (on the MU Admissions website). The Millersville University Admissions Office receives the student's community college transcript at the completion of each semester and can receive specialized guidance, advisement and credit evaluations. Early in their final semester at HACC or RACC (prior to earning an associate degree), students will formally apply to Millersville for the semester. Additional program guidelines and benefits can be found on the MU Admissions website.

TRANSFER CREDITS

Evaluation of transfer credits from other institutions is done by the Registrar's office after a student is officially admitted to the University. A preliminary credit evaluation is included with the admission letter sent to most students. In general, transfer credit is awarded for college-level courses in fields of study offered at Millersville that were completed with a grade of C- or higher through a regionally accredited institution. For institutions with other grading scales, courses in which the applicant has earned a grade above the lowest passing grade are accepted.

To earn a Millersville degree, transfer students are required to complete a minimum of 30 semester hours through Millersville, including 50 percent of their major department requirements (excluding student teaching).

Students who have been awarded transfer credit for a particular course, and subsequently complete the same course at Millersville, forfeit the transfer credit.

Transfer credits are not used in computing Millersville GPAs.

PROGRAM ADMISSION REQUIREMENTS

MUSIC MAJORS

Applicants for Music programs, including transfer applicants and certification students, are required to audition with a solo performance and to take a musical proficiency test. Information about the audition procedure is available via the admissions MySpyglass portal.

ART MAJORS

Applicants for Art and Design programs, including transfer and certification applicants, are required to submit portfolios for review as part of the admissions process. Information about the portfolio process is available via the admissions MySpyglass portal.

NURSING MAJORS

The Bachelor of Science in Nursing (B.S.N.) degree program is designed for registered nurses who are graduates of accredited diploma or associate degree nursing programs. Admission requirements to Millersville's nursing program are:

1. Evidence of scholarship as shown by an official transcript from an accredited diploma school of nursing or an accredited associate degree in nursing program.
2. Licensure as a registered nurse in the state of residence and/or clinical practice. RN candidates for licensure will be admitted pending successful completion of state licensure requirements.

The Dual Admission in Nursing Program, in conjunction with Harrisburg Area Community College, provides the opportunity for the student to apply for dual admission to the University as well as the community college. This dual admission enhances student learning by providing access to an array of academic services in support of attaining the bachelor's degree in nursing. Formal admission to the major in nursing at Millersville University occurs upon graduation from Harrisburg Area Community College.

READMISSION OF FORMER STUDENTS

Former students in good academic standing at the time of their official withdrawal may apply for readmission at any time. Those who were dismissed for academic reasons must interrupt their enrollment for at least one semester. (Refer to the Academic Standards section.) Those who subsequently attended another institution must have an official transcript forwarded by that institution to the Millersville University admissions office.

Reentering students are subject to the curriculum and graduation requirements in effect at the time of their readmission, with the exception of those students who reenter within one year of their official withdrawal or dismissal. These students have the option of continuing under the curriculum and graduation requirements in effect for them at the time of their withdrawal or dismissal.

OTHER RESTRICTED PROGRAMS

Millersville occasionally places more stringent admissions requirements on certain degree programs. Students interested in certain programs may be admitted to the University but denied admission to a specific program. Once studies at Millersville are successfully under way, students may formally request to transfer into other majors if they meet minimum departmental standards and if space is available.

ACADEMIC AMNESTY

Former Millersville University students applying for readmission following a minimum absence of five years since the end of their last semester are eligible to petition for academic amnesty if their cumulative grade point average (CGPA) was below 2.0 at departure. The petition must be in the form of a letter of appeal to the Academic Standards Committee, sent in care of the registrar's office.

In order to be eligible to petition for academic amnesty, the former student must complete an application for readmission to undergraduate degree status. If academic amnesty is granted, the calculation of the CGPA is restarted with the new matriculation semester.

Under academic amnesty, all previous coursework and grades remain on the permanent record but are not included in the calculation of the Millersville University CGPA after amnesty is granted. Students may use courses taken in the pre-amnesty period to fulfill general education requirements if a grade of C- or higher was earned in the course.

SECOND BACCALAUREATE DEGREE STUDENTS

Anyone with a bachelor's degree from a regionally accredited college or university may apply to earn a second bachelor's degree. All second-degree students must declare a major at the time they apply for admission.

SPECIAL ADMISSION STUDENTS

POST-BACCALAUREATE TEACHING CERTIFICATION STUDENTS

Anyone with a bachelor's degree may apply for courses leading to initial or additional teaching certification as a full-time or part-time student. For teaching certification requirements, contact the certification office, Stayer Hall, Room 120.

PASSHE VISITING STUDENTS

The purpose of the PASSHE Visiting Student program is to facilitate undergraduate student enrollment at institutions of Pennsylvania's State System of Higher Education and to enable students to take advantage of courses available across the System, without loss of institutional residency, eligibility of honors or athletics, or credits toward graduation at the home institution.

See the Special Academic Opportunities section of this catalog.

TRANSIENT STUDENTS FROM OTHER COLLEGES

Students in good academic standing who are enrolled in a degree program at another college may apply to Millersville as part-time transient students.

HIGH SCHOOL STUDENTS (DUAL ENROLLMENT)

Qualified high school juniors and seniors may take credit-bearing courses at Millersville while pursuing their high school diplomas. Applicants must submit a high school transcript. They must also complete an application. This application, along with a list of approved dual-enrollment courses, can be found on the admissions website. Participation in the program does not guarantee later admission as a degree-seeking student. Homeschooled students pursuing a Pennsylvania Homeschoolers Association diploma or other regionally recognized homeschooling certifying program are also encouraged to apply, submitting appropriate transcripts.

VETERANS

Millersville University meets all criteria for approval of Veterans Education under the provisions of Title 38, United States Code, Section 1775 (a)(1). DANTES and USAFI courses are considered for transfer credit in accordance with the recommendations of the Commission of Accreditation for Service Experiences of the American Council on Education.

The Veterans Benefits and Transition Act of 2018 (applicable to students who receive benefits under the Chapter 31 Veteran Readiness & Employment and/or Chapter 33 Post 9/11 GI Bill®) states that students who are entitled to education assistance will not impose any penalty. A penalty includes the assessment of late fees and denial of access to classes, libraries or other institutional facilities. The University may not require individuals to borrow additional funds to cover a balance to the University that is caused by a delayed payment from the VA under Chapter 31 or Chapter 33.

The statute allows Millersville University to require Chapter 31 Veteran Readiness & Employment and Chapter 33 Post 9/11 GI Bill® students to take the following additional actions:

- Submit a Certificate of Eligibility (COE) for entitlement to educational assistance no later than the first day of a course of education.
- Submit a written request to use such entitlement (VA enrollment certification form).
- Provide additional information necessary to the proper certification of enrollment by the educational institution.

Under section 3679 of Title 38, Millersville University is authorized to require additional payment or impose a fee for the amount that is the difference between the amount of the student's financial obligation and the amount of the VA education benefit disbursement.

"GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at **https://www.benefits.va.gov/gibill**."

Veterans, reservists, VA Readiness & Employment participants and eligible dependents with questions about educational benefits should contact the university School Certifying Official in the Financial Aid Office at **fa.mail@millersville.edu** or 717-871-5478. The Veteran Resource Center is available to provide support resources and can be reached at 717-871-4343.

AUDITING COURSES

An individual who is not concerned with earning credit may audit a course upon approval of the course's instructor. An auditing student attends classes and participates in class discussions but does not take examinations, write papers or fulfill other requirements generally associated with earning credit. The student's transcript does not record a grade but notes that the course was audited. Standard tuition and fees are charged. Ordinarily no more than one course may be audited per semester.

Students enrolled in a degree program may also request audit privileges. See the Special Academic Opportunities section of this catalog.

OTHER SOURCES OF CREDIT

ADVANCED PLACEMENT EXAMINATIONS (AP)

Credit is granted to students earning scores of 3 or higher on AP examinations. The number of credits awarded depends on the academic major, AP subject area and departmental recommendation. Contact your high school counseling office for information on taking an AP examination. Students must be admitted to undergraduate, degree-seeking status and be currently enrolled to be eligible for an AP credit award. A score report from the College Board must be sent to Millersville University. Visit **www.millersville.edu/apscores** for more information regarding score reports.

COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

CLEP is a program of the College Board that includes both general and subject examinations. Six credits are awarded for scores of 50 or above on each of the CLEP general examinations: College Composition (with or without essay); Humanities; College Mathematics; Natural Sciences; and Social Sciences and History.

Three to six credits are awarded to students who earn a score of 50 or above on the CLEP subject examinations. Contact the registrar's office at **www.millersville.edu/registrar** regarding credit awards.

INTERNATIONAL BACCALAUREATE (IB) PROGRAM

Millersville University recognizes the value of the rigorous IB Program and considers it seriously when evaluating the credentials of admission applicants. For students entering with the IB Diploma or Certificate, credit may be awarded for a score of five or higher on examinations in higher level (HL) IB courses. Such credit is generally awarded on a course-by-course basis as recommended by the appropriate Millersville University department. The University does not give credit for standard level (SL) examinations. Credit awarded for IB higher level examinations may be used to satisfy general education requirements, major or minor requirements, or electives in the same manner as Advanced Placement (AP). Students will not receive duplicate credit for IB examinations, AP examinations, CLEP examinations or any other college courses taken before or after enrolling at Millersville University. In the event of overlapping course content, credit will be given for only one course. International Baccalaureate transcripts should be submitted to the Office of Admissions, Millersville University, P.O. Box 1002, Millersville, PA 17551-0302. Students can request transcripts through their high school IB coordinator within the first year after high school graduation. Thereafter, transcripts can be requested from the International Baccalaureate Program, North America, 475 Riverside Drive, 16th Floor, New York, NY 10115, (212) 696-4464. **ibna@ibo.org**.

GRADUATE ADMISSIONS

Admission to a Master's Degree Program

(See the appropriate Academic Program section for additional criteria.)

Admission decisions are based upon a combination of factors that may include grade-point average; official recommendations from those able to critically assess an applicant's ability to succeed in a graduate program; a written statement of goals; standardized test scores; academic preparation for work in the proposed field; the applicant's interests as matched with those of faculty; and, where appropriate, a successful interview.

Regular Admission

To be eligible for regular admission, an applicant must have earned a bachelor's degree from a regionally accredited four-year college or university in the United States or equivalent from a similar institution abroad. The applicant must demonstrate the ability to successfully complete a master's degree - generally achieving at least a 2.75 undergraduate grade-point average in all coursework attempted (unless otherwise specified by the academic program). Review of applicants is holistic and strives to take into account an applicant's full profile, of which one portion is the applicant's academic performance.

Application Procedure

Prospective students may apply electronically by visiting the admissions website. For an application to be considered complete, the application checklist that is program specific must be satisfied. The checklist is available via the admissions MySpyglass portal and may include:

1. A nonrefundable application fee of $40.
2. Official copies of all transfer and undergraduate transcripts and official transcripts of any previous graduate work *(it is not necessary to send Millersville University transcripts)*.
3. Official recommendations submitted by professors or others capable of assessing the applicant's potential for success in a graduate program. Academic or supervisory/professional recommenders are preferred.
4. A statement of academic and professional goals.
5. Pennsylvania Public School Code requires updated background checks for employees and all persons who come into direct contact with children. All students, including M.Ed., supervisory, nondegree and post-baccalaureate candidates, must submit TB test and current criminal background clearances defined as being within one year of the issue date and extending through the duration of the field placement for any class requiring field experience.
6. Any additional information required by the specific department. Applicants should refer to the appropriate *Academic Programs* section of this catalog for additional individual program admission requirements.

Application Timelines

Graduate programs take applications on a rolling basis (i.e., no official deadline). However, applicants should refer to the appropriate *Academic Programs* section of this catalog for additional individual admissions deadlines.

Admission to a master's degree program is contingent on the recommendation of the department in which the student proposes to study. After reviewing the application and supporting materials, the department recommends their decision to the Office of Admissions which will notify the student.

Application as a Nondegree Graduate Student

Applicants for graduate nondegree studies must have completed a baccalaureate degree from a regionally accredited four-year college or university.

Admission as a nondegree student does not include admission to degree or certification programs. Nondegree students may apply for admission to a degree or graduate-level certification program after having accumulated graduate credits; however, no more than nine graduate credits, in nondegree status, may be transferred to a degree or graduate-level certification program, subject to departmental approval. Courses for transfer from nondegree status into a program must have received a satisfactory grade, and except in the most extenuating circumstances, no transfer credit will be allowed for work completed more than five years prior to admission to a degree or graduate-level certification program. It is imperative that applicants consult with the graduate program coordinator from their intended discipline to understand what courses are available to nondegree students.

A nondegree student is permitted to register for any graduate or undergraduate course not restricted by the department.

Application as a Transient Student

Those students desiring to take graduate work for transfer to another institution must, at the time of admission, present a statement from the proper official of the school accepting the work in transfer, indicating their satisfactory graduate student status. Transients must also complete the application for admission as a nondegree student. Further, it is the responsibility of transient students to request, in writing, that a transcript of completed work be forwarded to the appropriate institution.

Application as an International Student

Millersville University welcomes applications from prospective international students. In addition to satisfying general admissions requirements as stated on the Graduate Program Admissions Application, international applicants must demonstrate proficiency in the Test of English as a Foreign Language (TOEFL). TOEFL score requirements are 500 on the paper-based test, 183 on the computer-based test or 60-80 on the Internet-based test. The TOEFL is administered nationally. In lieu of the TOEFL, English language proficiency may be demonstrated by earning a score of "6" or higher on the International English Language Testing System (IELTS) exam.

Applicants possessing a baccalaureate degree earned at a non-U.S. institution must have official academic credentials sent to a recognized credential evaluation service for a course-by-course evaluation. One such service is World Education Services, Inc., at www.WES.org. The WES ICAP (International Credential Advantage Package) is a service that allows applicants to store their verified academic transcripts with WES and have them delivered to Millersville University together with the credential evaluation report. Applicants who use the WES ICAP service do not need to submit an official transcript to Millersville University from the non-U.S. institution. The WES ICAP service verifies and authenticates the academic transcripts and delivers the transcripts and credential evaluation to Millersville University directly.

Applicants not using the WES ICAP service must submit to Millersville University an official academic transcript in their native language (with English translation) in a sealed envelope from the non-U.S. institution.

International applicants must also complete a financial disclosure form, also known as the Source of Funds.

Because of Pennsylvania teacher certification requirements, international applicants may not be admitted to the following programs: gifted education, language and literacy education, special education and early childhood education.

Semester Hours

Students should consult with their advisor and discuss the specific program requirements in the *Academic Programs* section to ascertain the semester hours required in a particular degree program.

Residency Requirement

Students must complete a minimum of two-thirds of their graduate degree or certification program at Millersville University in order to meet residency requirements.

Student Status

To be considered full-time, graduate students must be registered for at least 6 credits by the end of the drop/add period.

Time Limit

Work for the degree may be pursued over several years, which need not be in succession but must be concluded within a five-year (master's) or seven-year (doctorial) period. The five-year period begins the term for which a student is accepted into a degree program. A reevaluation of coursework taken prior to admission to a degree program and an extension of time, usually an additional year, beyond this five- or seven-year limit may be granted at the request of the student and upon the recommendation of the advisor and graduate program coordinator.

Second Master's Degree

Students interested in earning a second master's degree at Millersville in the same field must meet all course requirements for the second degree and complete no fewer than 24 semester hours of approved coursework beyond the requirements for the initial degree.

About MU

Athletics

Intercollegiate Athletics

Intercollegiate athletics has a rich history as part of the fabric of Millersville University. The Department of Athletics sponsors 19 intercollegiate sports competing in the Pennsylvania State Athletic Conference and NCAA Division II. Marauders excel in both competition and in academics with Millersville's teams winning 56 PSAC Championships and two NCAA Championships. Nine Millersville athletes have also won individual NCAA Championships. The more than 450 student-athletes annually produce a GPA over 3.2 and in 2025-26, more than 240 Marauders were named PSAC Scholar-Athletes (CUM GPA of a 3.25 or higher). A staff of 60+ coaches and administrators provide a championship experience, supporting student-athletes with mentoring, academic support, and career development. Student-athletes have access to the Morgan Academic Center in Lehigh Hall. The health and wellness of the student-athletes are supported by five full-time athletic trainers and a strength and conditioning coach. Millersville's student-athletes train in the Carpenter-Trout Strength Center.

For additional information, please visit **www.millersvilleathletics.com**

About MU

Administration

University Administration

PRESIDENT'S CABINET

- President of the University, Daniel A. Wubah, Ph.D.
- Provost and Senior Vice President for Academic Affairs, Gail Gasparich, Ph.D.
- Vice President for Advancement, Mr. Victor E. Ramos
- Vice President for Finance and Administration/CFO, Nafez Alyan, Ph.D.
- Vice President for Student Affairs, Mary Beth E. Williams, Ph.D.
- Vice President for University Relations and Strategic Initiatives, Victor S. DeSantis, Ph.D.
- Chief Technology Officer for Information Technology, Mr. Josh Hartranft

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DEANS COUNCIL

- Provost and Senior Vice President for Academic Affairs, Gail Gasparich, Ph.D.
- Dean, College of Education and Human Services, Lara Willox, Ph.D.
- Dean, College of Science and Technology, Marc A. Harris, Ph.D.
- Dean, Lombardo College of Business, Marc Tomljanovich, Ph.D.
- Dean, College of Arts, Humanities and Social Sciences, Ieva Zake, Ph.D.
- Dean of University College & Associate Provost, Rachel Finley-Bowman, Ph.D.

- Interim Dean of Graduate Studies, Marc A. Harris, Ph.D.
- Associate VP for Grants Sponsored Programs & Research, Mr. Jeffry B. Porter
- Interim Associate Vice President and Dean of Admissions, Enrollment Management, Matt Davis.
- Assistant Vice President for Institutional Assessment and Planning, Carole E. Runge, D.M.
- Assistant Vice President for International Services and Global Engagement, Dan Kumala, Ph.D.
- Registrar, Ms. Alison Hutchinson
- Assistant to the Provost, Ms. Kathy Nazarenus

ACADEMIC DEPARTMENT CHAIRS

College of Arts, Humanities and Social Sciences

- Art & Design - Prof. Line Bruntse, Chair
- Communication & Theatre - Dr. Stacey Irwin, Chair
- Criminology, Sociology and Anthropology - Dr. Frederika Schmitt, Chair
- English and World Languages - Dr. Justin Mando, Chair | Dr. Emily Baldys, Asst. Chair
- Government, Law & International Relations - Dr. Richard A. Glenn, Chair
- History and Philosophy - Dr. Ron Frankum, Interim Chair
- Music - Dr. Micheál B. Houlahan, Chair | Dr. Christy Banks, Asst. Chair
- African-American Studies Minor - Dr. Onek Adyanga, Coordinator
- Entrepreneurship Minor and ELC – Dr. Jennifer Jester, Coordinator
- International Studies Minor - Dr. Nivedita Bagchi, Coordinator
- Latino/a Studies Minor - Dr. Bertha DeJesus, Coordinator
- Women's and Gender Studies Minor - Dr. Jennifer Miller, Coordinator

The Lombardo College of Business

- Accounting & Finance - Dr. Eric Blazer, Chair
- Economics - Dr. Kenneth W. Smith, Chair
- Management & Marketing - Dr. David J. DiRusso, Chair
- Wellness & Sport Sciences - Dr. Daniel J. Keefer, Chair

College of Education and Human Services

- Early, Middle & Elementary Education - Dr. Jennifer Shettel, Chair
- Educational Foundations - Dr. Tiffany E. Wright, Chair
- Psychology - Dr. Debra S. Vredenburg-Rudy, Chair | Dr. Elizabeth Thyrum, Asst. Chair
- Social Work - Dr. Bertha DeJesus, Chair
- Special Education - Dr. Jason Davis, Chair

College of Science and Technology

- Applied Engineering, Safety & Technology - Dr. Jack Ogutu, Chair
- Biology - Dr. Brent M. Horton, Chair | Dr. Laura Weise Cross, Asst. Chair
- Chemistry - Dr. Daniel Albert, Chair
- Computer Science - Dr. Chad Hogg, Chair
- Environment, Geosciences, and Emergency Management - Dr. Lynn Marquez, Chair
- Math and Physics - Dr. Tyrone Washington, Chair
- Nursing - Dr. Kelly A. Kuhns, Chair | Dr. Susan Moyer, Asst. Chair

University College

- Exploratory Studies & Student Development - Dr. Kristen Lawson, Chair
- Library Department - Prof. Scott Anderson, Chair

GRADUATE PROGRAM COORDINATORS

College of Arts, Humanities and Social Sciences

- English - Dr. Nicole Pfannenstiel
- History - Dr. Tanya Kevorkian
- Language and Literacy Education - Dr. Aileen P. Hower

The Lombardo College of Business

- Sport Management - Dr. Julie Lombardi

College of Education and Human Services

- Assessment, Curriculum and Teaching - Dr. Abdulsalami Ibrahim
- Doctorate in Education - Dr. Ann Gaudino
- Doctor of Social Work - Dr. Alex Redcay
- Early Childhood Education - Dr. Jennifer Burke
- Gifted Education - Dr. Charlton Wolfgang
- Leadership for Teaching and Learning - Dr. Tiffany Wright
- Clinical Psychology - Dr. Karena Rush
- School Psychology - Dr. Joel Winnick
- School Counseling - Dr. R. Joseph Behun
- Social Work - Dr. Leonora Foels
- Special Education - Dr. Richard Mehrenberg

College of Science and Technology

- Doctor of Nursing Practice - Dr. Kelly Rotondo
- Emergency Management - Mr. Duane Hagelgans
- Nursing - Dr. Bryan Weinberg-Wonsidler
- Technology & Innovation - Dr. Jack Ogutu

About MU

Governing Boards

Overview of Governing Boards

Millersville University is a constituent member of the Pennsylvania State System of Higher Education. As a PASSHE institution Millersville is governed by the Commonwealth of Pennsylvania as well as a local Council of Trustees.

COMMONWEALTH OF PENNSYLVANIA

Josh Shapiro
Governor

PENNSYLVANIA STATE SYSTEM OF HIGHER EDUCATION

Chancellor Chris Fiorentino

PASSHE BOARD OF GOVERNORS

- Cynthia D. Shapira, Chair
- David M. Maser
- Samuel H. Smith
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- Robert W. Bogle
- Rep. Tim Briggs
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- Abigail Hancox
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- Daniel A. Klingerman
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- Dr. Khalid N. Mumin
- Rep. Brad Rose
- Sen. Judith L. Schwank
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- Dr. Kate Shaw
- Larry C. Skinner
- Skylar Walder
- Neil R. Weaver
- Janet L. Yeomans

MILLERSVILLE UNIVERSITY OF PENNSYLVANIA COUNCIL OF TRUSTEES

- Mr. Michael G. Warfel ’84, *Chairman*
- Dr. Richard L. Frerichs ’64/’69M, *Vice Chairman*
- Thomas J. Baker ’02
- Mr. Brandon W. Danz ’03
- Saul W. Fink, Ph.D. ’85
- Rep. Jordan A. Harris ’06
- Mr. Rick Rodgers
- Ms. Kathryn R. Ross
- Dr. Amber M. Sessoms ’06/’08M
- Ms. Holly L. Trego ’98
- Daniel A. Wubah, Ph.D., President, *ex officio*

University Calendar

2026-2027

FALL TERM 2026

- FRI AUG 20 | Orientation for new students admitted for Fall 2026 begins (tent.)
- SUN AUG 23 | Orientation for new students admitted for Fall 2026 ends (tent.)
- MON AUG 24 | Fall classes begin
- MON SEP 07 | Holiday (no classes)
- FRI SEP 18 | Parent and Family Weekend
- SAT SEP 19 | Parent and Family Weekend
- FRI OCT 09 | Fall recess begins after last class
- WED OCT 14 | Fall recess ends at 7:00 a.m.
- FRI OCT 16 | Homecoming Weekend
- SAT OCT 17 | Homecoming Weekend
- TUE NOV 24 | Thanksgiving recess begins after last class
- MON NOV 30 | Thanksgiving recess ends at 7:00 a.m.
- MON DEC 07 | Last day of classes
- TUE DEC 08 THROUGH FRI DEC 11 | Evaluation period (special class schedule)
- SAT DEC 12 | Commencement; End of Fall Term

WINTER TERM 2027 (5 WEEKS)

- MON DEC 14 | Winter classes begin
- SUN JAN 17 | Winter classes end after last final examination
- MON JAN 18 | Holiday (no classes)

SPRING TERM 2027

- TUE JAN 19 | Spring classes begin
- MON MAR 08 | Spring recess begins at 7:00 a.m.
- MON MAR 15 | Spring recess ends at 7:00 a.m.
- MON MAY 03 | Last day of classes
- TUE MAY 04 THROUGH FRI MAY 07 | Evaluation period (special class schedule)
- SAT MAY 08 | Spring Commencement; End of Spring Term

SUMMER TERM 2027 (14 WEEKS WITH 3 START DATES; SEE WEB SCHEDULE FOR SPECIFIC COURSE DATES)

- MON MAY 10 | First summer start date
- MON MAY 31 | Holiday (no classes)
- FRI JUN 04 | First summer classes end date
- MON JUN 07 | Second summer start date
- FRI JUN 18 | Holiday (no classes)
- MON JUL 05 | Holiday (no classes)
- FRI JUL 09 | Second summer classes end date
- MON JUL 12 | Third summer start date
- FRI AUG 13 | Third summer classes end date

FALL TERM 2027

- MON AUG 23 | Fall classes begin (tent.)

Policies

UNIVERSITY ACADEMIC POLICIES

GRADING POLICIES

Each instructor establishes his or her own grading policy based on classroom participation, homework, unannounced quizzes, etc., and states it clearly and in writing at the beginning of the course. Sufficient measures are built into each course structure to evaluate student achievement.

Final examinations normally do not count as more than one-third of any student's final grade. Instructors may excuse any student with superior achievement (a grade higher than A-) from taking a final exam.

GRADES AND GRADE POINT SYSTEM

The grade point average (GPA) is a comprehensive evaluation of a student's academic standing. The grades and terms used to describe achievement are reported at the end of each semester as:

GRADE	DESCRIPTION	GRADE POINT VALUE
A	Excellent	4.0
A-		3.7
B+		3.3
B	Good	3.0
B-		2.7
C+		2.3
C	Acceptable	2.0
C-		1.7
D+		1.3
D	Poor	1.0
D-		0.7
F	Fail	1
I	Incomplete	1
P	Pass	1
S	Satisfactory	1
U	Unsatisfactory	1
W	Withdrew	1
M	Military Withdrawal	1
AU	Audit	1
X	Proficiency in Progress	1
Z	No Adequate Evaluation for Grading	0.0

1 - Not considered in computing GPA.

University policy accepts D- as minimum earned credit. There are certain general education and department major competency requirements that are satisfied only by a higher minimum grade. If a student earns less than this higher minimum grade in such a course, the credits will count toward earned credits but might not count toward completion of general education and department major requirements.

The semester GPA is the number of grade points earned in Millersville courses in a semester, divided by the number of credits in that semester for which grades calculated in the GPA were earned. Grade points for each course are calculated by multiplying the grade point value by the number of credits for the course.

The cumulative GPA (CGPA) is the total number of grade points earned in Millersville courses divided by the number of Millersville GPA credits. Credits from audited courses, subsequently repeated courses, advanced standing programs such as AP and CLEP, and transfer credits are not included in the CGPA.

The Millersville grade point average (GPA) is rounded to two decimal places.

SCHEDULE ADJUSTMENT: DROP/ADD

For fall and spring terms, students may drop or add courses online from the early-registration period until 11:59 p.m. EST, the eighth calendar day of the term, excluding holidays. Prior to the first day of classes, faculty signatures are not required to drop or add a course unless faculty permission is specifically required.

During the summer and winter sessions and for courses which have start and/or end dates outside of the regular semester length, the Registrar will determine equivalent dates for no grade, W grade and regular grade periods. Refer to the Registrar’s website for details.

Courses that are dropped during the drop/add period will not be entered on the student’s record.

It is the student's responsibility to make official changes to his/her schedule. There is no automatic drop policy for nonattendance.

WITHDREW (W)

The notation made on a student's record about a withdrawn course depends on when the student withdraws. Students who "drop" or withdraw by the end of the drop/add period have all references to that course deleted from their records. Students will be permitted to withdraw from a course and receive a grade of W up until the end of the 10th week of the semester. The W grade does not carry any quality points and will not be calculated in the student's GPA. There will be no limit on the number of courses from which the student may withdraw. A student who withdraws from their last course is required to submit a form withdrawing them from the University or taking a leave of absence. See Leaving Millersville University for more information. After the 10th week of the semester and through the last day of classes, students who withdraw will receive an earned, non-W grade, which will be determined by the instructor, consistent with University policy.

The official date of withdrawal will be determined by the student's last date of attendance in any registered course. Deadlines for withdrawal are strictly enforced. It is the student's responsibility to obtain all required signatures (both the course instructors and advisors) in time to meet the deadline.

Failure to withdraw from a course properly may result in additional tuition fees as well as a failing grade. Financial aid may also be affected.

See the sections on Credit Load Policies and Tuition for more information.

During summer and winter sessions, the registrar sets equivalent deadlines for withdrawing from a course without a grade or with a W grade.

WITHDRAWAL FROM A COURSE

A student may withdraw from a course, provided they conferred with both the course instructor and their advisor and have filed a course withdrawal form, which is available at the Registrar's Office.

Failure to withdraw from a course properly may result in additional tuition fees as well as a failing grade. For example, a student who does not attend a class but only submits a withdrawal form during the second week of class may be subject to additional tuition for that two-week period.

Withdrawal periods will be determined by the Registrar's Office and be prorated for summer, winter and out-of-term courses. To withdraw from a course, access the withdraw form in MAX, on the web in the Student Forms Center, or contact the Registrar's Office, Lyle Hall.

MILITARY WITHDRAWAL (M)

A grade of M may be assigned when a student or spouse must withdraw due to military obligation (called to active duty) and is unable to complete their courses. M grades are not applicable to students who withdraw from the University to complete basic military training. M grades are not used in the computation of cumulative grade point average.

INCOMPLETE POLICY

An incomplete (I) grade is used to denote coursework that is unfinished due to circumstances beyond a student's control, such as personal illness, accident or death in the family. It is a privilege granted by the instructor because of circumstances, not a right to be expected by the student. A student may request that the course instructor assign an incomplete grade. The instructor may assign an incomplete (I) grade only if the student is passing the course and can complete the remaining requirements without attending additional classes. If class attendance is required to complete course requirements, the instructor must issue a final grade.

An incomplete grade issued to a student on academic probation will not prevent or delay academic action for dismissal. A student's cumulative grade point average will be calculated based on all completed coursework.

A student is encouraged to complete the required work as soon as possible. The deadline for making up an incomplete is at the end of the 10th week of the subsequent regular semester (fall or spring); however, an instructor may establish an earlier deadline. At the deadline, one of the following actions will occur:

- The instructor submits a final grade on the change-of-grade form.
- The instructor recommends an extension.

- The grade of “I” converts to an F.

A faculty member may petition the school Dean for a retroactive administrative withdrawal (W) from a course in which an incomplete grade cannot be resolved due to extraordinary circumstances (e.g., disability or death of the student or faculty). If the petition is approved, the Dean will notify the Registrar to record an administrative withdrawal for the course.

Students will not graduate with unresolved incomplete grades. Degree candidates are notified of the outstanding degree requirements. The degree is not conferred until all requirements have been met.

PASS/FAIL COURSES (P, F)

In order to stimulate and/or satisfy intellectual curiosity, students are encouraged to engage in challenging study on an elective basis. The pass/fail option provides the opportunity for a student to enter a course that he/she might ordinarily avoid. Accordingly:

1. A student may enroll in no more than a total of two courses pass/fail.
2. The student needs to have passed 60 or more credits before electing a course pass/fail.
3. The student must have a minimum GPA of 2.80 or obtain permission of the instructor.
4. The pass/fail option is ordinarily restricted to courses numbered 300 or above. However, a 200-level course may be taken pass/ fail with the prior approval of the instructor.
5. Courses taken to satisfy degree requirements for the major, whether offered by the department of the major or offered by other departments as required-related courses, may not be taken pass/fail.
6. Departments may designate which of their course offerings beyond degree requirements their majors may not take pass/fail.
7. Professional education requirements may not be taken pass/fail.
8. Courses taken to satisfy requirements for the minor may not be taken pass/fail.
9. No course used to satisfy general education requirements may be taken pass/fail, but if students take the same courses for other than general education purposes, they may take them pass/fail.
10. Courses taken on a pass/fail basis will be counted toward the total credit-hour requirement for graduation, but those courses that are passed will not be included in the GPA computation on which academic honors and academic standing are based. Courses failed under the pass/fail option will be included when computing the GPA.
11. The minimum grade a student must earn in order to be awarded a “pass” grade is D-.
12. The option to take a course on a pass/fail basis may be exercised until the end of the add period. Contact the Registrar’s Office, Lyle Hall, for the appropriate form. Having properly registered for a course on a pass/fail basis, a student still has the option to take a letter grade instead of a pass/fail grade, provided that the decision to change is filed with the Registrar the week prior to finals week.
13. The pass/fail option is limited to students not on probation at the time of registration.

SATISFACTORY AND UNSATISFACTORY (S, U)

These terms describe achievement in student teaching and other field experiences.

AUDIT (AU)

Auditing a course allows a student to attend classes and participate in discussions without the pressures of taking examinations, writing papers or fulfilling other requirements generally associated with earning credit. An audited course is reported on the student’s record with the designation AU. It cannot be used to satisfy graduation requirements, nor is it considered in computing GPAs. Standard tuition and fees apply.

To register to audit a course, contact the Registrar’s Office, Lyle Hall, for information and to obtain a permission form, and submit it by the end of the add period. The audit privilege may not be changed to credit status. Audit privileges are ordinarily limited to one course per semester.

PROFICIENCY IN PROGRESS (X)

This grade reflects progress toward, but not achievement of, proficiency in precollege developmental courses.

Z GRADE (Z)

A grade of Z is treated the same as a grade of F in calculating the student's GPA. The Z grade may not be removed and can only be excluded from the GPA by the student registering for and satisfactorily completing the course. The receipt of a Z grade shall not entitle a student to a refund of fees. This grading procedure is intended to apply only to those students for whom there is no adequate evaluation for the determination of a grade. In cases in which the faculty member does not assign any grade, the registrar may assign the Z grade if the student has officially registered for the course.

REPEAT POLICY

A student, in consultation with the advisor, may repeat a course to improve their GPA, to meet minimum competency requirements or to satisfy graduation requirements. Students only need to repeat a failed course if it is specifically required for graduation. Students may repeat courses for which they have received a grade of C+, C, C-, D+, D, D-, F, W, Z or U.

Courses failed at Millersville must be repeated at Millersville in order to earn course credit and credit toward graduation. Students may not transfer credit for any course taken at another institution that is the equivalent of a course previously taken at Millersville; this policy applies whether the course was passed or failed at Millersville University. Students may repeat courses at Millersville for which they have received transferred credit, but they will forfeit the transfer credit.

Once the course is repeated, the new grade, credits and grade point value replace those earned previously in calculating the cumulative GPA. The earlier grade remains on the student's record even though it is no longer included in the computation of credits or cumulative GPA. In consultation with their advisors, students who find it necessary to repeat a course will be informed of, and expected to use, support services available to them through the Office of Learning Services.

An undergraduate student may not take an undergraduate course of record more than three times. A course of record is defined as a course in which a student receives a grade of A, B, C, D (including + and -), F, U, Z or W. The academic department offering a course may drop a student from a course if the student attempts to take a course more than three times. Undergraduate students will be limited to a maximum total of six repeats during their academic career.

GRADE CHANGES

Students are responsible for reviewing grade reports as soon as they are available and contacting their instructor about any grade in question. Grade changes may be made only by the instructor issuing the grade, with the approval of the department chairperson and the school Dean. Please refer to the Other Academic Policies section of the catalog for details.

COURSE PREREQUISITES

Courses may have a series of prerequisites (satisfactory completion of a prior course, minimum GPA or earned credits, placement test scores, etc.). Students who do not meet the stated prerequisite(s) may be removed from a course at the discretion of the professor. The professor will notify the Registrar and student by the end of the drop period. The registration system will also remove a course due to the lack of proper prerequisites; review your schedule frequently to check for changes to your schedule.

TAKING A LESS ADVANCED COURSE

Undergraduate students do not receive credit for a less advanced course if they have already demonstrated competency by passing a more advanced course. For example, MATH100 Survey of Mathematical Ideas and MATH101 College Algebra may not be taken for credit after MATH161 Calculus 1. Students who wish to review less advanced material may do so on an audit basis.

UNIVERSITY ACADEMIC HONESTY POLICY

Students of the University are expected to adhere to Millersville University's values and be honest and forthright in their academic endeavors. To falsify the results of one's research, to steal the words or ideas of another, to cheat on an examination, to allow another person to commit, or assist another in committing an act of academic dishonesty, corrupts the essential process by which knowledge is advanced.

Actions that Violate the Academic Honesty Policy - The below lists are for illustration only. They should not be construed as restrictive or as an exhaustive enumeration of the various forms of conduct that constitute violations of the academic honesty policy

PLAGIARISM

Plagiarism is defined as intentionally or unintentionally using ideas, images, words, or data from another source without crediting that source (including online sources). Students are required to accurately acknowledge any ideas, images, words, or data they use from another source by properly citing the source with (1) an in-text citation in the body of the paper and (2) a complete entry in the reference list at the end of the paper. By placing their name on an assignment/paper/project, students certify that, unless properly cited, all work is original. Students will avoid being charged with plagiarism if they properly acknowledge/cite when doing one or all of the following:

1. quoting source's actual words, including words generated by Artificial Intelligence (AI);
2. using another person's ideas, opinions, or theories, including those generated by an AI, even if they are completely paraphrased in their own words;
3. borrowing facts, statistics, or other illustrative materials, including those generated by an AI, unless the information is common knowledge.

These guidelines should be followed for all source types, including books, newspapers, pamphlets, journal articles, websites, AI-generated content, and other online resources. *The above list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various forms of plagiarism that constitute violations of the academic honesty policy.*

FABRICATION

Fabrication is the falsification of research or other findings, or sources. The below list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various forms of fabrication that constitute violations of the academic honesty policy.

1. Citation of information not taken from the source indicated.
2. Listing in a bibliography fabricated sources or sources not actually consulted.
3. Inventing data or other information for research or other academic projects.

CHEATING

Cheating is the act or attempted act of deception by which students try to misrepresent that they have mastered subject matter in an academic project or the attempt to gain an advantage by the use of illegal or illegitimate means. The below list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various forms of cheating that constitute violations of the academic honesty policy.

1. Copying from another student's test or assignment (e.g., paper, project, homework).
2. Allowing another student to copy from their test or assignment.
3. Using the course textbook, or other material such as a notebook, brought to class meetings but unauthorized for use during a test.
4. Collaborating during a test with another person by receiving or providing information without the permission of the instructor.
5. Using or possessing unauthorized materials during a test or assignment (e.g., notes, formula lists, AI chatbots, online test repositories such as Chegg, formulas within calculators or other electronic devices, notes written on student's' clothing or person) that are unauthorized.
6. Unauthorized collaboration with other students on a test or assignment meant to be completed individually.

ACADEMIC MISCONDUCT

Academic misconduct is the violation of University policies by tampering with grades or participating in the distribution of any part of a test before its administration. The below list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various forms of academic misconduct that constitute violations of the academic honesty policy.

1. Stealing, buying, or otherwise obtaining all or part of test or assignment (e.g., paper, project, homework).
2. Selling or giving away all or part of test or assignment, including answers to test.
3. Bribing, or attempting to bribe, any other person to obtain test or assignment, or any information about it.
4. Buying, or otherwise acquiring, another's coursework and submitting it as their own work, whether altered or not.
5. Entering a building, office, computer, or network for the purpose of changing a grade in a grade book, on a test, or another assignment.

6. Changing, altering, or being an accessory to changing and/or altering a grade in a grade book, on a test or assignment on a “Change of Grade” form, or other official academic University record which relates to grades.
7. Entering a building, office, computer, or network for the purpose of obtaining an unadministered test or assignment.
8. Continuing to work on an exam or assignment after the specified allotted time has elapsed.
9. Completing an assignment or taking a test or course for someone else or permitting someone else to do the same in their place.
10. Giving or receiving unauthorized aid in a take-home exam, online exam, or other assignment.
11. Submitting work for a class that was already submitted for another class, when unauthorized, or allowing another student to submit or copy from previously submitted class work.

Actions which may be taken for violations of the Academic Honesty Policy.

When a faculty member suspects that a violation of the academic honesty policy has occurred, they will meet with students to:

- discuss the alleged act;
- hear any defense students may have;
- discuss any proposed academic sanctions;
- inform students of their rights to appeal faculty-imposed sanctions to the department chair and/or dean of the college

Academic sanctions that may be imposed by the faculty member include:

- verbal reprimands;
- written reprimands;
- requiring the students to redo/resubmit the assignment, test, or project;
- lowering the grade for the assignment, test, or project;
- not accepting the assignment, test, or project which results in a zero on the assessment.

The above list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various sanctions that may be imposed by instructors for violations of the academic honesty policy. Academic sanctions that require a formal charge be filed with the Associate Provost for Academic Administration include:

- any sanction in excess of lowering the grade for or not accepting an assignment, test, or project;
- assigning students a failing grade for the course;
- recommending temporary or permanent suspension from the academic major or University.

Regardless of the level of academic sanction imposed or requested above, faculty members are encouraged to submit a report for each violation of the Academic Honesty Policy to the Associate Provost for Academic Administration. If more than one (1) such report is filed for a student, even in the case of sanctions imposed only by the faculty member, then the Associate Provost for Academic Administration will meet with the student to discuss these occurrences and possibly impose additional academic sanctions.

Confidentiality

In accordance with the provisions of the Family Educational Rights and Privacy Act of 1974, any information relating to an alleged violation of the University's Student Code of Conduct or to the outcome of a judicial hearing must be treated as strictly confidential by members of the faculty.

About MU

Services For Students

DISABILITY SERVICES

The Office of Learning Services strives to support Millersville University faculty and students by supplementing student learners with academic accommodations, individualized learning assistance, peer tutoring, tutor training, auxiliary aids, assistive technology, academic skills’ workshops, and individualized programming to promote independent and successful learners for the future.

The Office of Learning Services coordinates academic accommodations and related services for students with learning and physical disabilities who meet eligibility criteria set forth by the Americans with Disabilities Amendments Act of 2008 (ADAAA 2008) and Section 504 of the Rehabilitation Act of 1973. This also extends to individuals with handicapping conditions that substantially limit a major life activity, such as learning.

General information and inquiries regarding services can be obtained by contacting the Office of Learning Services at 717-871-5554 or visiting our website at Accommodations and Services | Millersville University

STUDENT HOUSING

The University Housing and Conferences Services (UHCS) staff is dedicated to providing a safe and engaging living-learning environment in the residence halls. There are many housing options for you to choose from at the 'Ville. Approximately 2,000 students live in the five residence halls on campus. Most rooms are designed "suite style" and include top-rated amenities and safety features. The UHCS staff offers many academic and social engagement opportunities to support you in the key areas of academic performance, self-understanding and community connections.

The Housing Residency Requirement was instituted for the benefit of students. Students who live on campus benefit from the resources that support student success. Additionally, research and experience demonstrate that students who live on campus:

- Develop a greater sense of belonging;
- Find it easier to form friendships;
- Participate more in student organizations;
- Develop stronger connections to faculty;
- Increase their awareness of diversity; and,
- Are more likely to complete a degree within four years.

You'll meet and create relationships with many faculty, staff and students from different backgrounds and cultures, and have the opportunity to learn from them. We attempt to create an environment that is inclusive for all our students on campus. Millersville University believes that an inclusive community is a core value, an essential part of the foundation for the community.

MILLERSVILLE UNIVERSITY RESIDENCY REQUIREMENT: Students who have not earned 60 credit hours are required to live on campus. On-campus housing is defined as residing in one of the following residence halls: Bard Hall, East Village, Shenks Hall, South Village or West Village. Students entered into a housing contract are obligated to the full term of their housing agreement regardless of their credit hours completed and/or class standing, including graduate student status. There are additional terms and conditions which affect this policy.

UNIVERSITY DINING SERVICES

Millersville University offers a flexible and comprehensive dining program for students, faculty, staff, and guests. All students are eligible to participate, and those living in university-managed residence halls are required to purchase a Meal Plan. Residence Hall students are automatically enrolled in the EPPIIC Bucks Plan by default. Students with 30 or more credit hours may change their plan prior to the first day of classes.

Off-campus students, including those in Student Lodging, Millersville, and all commuters—may choose from any of the Meal Plans, which provide flexible dining options across campus. All dining locations are open to the campus community, regardless of Meal Plan participation.

The main dining facility, the **Upper Deck** in Gordinier Hall, is an all-you-care-to-eat venue.

Additional retail dining options include:

- **The Anchor** (Gordinier Hall): Convenience store concept with cold and hot food options
- **Evergreen Café** (Gordinier Hall): Student managed and run coffee shop
- **Chick-fil-A** (Student Memorial Center)
- **The Cove** (Lyle Hall)
- **Starbucks** (McNairy Library)

Dining also offers at some of our locations online ordering options using either GET app or Transact app

For meal plan descriptions, dining hours, and more, visit www.millersville.edu/dining or refer to the **Expenses and Financial Aid** section.

CENTER FOR COUNSELING AND HUMAN DEVELOPMENT

The Center for Counseling and Human Development, located on the third floor of Lyle Hall, is committed to providing quality mental health care to a diverse student body. The Center supports the academic mission of the University by enhancing students' emotional, social, and personal development. Accredited by the International Association of Counseling Services, the Center seeks to engage students in counseling, consultation, and outreach to realize their potential and persist to graduation. Licensed psychologists and counselors help students reach greater self-understanding and enhance their abilities to manage immediate and future concerns. Individual counseling, crisis intervention, educational workshops, group experiences and consultation services are available to all registered Millersville University students. A psychiatrist is also available for medication evaluation and management once a student has been seen by a Center clinician. All services are confidential, professional and at no cost to students.

HEALTH SERVICES

Health Services, located on the second floor of Lyle Hall, provides medical care to all registered students. They have a professional staff which includes physicians, a nurse practitioner, and registered nurses. There is no charge for evaluations regarding acute illnesses or injuries, and most treatments or over-the-counter medications are free. An in-house dispensary also provides common antibiotics for a small fee.

Services include minor injury treatment, chronic condition management, sexual health, mental health, physical exams, and free flu vaccines. The health center also offers in-house laboratory testing, EKGs, and wound care. For minor needs, students can visit the Self-Care Cart in the reception area.

To ensure a healthy and safe environment for our entire community, it is strongly advised that all incoming students complete the entrance medical forms and provide up-to-date immunization records. Prioritizing your health is a vital first step in a successful academic journey. Refer to the Health Services website, **www.millersville.edu/healthservices** for the health evaluation forms and additional information on how to upload medical documents directly to the students' health portal. Appointments are available by calling 717-871-5250.

CENTER FOR HEALTH EDUCATION AND PROMOTION

The Elsie S. Shenk Center for Health Education and Promotion (CHEP), located in the Cumberland House, contributes to fulfilling the educational mission of Millersville University by empowering students to make informed decisions and develop lifelong skills that enhance their personal well-being. CHEP contributes to the health, academic success, and retention of students by providing current and relevant information about high-risk behaviors; raising awareness about personal decision making and the impact decisions have on an individual and their community; and engaging students in meaningful opportunities to create a healthy community where all students can achieve their personal and academic goals.

CHEP features a diverse group of trained peer educators who provide lifestyle education programs, awareness events, and outreach on topics including alcohol and other drugs, mental health, sexual responsibility, healthy relationships, stress, and sexual violence. In addition to educational programs, CHEP hosts a wellness fair each fall and spring semesters on campus to connect students with resources and information on health, well-being and wellness. College student health campaigns are designed and implemented based on data collected from Millersville students to promote healthy decision making.

Wellness Coaching is a free service provided through CHEP to students. Wellness Coaching is an individualized process for helping students achieve a higher level of well-being and performance in their academic pursuits as well as life in general when change is desired, yet difficult to achieve. It empowers students to explore health topics of stress, sleep, social support, and substance use. Students can schedule appointments by emailing wellness.coaching@millersville.edu.

CHEP has community partnerships with various Lancaster community organizations to provide students with free resources and services. Sexual assault advocacy services are provided by the YWCA Lancaster in the Witmer Building as well as relationship violence advocacy services are provided by Domestic Violence Services of Lancaster. Additional information can be found on the website. www.millersville.edu/chep

STUDENT CONDUCT AND COMMUNITY STANDARDS

The Office of Student Conduct and Community Standards (SCCS) fosters student learning and success by balancing individual and community rights, while promoting a safe, student-centered, and inclusive community. The Office of SCCS administers and provides education on the Student Conduct & Community Standards Handbook, advocates for students' rights, and upholds the community standards and values of Millersville University. The office educates students about the expectations of the Millersville University community and assists them in their development. Through the discipline process, the Office of SCCS challenges students to think ethically and critically about their decision making and role within the campus community. The Office of SCCS teaches accountability and responsible citizenship so every student will thrive within Millersville University's diverse and dynamic academic community. The Office of SCCS works to ensure all Millersville University students have an exceptional, productive, and challenging educational experience in a safe and civil environment.

CAMPUS LIFE

Millersville University believes that the lifelong benefits of a college education are not derived solely from the classroom. Therefore, one of the University's priorities is to develop the full potential of its students and in doing so enhance the quality of their lives. To achieve this goal, Millersville University offers a wide variety of co-curricular activities, as being involved and engaged in campus life provides students the opportunity to build connections with fellow students, faculty, staff and administrators, and plays a critical role in one's own personal and professional development. The Department of Campus Life champions an inclusive and engaging community on campus through programs and activities that foster social belonging, personal leadership development, and campus pride. Students can find ways to get involved in areas such as: Campus Activities, Fraternity and Sorority Life, Leadership Programs, Mascot Team, Commuter and Off-Campus support and Student Organizations.

With more than 180 student organizations, students at Millersville University can find many opportunities that align with their personal and professional interests. If a student's interests are not represented in an existing organization, a new club may be established by following the procedures set forth by the Student Government Association.

Student organizations are open to all enrolled Millersville University students and divided into several general-interest categories: academic, arts and culture, fraternity and sorority life, identity-based, service and civic engagement, sports and leisure, and spirituality.

The first step to getting involved on campus is to activate your Get Involved account by logging into getinvolved.millersville.edu using your Millersville username and password. Once activated, you can browse the listing of student organizations, see current events and programs happening on campus, and stay connected to the campus you now call home.

For questions about getting involved on campus, visit the Department of Campus Life, located in the Student Memorial Center, suite 118, visit www.millersville.edu/campuslife/, and follow Campus Life on Instagram at @MillersvilleCampusLife.

EDUCATIONAL AND POPULAR PROGRAMMING

A wide range of programming is provided for students by the University Activities Board (UAB). Allocated by the Student Government Association, UAB is a student-run organization divided into committees, with each committee responsible for programming in their specific area (traditions, entertainment, recreation and leisure, late night and travel).

STUDENT GOVERNMENT ASSOCIATION

To foster an atmosphere of open communication within the University, Millersville offers a number of avenues for student participation in University governance. Consultation with students is an integral step in any major decision. The aim of the Student Government Association is to encourage students to participate in sound governmental procedures and develop innovative and creative University programs.

Students participate in University governance through the Student Government Association and the University Curriculum and Academic Policies Committee (UCAPC). As the governmental body of the students, the Student Government Association is an integral component in the governance of the University and works with the faculty, staff, and administration on major University policies. The Student Government Association approves the constitution of every campus organization, delegates responsibility to its constituent groups, recommends the allocation of activity fee funds and makes emergency allocations to recognized University organizations when necessary. These decisions are subject to approval by the University president.

STUDENT COMMUNICATIONS MEDIA

The Snapper, MUTV 99 and WIXQ-FM are the official student communications media of Millersville University.

The Snapper is the University's student-run newspaper, published weekly during the academic year. For many years the paper has won the highest awards given by major press associations.

MUTV 99, the student-operated campus cable TV station, provides the University with 24/7 programming throughout the school year.

WIXQ-FM, the campus radio station, provides the University and local community with educational programming, news, sports, talk shows and music. The station adheres to all Federal Communications Commission regulations and is student operated.

FAITH AND SPIRITUALITY

Millersville University has students from many different backgrounds and faith traditions. We offer a welcoming environment for students to practice or explore these faiths in an open-minded setting while promoting appreciation and respect for religious and spiritual diversity.

Student Organizations offer faith and spirituality programs and services, including Athletes Bible Fellowship, Bible Campus Ministries, College Bible Fellowship, Fellowship of Christian Athletes, Hillel, John Newman Association (Roman Catholic), Navigators, Orthodox Christian Fellowship, Reformed University Fellowship, United Campus Ministry, University Christian Fellowship, and Young Life.

The Inter-Faith Council of Ministers is made up of campus ministers who serve the University community by providing faith-based counsel, assisting during times of crisis, and participating in faith and spirituality events throughout campus.

Millersville-area churches welcome students to their services and often sponsor programming specifically for students. Students who do not find a place of worship in Millersville will find many options available in the nearby city of Lancaster. Three synagogues in Lancaster represent the Reform, Conservative and Orthodox branches of Judaism. Seven Muslim mosques are located in the Harrisburg area; a Buddhist association is in Columbia; and a Hindu temple is in New Cumberland.

VETERANS RESOURCE CENTER

Designated a Military Friendly® Bronze Designation campus, Millersville University proudly serves and supports our student veterans and their dependents. The Veterans Resource Center (VRC), located on the north side of campus in the Mercer House, strives to provide the support and assistance necessary for students to achieve academic success while fostering camaraderie and engagement. The VRC is staffed by student veterans who through their shared experiences endeavor to maintain a dynamic, effective welcoming center that is responsive to the needs of our student veteran community.

SERVICES FOR COMMUTERS

Commuting students are an integral part of the University community and are encouraged to take advantage of the many opportunities to get involved on campus. Commuter student support provided by the Department of Campus Life engages commuter students throughout the academic year through various programs and events. Millersville has over 180 student organizations that meet throughout weekdays and on weekends, which makes it easy for commuters to become engaged during a time that works best for them. A complete listing of student organizations can be found at getinvolved.millersville.edu.

The Nest Commuter lounge, located in Student Memorial Center 104, is the new "home away from home" for our commuter students and offers several spaces to rest, nap, collaborate, study, and eat. The Nest also includes computer workstations and kitchenette area with a refrigerator for food storage, microwave, and Keurig machine. Additionally, Club De'Ville, located on the lower level of the Student Memorial Center, is a space designed for students to relax. The lounge area is equipped with comfortable seating, a video gaming area, arcade games, and grab-and-go food.

BUS SERVICE

Millersville University coordinates bus service for students, faculty and staff for traveling throughout the campus and surrounding apartment complexes and a bus route to downtown Lancaster. Schedules are available in the Student Memorial Center, at the Student Information Desk, located just inside the main entrance. The schedule plus additional information can be found at www.millersville.edu/shuttlebus

DR. RITA SMITH-WADE-EL CENTER FOR INTERCULTURAL STUDENT ENGAGEMENT

The Dr. Rita Smith-Wade-El Center for Intercultural Student Engagement, also known as OISE, is a student-centered resource that is dedicated to creating and sustaining a campus culture that aligns with the University's commitment to its EPPIIC Values. CISE aims to provide students with opportunities to explore their multiple identities and learn about the background and experiences of others. The hope is to create a culture of inclusion and a sense of belonging here on campus and beyond. CISE engages students in the development of knowledge, awareness and skills around cultural competence, social justice, and advocacy for marginalized populations. CISE also works to support identity-based/multicultural student organizations. For more information about these organizations and how to get involved, visit getinvolved.millersville.edu.

Additionally, CISE provides individual support through holistic academic and personal coaching for students and families. An example of this holistic support is a partnership with Milton Hersey. This partnership helps students transition to Millersville University by combining support from both the high school and the college environment. Students are provided an outreach counselor from CISE while continuing to meet with their high school counselor to ensure student success and scholarship.

Our programs use the best practices and essential resources to provide excellent academic support to help students realize their full potential. CISE students have the opportunity to benefit from:

• Group and Individual Tutoring Services

• Peer Mentoring

• Common Structured Study Hours

• Intensive Outreach and Interpersonal Support

• Individual and Group Meetings

• Advocacy and Allyship Skill Development Workshops

• Four-year Cocurricular Plan for Success

• Networking and Mentoring Workshops

• Monthly Library Learning Workshops

• Wellness, Health, and Resilience Workshops

• Holistic Student Development

• Community Engagement Opportunities

• Graduate Assistant Opportunities

• Financial Literacy Workshops Each Semester – Student Loans & Scholarship Programs

• First-Generation Programs and Resources

• Leadership Development- Project Management Training

Our programs encourage students to question, alter, inspect, and challenge their experience for the purpose of constructive self-actualization. Students who use our services make the necessary changes to be successful at Millersville University

The Center for Intercultural Student Engagement is located in the Adams House on the corner of Frederick Street and George Street.

CAMPUS RECREATION

Campus Recreation at Millersville University is dedicated to promoting student well-being through inclusive, engaging, and dynamic programs that support a healthy, active lifestyle. Whether you're looking to compete in sports, try something new, build community, or simply have fun, there's something for everyone. From intramural and club sports to fitness and outdoor adventures, Campus Recreation offers a wide range of opportunities to get involved, stay active, and make the most of your college experience. Follow @mucampusrec on Instagram, Facebook, X, Threads, YouTube, and TikTok for the latest information and programs!

Intramural Sports

All students are encouraged to get involved in Intramural Sports, which are organized with significant student input and leadership. A wide range of sports and activities are offered, including basketball, flag football, indoor and outdoor soccer, softball, ultimate frisbee, volleyball, floor hockey, dodgeball, badminton, tennis, table tennis, field hockey, and eSports.

For schedules, registration, and more information, visit IMLeagues.com.

Special Events

Campus Recreation hosts a variety of special events throughout the year that bring the campus community together in fun and creative ways. Past events have included:

- Rec the Quad
- Iron Chef Competition
- NFL and NCAA watch parties
- Powerlift competition

These events are a great way to meet new people, relax, and enjoy campus life. Visit https://millersville.dserec.com/online/eventsr for more information.

Club Sports

Club Sports are student-run organizations that offer opportunities for organized, non-varsity competition and recreational play. These clubs are a great way to stay active, build friendships, and develop leadership skills.

Current active club sports on campus include:

- Baseball
- Bowling
- Equestrian
- Fencing
- Ice Hockey (Division II)
- Ice Hockey (Division III)
- Millersville Dance Team (MU Dance)
- Men's Basketball
- Men's Lacrosse
- Men's Rugby
- Men's Soccer
- Men's Volleyball
- Mixed Martial Arts (MMA)
- Running
- Softball
- Tennis

- MOOSE Ultimate Frisbee
- Women's Basketball
- Women's Rugby
- Women's Soccer
- Women's Volleyball

Outdoor Programs

Campus Recreation's Outdoor Programs provide students with exciting ways to explore the outdoors, connect with others, and challenge themselves through adventure and team-based experiences.

A signature feature is Millersville University's Ropes Course, which includes over 30 unique elements designed for team building, leadership development, and adventure-based programming. These experiences can be tailored for student organizations, academic classes, athletic teams, and more.

In addition to on-campus offerings, Outdoor Programs organizes local trips throughout the year. Popular excursions include hiking, rock climbing, caving, and ski/snowboard trips—giving students the chance to experience the region's natural beauty while staying active and having fun. Visit https://millersville.dserec.com/online/eventsr for more information

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Rec Center (Located in the Student Memorial Center)

The Rec Center is your on-campus destination for fitness, wellness, and recreation. Facilities include:

- A wide variety of cardio and strength-training equipment
- Indoor walking/running track
- Three-court field house (Ville Courts)
- Multi-Activity Court (MAC): an enclosed space ideal for basketball, indoor soccer, roller hockey, dodgeball, and floor hockey
- One racquetball court
- One Mixed Martial Arts training room
- Functional Training Room: equipped with a sled, plyo boxes, TRX, and other state-of-the-art fitness tools
- Dance Studio
- Table Tennis tables
- Group fitness classes: led by certified instructors
- Locker rooms: equipped with day-use lockers and showers
- Rentable equipment: fitness, sports, games, and more

Student Employment

Campus Recreation offers a variety of student employment opportunities across all program areas—including Intramural Sports, Club Sports, Fitness, Outdoor Programs, the Rec Center, and Marketing.

· These are paid, on-campus positions with flexible scheduling designed to fit around your academic and personal commitments. All training and required certifications are provided—no prior experience is necessary.

· In addition to daily responsibilities, student staff gain valuable leadership experience and career-readiness skills through hands-on learning, team collaboration, and professional development opportunities. Roles may include officiating games, supervising facilities, leading trips or fitness classes, assisting with events, and more.

· Working with Campus Recreation is more than just a job—it's a chance to grow, lead, and make an impact on campus.

STUDENT MEMORIAL CENTER

The Student Memorial Center (SMC) is often viewed as the living room of Millersville's Campus and fosters community, engagement, and Marauder pride. The SMC has six furnished meeting rooms and a large multipurpose room to support engagement and student success on campus and are used for weekly meetings, activities, lectures, and other special events.

Reservations for meeting rooms and the multipurpose room can be made online via Ad Astra. The SMC also includes student-centered spaces such as a printing station, the Nest Commuter Lounge, and the Galley, our spacious, comfortable dining lounge located just steps from Chick-fil-A.

The SMC houses the following departments:

- Avenue C Vending Area
- Campus Life
- Campus Recreation
- Center for Health Education and Promotion
- Chick-fil-A
- IT Technical Operations
- PSECU Financial Education Center
- SMC Rec Center
- Talent Search
- University Ticket Office
- Division of Student Affairs
- University Store

INFORMATION TECHNOLOGY

Information Technology provides a wide variety of services for faculty, staff and students that enhance the processes of research, instruction and learning. These services include training materials relating to software products, maintenance and support for classroom technology, documentation and how-to instructional materials, assistance in statistical analysis of data, and advice on purchasing decisions.

Over a dozen general-purpose and specialized computer laboratories located throughout the campus, and housing more than 475 computers, provide students with convenient access to the University network, email and the internet. These labs are multimedia-capable and may be used by faculty as technology classrooms to enhance students' learning experiences. The labs are available during daytime and evening hours.

Millersville University has a robust, high-speed, campus-wide network that connects all major buildings and residence halls to campus network services and the internet. Every Millersville student automatically gets a myVille account and an email account upon admission to the University. myVille is the student portal to the University's computing and networking systems—the student access point to Millersville University's online services. Residence hall students must have valid myVille accounts to access the internet from their residence hall rooms. This is also true for all students using computers in the various computer labs around campus. Network and internet usage are governed by the Millersville University Policy for Responsible Use of Electronic Resources.

Wireless access to the internet is available throughout the campus.

Assistance for any type of technology question is provided by the Technology Assistance Center (TAC). The TAC, located in the Boyer Building, provides telephone support for hardware and software questions, as well as walk-in support for faculty, staff and students. Visit the Information Technology web page, **www.millersville.edu/infotech**, for the TAC's available hours.

For complete details about the Information Technology staff, services provided, equipment in labs and much more, visit the Information Technology web page, **www.millersville.edu/infotech**, or phone (717) 871-7777.

STUDENT POLICIES

Students are expected to familiarize themselves with and abide by all student conduct regulations found in this catalog and other University publications, including the Student Code of Conduct, the Living on Campus Handbook and the Student Handbook. Please refer to the Student Handbook for information on student discrimination grievance procedures, sexual-harassment policy, and policy on sales and vendors.

IDENTIFICATION CARD

For students, the preferred method of identification is MU Mobile ID. This mode of identification does not require the issuance of a physical ID card. The user is able to access all of the same features allowed by a tangible ID card, but from the convenience of their smartphone. Please click the link below for more information: Mobile ID - Home

Physical ID cards are required for all Millersville University employees. Students who do not own a smartphone or do not wish to use MU Mobile ID will need to procure an ID card. Please note: Students can only have one valid ID. An ID card will not work if the user has an active MU Mobile ID. For more information regarding ID cards, please contact the ID Services Office.

The Millersville University ID office is located at the MU mailroom in the Boyer Building room 123, Monday through Friday from 8 a.m.-4:00 p.m. , or phone (717) 871-7008.

MOTOR VEHICLES

All vehicles parked on the properties of Millersville University must display a valid University-issued parking permit. Permits may be secured at the University Police Parking Division, located in the Boyer Building.

Violations of University parking regulations may result in parking violation tickets and possible disciplinary action, including cancellation of parking privileges, the withholding of grades and the denial of registration privileges. Parking sections of the Pennsylvania Vehicle Code (Title 75) are also enforced on the properties of Millersville University.

The Parking Division will utilize a waiting list in the event resident student parking reaches capacity for students who live in University residence halls. Office hours are Monday through Friday from 8 a.m.-4:30 p.m. Hours are extended at the beginning of the fall and spring semesters and are posted at the University Police Department.

PRIVACY OF STUDENT RECORDS

The Family Educational Rights and Privacy Act of 1974 was amended in December 2008 by the U.S. Department of Education. It gives students the right to review their academic records, to challenge their contents and to protect their confidentiality. Basic directory information may be disclosed without prior consent of the student. In the event of an alcohol-related incident or a health/safety emergency, parents may be considered appropriate parties to whom a nonconsensual disclosure may be made.

The Office of the University Provost is responsible for institutional compliance with the FERPA guidelines. The Office of the Registrar is responsible for the maintenance and release of the academic record. The Registrar's Office is located on the first floor of Lyle Hall. Questions or concerns about FERPA are to be directed to the Registrar.

Annual notification of the University’s policy on confidentiality of student records is also posted on the registrar’s website.

Students may file complaints about the contents of their records or alleged wrongful disclosures of information with the Registrar's Office.

SMOKING

Smoking is prohibited inside all campus buildings.

Confidentiality

In accordance with the provisions of the Family Educational Rights and Privacy Act of 1974, any information relating to an alleged violation of the University's Student Code of Conduct or to the outcome of a judicial hearing must be treated as strictly confidential by members of the faculty.

About MU

Expenses & Financial Aid

Overview of Expenses and Financial Aid

As a state-owned university, Millersville University provides educational opportunities that surpass those available at many more costly institutions.

Students may qualify for a number of scholarship opportunities to explore available scholarships please visit the Office of Financial Aid's guide to scholarship resources.

The table below and other information in this section present the most recent approved costs for the academic year. Tuition and fees are subject to change at any time.

UNDERGRADUATE COSTS

EXPENSE	RESIDENTS OF PENNSYLVANIA	NONRESIDENTS OF PENNSYLVANIA
Tuition[1]	$7,994	$19,986
General Fee[1]	$3,000	$3,000
Technology Fee[1]	$598	$910
Room & Meals[2]	$12,830	$12,830
Estimated Books & Supplies[3]	$1,200	$1,200
Estimated Personal Expenses[3]	$2,000	$2,000
Estimated Travel Costs[3]	$800	$800

[1] Tuition and fee costs are based on full-time enrollment.

[2] Your actual charges may vary based on your room assignment and meal plan.

[3] Costs not billed directly by the University but that a student may incur.

GRADUATE COSTS

PER CREDIT EXPENSE	RESIDENTS OF PENNSYLVANIA	NONRESIDENTS OF PENNSYLVANIA
Tuition - Graduate Standard	534.00	801.00
Tuition - Doctoral (DNP)	587.00	881.00
Tuition - Doctoral (EDD/DSW)	694.00	1,041.00
General Fee	153.00*	153.00*
Technology Fee	35.00	50.00
Doctoral Fee	115.00	115.00

*The maximum amount of General Fee charged for a graduate level student taking 12 or more credits is $1,791.00.

PAYMENT OF TUITION AND FEES

Students enrolling for classes during the early registration period are not required to pay immediately. Electronic semester bills are forwarded four to six weeks before the beginning of each semester. Full payment is due, by the due date on the e-bill.

Student account balances by term are available within the Student Account Manager platform (SAM). Students enrolling after all initial billing dates have passed are expected to make payment immediately upon registration. Students are considered officially enrolled, able to earn credits, receive grades and graduate when all charges are paid in full and they have confirmed attendance. Students who register are responsible to drop any class they do not plan to attend. Failure to drop the class before the semester begins may result in charges and/or grades being posted to your records. Do not rely on the “drop for nonpayment” policy to remove classes.

Information about fees, payments and important billing dates can be found at www.millersville.edu/osa or at the Office of Student Accounts, Lyle Hall.

PAYMENT PLAN

Millersville University offers a variety of installment plans to meet the needs of students and families. These installment plans are only available in the Fall Spring, and Summer semesters.

Options are presented within the Student Account Manager (SAM). Plan options change throughout the billing cycle. There is a $30 enrollment fee charged per term. A $25 late fee will be assessed to any account with an unsuccessful installment.

More information regarding payment plans is available at www.millersville.edu/osa or at the Office of Student Accounts, Lyle Hall.

TUITION

Tuition charges are set by the Board of Governors of Pennsylvania’s State System of Higher Education.

Tuition for Residents of Pennsylvania. Full-time in-state undergraduates pay $3,997 per semester for 12 to 18 credit hours plus $333 per credit hour over 18. Part-time undergraduates enrolled in fewer than 12 credit hours pay $333 per credit hour. All undergraduates pay $333 per credit hour during Winter and Summer sessions, no matter their course load.

Tuition for Nonresidents of Pennsylvania. Full-time undergraduates pay $9,993 per semester for 12 to 18 credit hours plus $833 per credit hour over 18. Part-time undergraduates enrolled for fewer than 12 credit hours pay $833 per credit hour. All undergraduates pay $833 per credit hour during winter and summer sessions, no matter their course load.

[1] Rates subject to change for future academic years. For up-to-date fee information, please refer to the Office of Student Accounts website at millersville.edu/osa.

Tuition for International Students. International students are charged nonresident tuition and fees, or the costs associated with their program of enrollment. A $100 International Student Fee is also assessed. Additional information regarding specific programs can be found at www.millersville.edu/internationalprograms or at the Office of International Programs and Services, Lyle Hall.

Residency Status. In order to qualify for Pennsylvania resident tuition, students must meet State System of Higher Education criteria as summarized below:

1. Continuous residence in Pennsylvania for 12 months prior to registration.
2. U.S. citizenship, formal declaration of intent to become a citizen or admission to the United States on an immigrant visa. A nonimmigrant visa (tourist or student visa) is not proof of intent of residency.
3. Pennsylvania residency by parent(s) or guardian(s) of students who are minors. The age of majority in Pennsylvania for establishing an independent residence for tuition purposes is 22. A minor may, however, prove financial emancipation and independence through clear and convincing evidence.
4. A United States government employee or a member of the armed forces who was residing in Pennsylvania immediately prior to entering the government service and who has continuously maintained Pennsylvania as his or her legal residence is considered a Pennsylvania resident. Others in military service stationed in Pennsylvania are considered Pennsylvania residents.
5. A student receiving a scholarship or grant dependent on residence in a state other than Pennsylvania is not considered a Pennsylvania resident.

A student who changes his or her residence from Pennsylvania to another state must give prompt written notice to the University. The University may reclassify a student if it believes he or she is no longer a Pennsylvania resident. Students may challenge residency classifications by making written petitions to the Office of Student Accounts, Lyle Hall. To obtain the request form, go to the Student Accounts homepage at www.millersville.edu/osa and click on “Residency.”

Refunds will be made according to current University and State System of Higher Education policies. Students who reduce their credit hour
load after the end of the drop/add period so as to qualify for billing as part-time students shall not be eligible for a refund of the amount billed which exceeds the part-time rate.

There will be no partial refunds for full-time students who reduce their credit-hour load below full-time status, or for part-time students who reduce their credit load. After the drop/add period, refunds of tuition and the general fee will only be considered for students who fully and officially withdraw from the University or, in the case of eligible undergraduates, take an official leave of absence.

The technology fee is nonrefundable after the drop/add period, and the refund of tuition and general fee for total withdrawal will be based on the following schedule for the fall and spring semesters.

TIME PERIOD	REFUND
Through “drop/add period”	100%
Second Week	80%
Third Week	60%
Fourth Week	50%
Fifth Week	40%
After fifth week	No refund

Note: Refunds for first-time students receiving financial aid under Title IV are made according to Public Law 102-135, Section 484B of the Higher Education Amendments. Financial Aid may be adjusted based on the withdrawal date.

Summer and Winter sessions are considered separate terms and are treated as such for refund purposes. See the appropriate session course listing for the applicable refund schedule on the University website, www.millersville.edu/osa. Rates and refund amounts are subject to change.

GENERAL FEE

The general fee is a mandatory fee used to support a variety of ongoing student services and activities, such as student senate, student organizations, health services and wellness programs, Student Memorial Center debt service, expansion, capital replacement and maintenance. The fee is charged to all students except those enrolled in a Doctoral or fully-online program.

The 2026-2027[1] fee is $1,500 per semester for full-time undergraduate students and $125 per credit hour for part-time undergraduate students.

[1] Rates subject to change for future academic years.

TECHNOLOGY FEE

The technology fee is a mandatory fee collected to acquire, install and maintain up-to-date and emerging technologies to enhance student learning outcomes.

The 2026-2027[1] fee is $299 per semester for full-time Pennsylvania residents, and $455 per semester for full-time nonresidents. Part-time Pennsylvania residents pay $25 per credit; part-time nonresidents pay $37.50 per credit.

The 2026-2027 fee is $35 per credit hour for graduate Pennsylvania residents and $50 per credit hour for non-residents.

[1] Rates subject to change for future academic years.

Refunds. The policies and schedule for tuition refunds also apply to the general fee. The technology fee is nonrefundable after the drop/add period.

HOUSING FEES

Millersville has on-campus suite-style residence halls offering a variety of housing options for fall and spring semesters. Please visit our website at www.millersville.edu/housing for room layouts and dimensions as well as video tours.

2026-2027 ROOM RATES PER SEMESTER

EAST, SOUTH, AND WEST VILLAGES

ROOM	SEMESTER PRICE
2 Bed/1 Bath Single Semi-Suite	$5010
2 Bed/2 Bath Double Suite	$5010
2 Bed/2 Bath Double Semi-Suite	$4445
1 Bed/1 Bath Double Semi-Suite	$4445
Pod Single	$4980
Private Suite	$5145

SHENKS HALL

ROOM	SEMESTER PRICE
A Suites	$4915
B Suites - Single	$4915
B Suites - Double	$4520
C Suites	$4285
D Suites	$4520

BARD HALL

ROOM	SEMESTER PRICE	
Single	$3795	

Housing Refund Policy. Housing charges will only be refunded for students who **completely withdraw** from the University and **properly check out** of the residence hall. The housing refund effective date will correspond with the date the student officially checks out of the residence hall. The student must coordinate the official checkout with their respective Residential Area Director (RAD)/Residencial Area Coordinator. Refer to Section IX: Residence Hall in the online Living On Campus Guide for more information. The refund tables can be found by going to https://www.millersville.edu/osa/refund.php.

MEAL PLAN - DESCRIPTION AND RATES

Residential Students - The 2026-2027 housing and meal rate is estimated to be $6,415 per semester with an EPPIIC Bucks meal plan of $2,375
per semester depending on housing and dining choices. All first-year residential students are required to have an EPPIIC Bucks meal plan during each semester (fall semester and spring semester) for an academic year total of approximately $4,750. Each residential student (first-year, transfer and upper-class) is automatically enrolled in the EPPIIC Bucks meal plan. Students with greater than 30 credit hours, including transfer and upper-class students, may change their EPPIIC Bucks Meal Plan to the Captain Bucks meal plan ($2,200), or Pirate Bucks meal plan ($2,035) no later than the Friday prior to the first day of classes each semester. A Traditional weekly Meal Plan is the number of meals per week. All plans are declining balance, and the initial amount is the amount paid for the plan.

Commuter Students (non-Millersville University Resident Students) – All commuter students may sign up for any of the Meal Plans for the fall and spring semesters. Commuter students who are Meal Plan members during the fall semester are not automatically signed up for a spring semester Meal Plan. Commuter students may become a Meal Plan member for Buccaneer Bucks ($1130), Island Bucks ($850) or Voyager Bucks ($710) at any time during the fall or spring semester.

All meal plans are declining balance, and students are responsible for managing their funds. The Upper Deck provides an “all-you-care-to-eat” dining concept. Parents and students may check their balances and transactions via the GET APP. Unused funds on the meal plans roll over from the Fall Semester to the Spring Semester. Commuter students, who choose not to sign up for an additional Meal Plan during the Spring Semester, may use any unused funds from the fall semester provided they are enrolled for classes. Any unused funds at the end of the Spring Semester are forfeited. The only exception is a student who is enrolled in Summer Session 1 classes, they may use any remaining funds. All remaining funds after the fourth Friday of Summer Session 1 are then forfeited.

Summer Session III – Enrolled students living in Residence Halls are required to have a Meal Plan for Summer Session III. Students may choose between the Buccaneer Bucks ($1130 Declining Balance) or the Island Bucks Plan ($850 Declining Balance). Each resident student will automatically be enrolled in the Island Bucks meal plan. Students may change to the Buccaneer Bucks plan no later than the Friday prior to the first day of classes for Summer Session III. Any unused funds after Summer Session III are rolled over to the Fall semester provided the student is enrolled for classes during the fall semester.

Students living off campus are welcome and invited to become Meal Plan members. All students are welcome to dine at the Upper Deck in Gordinier Hall and all Retail Dining Locations on campus. Off-campus students may sign up for a Meal Plan at any time. Students who sign up prior to the beginning of a semester, who wish to cancel or change their Meal Plan choice must do so by the Friday prior to the first day of classes semester. Students who sign up for a Meal Plan after the first day of classes looking to change or cancel their meal plan choice should reach out to Heather Keck at 717-871-5651.

2026-2027 UNIVERSITY DINING MEAL PLAN RATES SUMMARY

RESIDENT TRADITIONAL PLANS

PLAN	COST
EPPIIC Bucks[1] - $2375 in declining balance per semester	$2,375.00
Captain Bucks[2] - $2200 in declining balance per semester	$2,200.00
Pirate Bucks[2] -$2035.00 in declining balance per semester	$2,035.00

[1] 0-29 Credits

[2]30 Credits or More

COMMUTER PLANS (ACADEMIC YEAR & SUMMER OPTIONS)

PLAN	COST
Buccaneer Bucks - $1130 in declining balance per semester	1,130.00
Island Bucks - $850 in declining balance per semester	$850.00
Voyager Bucks - $710 in declining balance per semester	$710.00

REFUNDS

A prorated schedule for housing and meal plan fees for students who withdraw from the University is as follows:

DATE	REFUND
Prior to student move-in day	100%
First week	90%
Second week	80%
Third week	70%
Fourth week	60%
Fifth week	50%
After fifth week	No refund

DINING DETAILS

Check out our Dining web page for additional dining details and information at Millersville University. www.millersville.edu/dining

STUDENTS WITHOUT A MEAL PLAN AND VISITORS

Students who live off campus, faculty, staff, and visitors may dine at the Gordinier Hall Resident Dining Hall and all dining retail locations on campus. Students, faculty, and staff with a Millersville University ID will be charged the following prices at the Upper Deck beginning Monday, August 13, 2025. Breakfast - $9.10, Lunch - $11.90 and Dinner - $14.65. All visiting guests without a University ID will be charged the following prices at the Upper Deck beginning Monday, August 13, 2025, are Breakfast - $10.80 Lunch - $13.55 and Dinner - $16.85. Rates for special events are available through the Dining & Catering Services Office at 717-871-5275. Rates are subject to change.

MARAUDER GOLD

Money deposited into your Marauder Gold account may be used to make purchases at on-campus Dining locations, University services, University Store, and local participating vendors that display the Marauder Gold logo. You may open a Marauder Gold account with a minimum deposit of $50 with additional deposits of $25 or more. Marauder Gold deposits may be made using the “GET" App using a credit/debit card (American Express, Discover, MasterCard or Visa). The Office of Student Accounts, Lyle Hall Room 246 accepts payments made via check, cash, or money order. Please notate Marauder Gold on all methods of payment.

OTHER FEES

APPLICATION FEE: UNDERGRADUATE ADMISSIONS

Students who apply and are admitted to the University through the undergraduate admissions office are not charged an application fee.

APPLICATION FEE: GRADUATE ADMISSIONS

Individuals who apply for admission through graduate and professional studies (i.e., Masters, Certification, Endorsement, Certificate, or Doctorate) will pay a graduate application processing fee of $40 with the submission of each new application. Non-degree applicants do not pay an application fee. Fee waivers may be available upon request.

PAYMENT EXTENTION FEE

Students who do not resolve their account by the due date are subject to a $100 fee.

LATE-REGISTRATION FEE

Students who register after the start of the semester/session are subject to a $50 late registration fee, except when permission for late registration has been granted by the registrar.

ORIENTATION FEE

Students admitted for the fall or spring semesters are required to pay an orientation fee and are expected to attend the orientation program. The orientation fee amount varies annually and is required regardless of attendance. For more information, please visit millersville.edu/orientation.

SPECIAL HANDLING FEE

Anyone who supplies the University with a check or electronic payment that is not honored by the bank on which it is drawn is charged $35.

REPLACEMENT FEE

The fee for replacement of a Millersville student identification card is $25.

DAMAGE FEE

Students are responsible for damages, breakages, and loss or delayed return of University property.

DEGREE FEE

Each candidate for a degree must pay $30 to cover the cost of the diploma. The Commonwealth of Pennsylvania requires a nonrefundable fee for credentials evaluations and processing teaching certification applications.

HEALTH SERVICES SUPPLIES FEE

The cost of any expensive supplies used to treat a patient at Health Services will be charged to the patient.

LIBRARY OVERDUE AND ITEMS FEES

Please contact the library for information at 717-871-7110, or visit the Millersville website, www.millersville.edu.

DEPOSITS

ADVANCE MATRICULATION DEPOSIT

A nonrefundable $150 deposit is required upon acceptance of the offer of admission. It is applied toward payment of tuition. It is transferable on a one-time basis to a revised admission date upon the approval of the director of admissions.

ADVANCE HOUSING DEPOSIT

Students admitted to University residence halls must pay a non refundable deposit of $200 each year. It may be applied only toward payment of residence hall fees for spring. It is transferable on a one-time basis to a revised admission date upon the approval of the director of admissions.

OTHER EXPENSES

Most students incur additional expenses for books and supplies, personal needs, and traveling to and from home. These are not charged directly by
the University; however, the University provides estimates for the purpose of assisting students in finding aid resources to meet the needs of their additional expenses.

For the 2026-2027 academic year, the total cost of attendance for Pennsylvania residents living on campus in the residence halls is estimated at $29,512, and the standard cost of attendance for non residents living in the residence halls is estimated at $41,824. For the 2026-2027 academic year, the total cost of attendance for commuting Pennsylvania residents living with their parents/guardians is estimated at $20,922, and the standard cost of attendance for commuting non residents living with their parents/guardians is estimated at $35,134.

For the 2026-2027 academic year, the total cost of attendance for off-campus Pennsylvania residents who are renting temporary housing in the Millersville/Lancaster area is estimated at $28,222 and the standard cost of attendance for non residents renting temporary housing in the Millersville/Lancaster area is estimated at $40,534 for nonresidents. This amount assumes the student is sharing facilities and rental costs with at least one other person. The cost of attendance is comprised of direct costs (billed by the university) and indirect costs (possible educational expenses you may incur). The cost of attendance is not the amount you will be charged by the Millersville University. Starting in the 2026-27 academic year, non-resident students will receive the MU Advantage tuition rate which reduces the standard out-of-state cost of tuition. For more information visit: https://www.millersville.edu/osa/mu-advantage.php.

Federal Financial Aid can only be applied to courses that are required towards the completion of the student's degree. To learn more about the Course Program of Study Policy visit: www.millersville.edu/finaid/maintaining-eligibility/course-program-of-study-cpos.php

More information regarding expenses can be found on the Financial Aid section of Millersville's website under Calculating Eligibility: https://www.millersville.edu/finaid/eligibility/calculate.php

STUDENT INSURANCE

An accident and sickness insurance plan is available to Millersville University students through the University insurance carrier, Consolidated Health Plan. All questions regarding eligibility, insurance coverage, costs or premium refunds should be directed to the insurance carrier, 800-633-7867.

FINANCIAL AID

At Millersville University, a range of financial aid resources are available to eligible students, including scholarships, state grants, federal grants, employment programs, federal loans, and private education loans. To access these resources, students must complete the Free Application for Federal Student Aid (FAFSA) annually. The FAFSA opens on October 1st, and we recommend completing it by March 15th to be considered for all types of aid. Pennsylvania residents must submit the FAFSA by May 1st each year to be considered for a PA State Grant.

For more information on scholarship opportunities for prospective and current Millersville students, go to: www.millersville.edu/finaid/financial-aid-options/scholarships/index.php

UNIVERSITY SCHOLARSHIPS

A number of scholarships are offered at Millersville, including scholarships based on academic performance, athletic potential and need. For more information on scholarship opportunities for prospective and current Millersville students, go to: millersville.edu/finaid/financial-aid-options/scholarships/index.php

ASSISTANTSHIPS

Graduate assistantships are awarded on a competitive basis for a nine-month period to graduate students admitted into a master's degree program and are renewable for one year. Remuneration for graduate assistants includes a stipend and waiver of tuition only, up to a maximum of 18 graduate credits per calendar year. University fees are not covered. Full-time graduate assistants receive $6,000/year ($3,000/semester) and work 300 hours per semester in their assignment. Current assistantship assignments include most of the departments offering graduate degree programs. Other academic and administrative support assignments are available. Graduate assistantship assignments, which are awarded for fall and spring semesters only, vary but may include research, counseling and administrative responsibilities. Interested students should visit the Graduate Studies and Adult Learning website at www.millersville.edu/gsal for information.

FEDERAL GRANT PROGRAMS

FEDERAL PELL GRANTS

The Federal Pell Grant is a free resource to support students in their college journey. Eligibility is determined through the FAFSA and the amount awarded is based on the Student Aid Index (SAI) calculated, financial need, and the number of credits you are enrolled. This federally funded grant is automatically awarded to eligible undergraduate students pursuing their first bachelor's degree. For more information, go to: millersville.edu/grants. To apply, students simply need to complete the FAFSA at https://studentaid.gov/h/apply-for-aid/fafsa. If eligible, students will receive notification of the award in their financial aid offer from Millersville.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)

This program is intended to provide additional support to students who have exceptional financial need, which is determined by the FAFSA and the Student Aid Index (SAI) calculated. FSEOG is exclusively for undergraduate students pursuing their first bachelor's degree and enrolled at least half-time (6 credits). FSEOG is automatically awarded to eligible students and award amounts range from $1,000-$2,000 per year. For more information, go to: https://www.millersville.edu/finaid/financial-aid-options/grants/index.php

STATE GRANT PROGRAMS

The Pennsylvania Higher Education Assistance Agency (PHEAA) offers state grants, known as the PA State Grant, to assist Pennsylvania residents in need of financial support to attend approved higher education institutions. To apply for a PA State Grant, simply complete the Free Application for Federal Student Aid (FAFSA) by the deadline of May 1st and ensure your application with PHEAA is complete. To complete the FAFSA, go to: https://studentaid.gov/h/apply-for-aid/fafsa

Grant award amounts depend on educational expenses and resources. Students must be in a degree-seeking undergraduate program and be enrolled at least half-time (6 Credits) to be eligible. PA State Grants are subject to annual review and may change from year to year. Renewal depends on satisfactory academic standing, continued need for financial assistance and the availability of funds appropriated by the Pennsylvania General Assembly. For more information, go to: https://www.millersville.edu/finaid/financial-aid-options/grants/index.php. To ensure your application is complete, go to: https://www.pheaa.org/

STUDENT EMPLOYMENT PROGRAMS

FEDERAL WORK-STUDY PROGRAM (FWS)

Federal Work-Study provides part-time employment opportunities for students who have completed a FAFSA and demonstrate financial need, enabling them to earn money while attending school. Although this program is part of the financial aid package, the funds are not directly applied to a student's bill. Federal Work-Study offers valuable opportunities for eligible students to work on-campus or in off-campus positions, including non-profit organizations or public agencies, with a focus on work in the public interest. Students can earn up to the amount awarded and are typically paid on a biweekly basis, with payment based on the number of hours worked. For more information, go to: millersville.edu/work-study

MILLERSVILLE UNIVERSITY STUDENT EMPLOYMENT PROGRAM

At Millersville University, students do not need to be eligible for Federal Work-Study to secure employment opportunities on campus. A variety of positions are available that cater to different skills and interests, providing valuable work experience while accommodating students' schedules. Whether it's working at the library, in a department office, or in a campus facility, there are plenty of options available for students seeking employment to support their academic and personal goals. Wages are earned in the form of a paycheck and are not applied to a student's bill. To search available positions, go to: https://jobs.millersville.edu/ > Search Jobs > Position Type: Student Worker

LOAN PROGRAMS

FEDERAL DIRECT LOANS

The Federal Direct Student Loan program guarantees loans from the Department of Education to students who complete the Free Application for Federal Student Aid (FAFSA) and maintain at least half-time enrollment (6 credits per semester). Unlike other loan programs, these loans are solely in the student's name, and no credit check or co-signer is required.

The annual loan amount varies based on the student's grade level (number of credits earned) and dependency status, with dependent undergraduate students eligible for a total of $5,500 to $7,500 per year, including a potentially subsidized portion of up to $3,500 to $5,500. Due to the new Federal Title IV regulations in the One Big Beautiful Bill Act, annual Federal Direct

Loan amounts must be prorated for students who are enrolled less than full-time. Subsidized loans are awarded based on financial need as determined by the FAFSA, offering the significant benefit of being interest-free while enrolled at least half-time. Any unsubsidized portions accrue interest during enrollment but feature low-fixed interest rates and multiple repayment options. Repayment is not required until six months after the student leaves school (graduates, withdraws, takes a leave of absence, or ceases to be enrolled at least half-time). Federal Direct Student Loans are highly recommended before exploring other loan options.

Eligible students who complete a FAFSA will be automatically offered Federal Direct Student Loans in their financial aid package, however, it's essential for students to actively accept these loans for them to be applied toward their bill. Additionally, first-time borrowers must complete loan Entrance Counseling and a Direct Loan Agreement/Master Promissory Note (MPN) at https://studentaid.gov/h/apply-for-aid/fafsa.

For more information go to: https://www.millersville.edu/finaid/financial-aid-options/loans/index.php

FEDERAL DIRECT PARENT PLUS LOANS

Federal Parent PLUS Loans are available to the parents of dependent undergraduate students to assist with providing additional financial support for their child's education after other federal and state aid sources. These loans are taken out in the parent's name, and the parent is responsible for repayment. Due to recent changes in regulations with the One Big Beautiful Bill, the new annual Parent PLUS Loan limit is $20,000 per student and the new lifetime limit is $65,000 per student. For more information, go to: https://www.millersville.edu/finaid/financial-aid-options/loans/index.php

FEDERAL DIRECT GRADUATE PLUS LOANS

Recent changes to Title IV regulations have eliminated the Graduate PLUS loan for new student borrowers. Current Graduate PLUS Loan borrowers may still be eligible in some situations. For more information go to: https://www.millersville.edu/finaid/financial-aid-options/loans/index.php

PRIVATE/ALTERNATIVE LOANS

Private/Alternative loans serve as additional financial aid options for students, filling the gap left after federal and state aid. These educational loan programs, provided by private lenders, require approval based on creditworthiness. Typically, if the student is the borrower, a co-signer is needed to secure the loan. Interest rates for private loans are determined by credit history and can be fixed or variable, often higher than federal loan rates. For more information, go to: https://www.millersville.edu/finaid/financial-aid-options/loans/index.php

ADVANCED REFUND REQUEST

An Advanced Refund Request allows students to receive an early payment of their anticipated refund. Students typically receive a refund when their financial aid exceeds their charges. Since financial aid disbursement happens after the add/drop period each semester, students can apply for an advance of up to $500 to cover educational expenses such as books or other unforeseen costs. Applications open the Wednesday before classes start and can be submitted to the Office of Financial Aid. If there are changes to the financial aid package resulting in a reduced refund, the student must repay the difference within 30 days to the Office of Student Accounts.

SATISFACTORY ACADEMIC PROGRESS (SAP)

Satisfactory Academic Progress (SAP) is a term used to describe the successful completion of coursework toward a degree or certificate. Making progress toward a degree is important for your academic success and a key factor in reducing student debt. Federal and state aid programs have separate SAP standards that students must meet at the end of each academic year to continue receiving funding.

FEDERAL TITLE IV SAP

This policy applies to all federal Title IV funding such as the Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Subsidized and Unsubsidized Loans, PLUS Loans, Work-Study, some scholarships, external awards, and private loans. Federal SAP has three separate measures and *students must meet all three components* to be considered as making Satisfactory Academic Progress. These components are Cumulative GPA, Completion Rate, and Maximum Timeframe. For example, undergraduate students must meet 67% of all attempted credits, maintain a 2.0 GPA after four semesters at

Millersville, and can only receive federal aid up to 150% of their program length. This policy is cumulative and applies to all students and periods of enrollment, regardless of aid being received. For more information on the federal SAP requirements and policy go to: millersville.edu/fa-sap

PA STATE GRANT SAP

The Pennsylvania Higher Education Assistance Agency (PHEAA) has a specific SAP policy for certain state aid programs they administer, such as the PA State Grant, Partnerships for Access To Higher Education (PATH) Grant, and the Ready to Succeed Scholarship (RTSS). For PA State Grant, RTSS, and PATH purposes, full-time students must successfully complete 24 new credits each year or at least 12 new credits each semester they receive a PA State Grant within the academic year. Part-time students must successfully complete at least 6 new credits each semester they receive a PA State Grant within the academic year. You are required to meet SAP standards for any semester that you receive a PA State Grant – please be aware summer is considered a semester. Like Title IV aid, SAP for PHEAA is reviewed at the end of every spring semester. Remedial credits taken during a semester that you aren't receiving a PA State Grant for or that were not eligible for PA State Grant eligibility will not be counted toward progress. Repeated courses in which credit was already earned during a prior semester when the PA State Grant was received will not be counted toward progress. For more information on PHEAA SAP go to: millersville.edu/fa-sap

About MU

Veterans Information

Overview of Information for Veterans

Veterans of the US armed forces may be eligible for benefits from federal and state government and other supporting agencies. Detailed information on available support programs can be found on our MU's Veterans information page.

VETERANS CERTIFYING OFFICIAL

The Veterans Certifying Official in the Office of Financial Aid at Millersville University handles all paperwork for individuals applying for the Department of Veterans Affairs (DVA) educational benefits. This office is also your link to the DVA in cases of problems with educational benefit processing.

Brandyn Whitmyer, Certifying Official
Brandyn.Whitmyer@millersville.edu
Office of Financial Aid
PO Box 1002
Millersville PA 17551
Telephone: 717-871-5100

COURSE SCHEDULING PREFERENCE FOR VETERAN STUDENTS

Act 46 of 2014 requires public institutions of higher education in Pennsylvania to provide veteran students, as defined in the Act, with preference in course scheduling. Noncompliance may be reported to the Pennsylvania Department of Education by submitting the Higher Education Student Complaint form found at**www.education.state.pa.us**. In accordance with Act 46 of 2014, Millersville University provides early registration priority for enrolled students identified as veterans who meet the following criteria:

1. Has served in the United States Armed Forces, including a reserve component and National Guard, and was discharged or released from service under conditions other than dishonorable;
2. admitted to Millersville University for the current academic year;
3. reside in Pennsylvania while enrolled.

Students who have identified themselves as being veterans, as defined above, will automatically receive their priority registration date and time in their MAX account. Students who believe they are veterans as defined above and who have not yet identified themselves as such should submit a DD214 or other proof of service to the School Certifying Official, Lyle Hall. The Veteran Coordinator will provide to the registrar's office the names of the students meeting these criteria prior to the posted

priority registration date. Students who are given course scheduling priority privileges are permitted to enroll in courses two days prior to the regular scheduling timetable as defined by the office of the registrar. Students with questions concerning course scheduling preference for veterans may contact the following individuals: Brandyn Whitmyer (717-871-5100), the Registrar's Office (717-871-5005).

MILITARY LEAVE OF ABSENCE

Students who are called to active duty must contact the registrar's office for assistance with arranging a leave of absence and their subsequent return to the University. Students should complete a Military Leave of Absence Form and include a copy of the student's military orders and return these documents to the registrar's office. Students who expect to return to class within the current semester to complete their coursework, or who are called to duty after completing a significant part of the course requirements, should contact their faculty regarding missed work. Students who cannot complete the current semester will be granted a leave of absence for military duty and will be allowed to return for the next semester without penalty.

Undergraduate

Overview

An undergraduate catalog is published every year by the Millersville University Council of Trustees. This publication is an announcement for the 2026-2027 academic year. The catalog is for informational purposes only and does not constitute a contract. The provisions of this catalog are not intended to create any substantive rights beyond those created by the laws and constitutions of the United States and the Commonwealth of Pennsylvania, and are not intended to create, in and of themselves, any cause of action against Pennsylvania's State System of Higher Education, the Board of Governors, the Chancellor, an individual President or University, or any other officer, agency, agent or employee of Pennsylvania's State System of Higher Education.

Information contained herein was current at time of publication. Courses and programs may be revised; faculty lists and other information are subject to change without notice; course frequency is dependent on faculty availability. Not all courses are necessarily offered each session of each year. Individual departments should be consulted for the most current information.

A Member of Pennsylvania's State System of Higher Education

Millersville University does not discriminate on the basis of race, color, religion, national origin, ancestry, sex, age, or disability in admission or access to, or treatment or employment in, its programs and activities. This includes Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, and the Americans with Disabilities Act of 1990.

Coordinators: Services for Students with Disabilities—Dr. Sherlynn Bessick, Director, Office of Learning Services, Lyle Hall, 717-871-5554; Title IX—Dr. Miguel A. Pereira, Title IX Coordinator/Labor Relations Manager, Dilworth Building, 717-871-44237— Ms. Melissa Higgins, Director for Human Resources, Dilworth Building, 717-871-4246.

State Authorization Reciprocity Agreement (SARA)

Effective January 1, 2017, The Commonwealth of Pennsylvania joined the National Council for State Authorization Reciprocity Agreements (NC-SARA). Millersville University has been approved by the state of Pennsylvania to participate in the National Council for State Authorization Reciprocity Agreements. NC-SARA is a voluntary, regional approach to state oversight of postsecondary distance education. For more information on NC-SARA, please visit www.nc-sara.org.

In compliance with 34 CFR 668.43(b) Code of Federal Regulation and U.S. Department of Education (USDOE) rules, an institution offering distance education must "provide its students or prospective students with contact information for filing complaints with its accreditor and with its State approval or licensing entity and any other relevant State official or agency that would appropriately handle a student's complaint." This process refers to the student's available recourse if the distance education student has exhausted all possible avenues for complaints at the institution related to consumer protection and the issue has not been resolved to the student's satisfaction.

All current, former, and prospective distance education students, regardless of their residency, must first submit any grievances, complaints, or concerns directly to Millersville University in accordance with university policies located in the Catalog. This step must be completed prior to seeking external resolution for an issue. Please note that student complaints about grades or student conduct cannot be addressed through the SARA/distance education complaint process and must be addressed by the university.

A student may appeal to the portal agency of the home state in which the institution is legally domiciled for consumer protection issues. The Pennsylvania Department of Education is the state portal agency and will notify NC-SARA of an appealed complaint in efforts to seek resolution. Complaints can be addressed to the Pennsylvania Department of Education, Higher and Career Education, 333 Market Street, Harrisburg, PA 17126, or via email at ra-distanceeducation@pa.gov. Students may also file consumer protection complaints with the Pennsylvania State System of Higher Education or the university's accreditor, the Middle States Commission on Higher Education.

SAFETY AND SECURITY INFORMATION

For current information about Millersville University campus security, in conformity with the requirements of Pennsylvania Act 1988-73, the College and University Information Act, and the federal Crime Awareness and Campus Security Act of 1990, contact:

University Police
Millersville University
P.O. Box 1002
Millersville, PA 17551-0302

Phone: (717) 871-4357
www.millersville.edu/police

Undergraduate

Undergraduate Programs

Explore Our Programs

Millersville University offers over 100 innovative programs taught by leading professors in their fields who produce learning opportunities that are both comprehensive and deep, often beyond the depth available in larger universities or private colleges.

Explore our programs by college:

College of Arts, Humanities and Social Sciences
College of Education and Human Services
College of Science and Technology
Lombardo College of Business
University College

Undergraduate

General Education

Gateway General Education PROGRAM

General Education consists of a broad program of study in the liberal arts and sciences. Consistent with Pennsylvania State System of Higher Education requirements, at least 40 semester credit hours shall focus on competencies associated with liberal education learning outcomes. These competencies are typically achieved through coursework in the humanities, fine arts, communication, social and behavioral sciences, mathematics, and the natural and physical sciences. General Education requirements shall be consistent with applicable statewide transfer policies and frameworks.

The Gateway General Education Program at Millersville supports students in their transition to the university experience and promotes a personalized pathway to academic success. The program provides opportunities to explore content across multiple disciplines and consider varied points of view, culminating in a capstone experience. Students can also choose to earn certificates through their general education coursework.

PROGRAM LEARNING OUTCOMES

The Gateway program supports the development of the following program learning outcomes to extend the depth of study accomplished in the major programs:

1. Apply writing skills to write effectively for diverse audiences.
2. Apply oral communication skills to present effectively to diverse audiences.
3. Make connections in their learning across the arts, humanities, social sciences, and sciences.
4. Apply critical thinking skills — including problem-solving, quantitative & scientific reasoning — to the arts, humanities, social sciences, and sciences.
5. Demonstrate an understanding of civic and social responsibility.
6. Create meaningful connections across diverse cultural contexts.
7. Identify, assess, select, and use technology effectively and responsibly to accomplish a task or solve a problem.
8. Demonstrate lifelong healthy behaviors in any dimension of wellbeing (emotional, environmental, financial, physical, social, spiritual, and vocational).

The Gateway Program includes four stages: Cornerstone Stage (four courses totaling at least 12 credit hours), Gateway Stage (eight courses in seven categories totaling at least 24 credit hours), Keystone Stage (two courses totaling at least 6 credit hours), and the Capstone Stage (one course totaling 3 to 4.5 credit hours). Students take courses across these stages for 45-48 total program credits.

THE CORNERSTONE STAGE

QUANTITATIVE LITERACY (QL)

Definition: Quantitative Literacy courses utilize mathematics and/or statistics to formulate and/or solve equations and interpret numerical data. These courses incorporate critical thinking and problem-solving skills to help students develop an understanding of numbers to build a foundation for understanding mathematics and statistics in real-world contexts and solving more complex mathematics problems.

Student Learning Outcomes

Students will be able to:

1. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
2. Convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words).
3. Make judgments and draw appropriate conclusions based on the quantitative analysis of data and/or mathematical models of phenomena or processes, while recognizing the limits of this analysis.
4. Make and evaluate important assumptions in estimation, modeling, and data analysis.
5. Express quantitative evidence in support of the mathematical/ statistical argument or purpose of the work (in terms of what evidence is used and how it is formatted, presented, and contextualized.

FIRST YEAR SEMINAR (FYEX)

Definition: First-Year Seminar (FYEX) courses are designed to support students' successful transition to university life. These courses use at least one high-impact educational practices to develop and foster skills that will lead to success in college, career, and personal life. Each seminar focuses on a different topic/theme of strong interest to faculty and students.

Student Learning Outcomes

Students will be able to:

1. Demonstrate autonomy and competence in planning for personal and academic goals.
2. Identify resources and practice strategies to support personal and academic success.
3. Develop effective communication, critical thinking skills and dispositions, and information literacy skills to explore academic content.
4. Recognize the value of diverse perspectives as a citizen of the university community.

ORAL COMMUNICATION (OC)

Definition: Oral communication courses focus on prepared, purposeful speaking designed to do one or more of the following, to increase knowledge, to foster understanding, to entertain and comfort audience members, to promote change in the listeners' attitudes, values, beliefs, or behaviors.

Student Learning Outcomes

Students will be able to:

1. Demonstrate knowledge of communication concepts, theories, and processes.
2. Appropriately research, analyze, organize and synthesize a variety of reliable source materials into effective oral and visual presentations.
3. Demonstrate ethical responsibility and cultural sensitivity towards audiences by adapting oral presentation delivery and visual messages.
4. Utilize critical thinking and evaluative skills to assess the appropriateness and effectiveness of presentational strategies.
5. Manage public speaking anxieties to deliver effective and engaging oral presentations.

INTRODUCTORY WRITING (IW)

Definition: Introductory Writing courses facilitate the development of college-level proficiency in the use of writing processes, critical awareness when reading and writing, stylistic fluency, and technical accuracy.

Student Learning Outcomes

Students will be able to:

1. Identify impacts of the composing process on the final product.
2. Write persuasively by distinguishing and applying effective strategies of argumentation appropriate to a given rhetorical situation including audience, purpose, and context.
3. Generate conclusions about texts that arise from rhetorical analysis to inform their own choices as writers.
4. Produce texts that demonstrate ethical writing by effectively synthesizing sources and conscientiously using conventions of academic discourse including citation, format, and style.

THE GATEWAY STAGE

INVESTIGATIONS INTO SCIENTIFIC REASONING

Definition: Investigations in Scientific Reasoning courses primarily focus on an empirical study of the natural world while providing training in the tools, processes, and subject matter appropriate to the discipline to address theoretical and/or practical issues. These courses emphasize that the scientific meaning of fact, theory, and law are not a hierarchy, and give students an appreciation of essential creative aspects of scientific process and discovery. Students must spend at least two contact hours per week (preferable consecutive) in hands-on (in person or approved online) lab, because of the applied nature of science labs.

Student Learning Outcomes

Students will be able to:

1. Apply the scientific method to investigate natural phenomena, solve problems, and gain a better understanding of the natural world.
2. Make observations, generate questions, develop a testable and falsifiable hypothesis, collect data, and interpret results.
3. Recognize that scientific explanations offer falsifiable predictions, that claims must be supported by evidence and logical reasoning, and that the nature of scientific discovery and knowledge is fluid.
4. Interpret and create scientific representations—such as formulas, graphs, and tables—by utilizing course-specific knowledge and understanding.

INFORMATION LITERACIES

Definition: Information literacy is a set of integrated abilities requiring students to recognize when and what information is needed and to locate, evaluate, and effectively use the needed information to participate ethically in communities of learning and/or practice. Students proficient in information literacy critically reflect on the economic, legal, and social issues surrounding the creation, access, and use of information. As a result, students will be able to incorporate new understandings into their perspectives, questions, or works (academic, professional, or creative).

Student Learning Outcomes

Students will be able to:

1. Identify the most appropriate sources and information to meet the scope of their need.
2. Create, execute, and refine search strategies with iteration utilizing search outcomes to find relevant sources and information.
3. Evaluate the credibility of sources to critically select and interpret information relevant to their need.
4. Contextualize and synthesize selected information to engage in ongoing scholarship and communities of learning and/or practice.
5. Contribute to ongoing scholarship and communities of learning and/or practice through ethical reflection, proper attribution, and respect of intellectual property.

PERSONAL WELLNESS

Definition: Personal Wellness encompasses multiple dimensions that are interconnected to promote optimal health and well-being. Students will select a course that focuses on one or more of the following: emotional, environmental, financial, physical, social, spiritual, or occupational. These courses emphasize the personal choices and responsible actions that lead to success.

Dimensions of Wellness

1. **Emotional Wellness** addresses mental health issues, emotional well-being, and/or addiction, while covering empirically supported strategies for addressing issues and identifying when and how to seek the help of a professional.
2. **Environmental Wellness** involves promoting sustainability, adopting stewardship practices, and making conscious choices to minimize one's ecological footprint. Emphasis is placed on personal connections with the environment such as implementing eco-friendly transportation options, personal resource conservation, recycling practices, and promotion of outdoor activities such as hiking, biking, gardening, etc.
3. **Financial Wellness** covers a range of issues related to financial literacy. Topics include budgeting, creation of an emergency fund for unforeseen circumstances, and the importance of planning. Examples such as paying for college, and eating balanced, healthy meals on a budget are highlighted to help decrease anxiety and promote peace of mind during difficult times.
4. **Physical Wellness** focuses on the importance of exercise, nutrition, sleep, and stress management. It aims to educate students on maintaining a healthy lifestyle by making informed dietary choices, engaging in regular physical activity, strategies for quality sleep, and managing stress effectively.
5. **Social Wellness** explores interpersonal relationships, communication skills, conflict resolution, and healthy human connections. It covers topics such as micro-aggressions, cultural competence, bystander intervention strategies, obtaining consent in romantic relationships, and setting boundaries to foster positive relationships.
6. **Spiritual Wellness** investigates what it means to have guiding principles that give meaning and purpose to life. It covers topics such as a supportive spiritual community, introspection activities, cultivating gratitude and compassion, and recognizing the connection between values, beliefs, and morals to reach life goals.
7. **Occupational Wellness** refers to finding satisfaction in relation to a career. Topics include work-life balance, self-care, avoiding burnout, and positive mental attitude. An emphasis is placed on discovering occupations that align with one's skills and abilities, and identifying characteristics of healthy work cultures that promote personal fulfillment.

Student Learning Outcomes

Students will be able to:

1. Analyze how lifestyle choices and personal responsibility influence well-being within the focused dimension of wellness they have selected (emotional, environmental, financial, physical, social, spiritual, or occupational).

2. Evaluate how preventive wellness practices build protective factors and lower risk factors for illness, injury, and/or harm. a) Protective factors are characteristics that decrease the likelihood of negative outcomes. Examples may include emotional support, resource conservation, avoiding debt, maintaining physical activity, resolving conflicts, cultivating gratitude, or appreciating work-life balance, etc. b) Risk factors are characteristics at the psychological, biological, community, family, and/or cultural level that are associated with higher likelihood of negative outcomes. Examples may include abuse, trauma, genetics, pollution, poverty, access, etc.
3. Apply an evidence-based framework that describes the process of behavior change for personal wellness development.

CREATIVE EXPLORATION

Definition: Creative Explorations courses focus on creating, combining and/or synthesizing ideas, images, or expertise in original ways. In these courses, students think, respond, communicate, and work in imaginative ways, characterized by innovation, divergent thinking, and risk-taking.

STUDENT LEARNING OUTCOMES

Students will be able to:

1. Demonstrate creative thinking skills that foster ways of looking at problems and solutions from a new or imaginative perspective.
2. Develop critical and analytical skills to promote the advancement of creative ideas.
3. Describe the influence and context of historical and/or contemporary creative endeavors while developing an appreciation of the impact of creativity on culture and identity.
4. Engage in the practice, development, and communication of creative insights or works, including creation, transformation, analysis, and synthesis.

PROBLEM SOLVING

Definition: Problem Solving courses involve designing, evaluating, and implementing strategies to answer questions or achieve stated goals using foundational critical thinking and/or logical problem-solving skills and processes. Students will research and evaluate evidence, collect, and analyze information, formulate conclusions, and communicate results effectively.

STUDENT LEARNING OUTCOMES

Students will be able to:

1. Define problems and/or generate questions in clear and concise terms.
2. Identify appropriate methods and apply knowledge/facts to synthesize new ideas and generate solutions to problems.
3. Collect relevant information from credible sources to address the problem(s).
4. Use critical thinking skills to recognize patterns and draw logical conclusions.
5. Present problem-solving processes and findings clearly and persuasively in written and/or oral communication.

ETHICAL ACTION & CITIZENSHIP

Definition: Courses in Ethical Action and Citizenship apply ethical principles to investigate real-world issues in cultural, economic, environmental, historical, political, and/or social contexts. Students in these courses will identify and communicate about challenges on local, national, and/or global levels in civically responsible ways.

STUDENT LEARNING OUTCOMES

Students will be able to:

1. Identify and reflect on the cultural, economic, environmental, historical, political, and/or social contexts of real-world issues.
2. Reflect on how the student’s experiences and perspectives form their understanding of an issue.
3. Analyze potential courses of action.
4. Apply ethical principles to real-world issues.
5. Communicate in a range of verbal and written formats about those issues, the frameworks in which they can be analyzed, one’s perspectives, and potential courses of action.

TECHNOLOGICAL COMPETENCY

Definition: Technological Competency courses address the ability to identify, assess, manage, adapt, and use tools, applications, and systems to effectively and responsibly accomplish tasks.

STUDENT LEARNING OUTCOMES

Students will be able to:

1. Apply knowledge, techniques, skills, and modern tools to solve broadly defined technology problems appropriate to the discipline.
2. Responsibly manage data, tools, applications, and/or systems.
3. Evaluate the results of the application of the technology.

THE KEYSTONE STAGE

Definition: Keystone courses—*Diverse Cultural Contexts* and *Advanced Writing*— support students as they extend Gateway stage exploration and skill-building into engagement with the cultural, environmental, economic, political, and social contexts of today's global issues. It is recommended that these courses are linked to create learning communities and taken after the completion of the Gateway stage courses or completion of 54 credits. The two Keystone courses must be at the 300 level or above and total at least six credit hours.

Diverse Cultural Contexts (DCC)

Definition: Diverse Cultural Contexts courses promote student exploration and analysis of cultural, environmental, economic, political, and social contexts in the world today. Students will engage in conversation to examine issues, proactively seek to understand multiple perspectives, and consider possible outcomes. DCC courses also provide extended practice with oral communication in modalities appropriate to the course.

Student Learning Outcomes

Students will be able to:

1. Examine issues from multiple perspectives and contexts with attention to origins and viewpoints.
2. Exhibit active listening and civil discourse to engage in respectful interactions.
3. Clarify elements of conflicts by defining stakeholders and recognizing biases.
4. Analyze the impact of their actions from multiple perspectives and contexts.

Advanced Writing (AW)

Definition: Advanced Writing courses extend students' writing processes and rhetorical awareness to align with writing domains and situations that students might encounter in their professional lives. Students will learn to write to professional and public audiences, compose in a variety of genres, and adapt their writing style based on the needs of typical rhetorical situations.

Students will be able to:

1. Adapt composing processes to negotiate tensions between writer intentions/choices and reader responses/expectations.
2. Analyze and address various audiences, purposes, and texts in authentic writing settings.
3. Identify, explain, and transform genres as forms of social action in disciplinary and public writing sites.
4. Plan and execute effective document organization and design.
5. Explain and integrate effectively the role that research plays in different writing settings, including how groups document and present research to public audiences.

THE CAPSTONE STAGE

Definition: The Capstone is the culminating experience where students apply knowledge from across the stages of the General Education Program to their discipline(s) to explore a big idea, issue of practice, or complex problem. Students will gain a broader understanding of the idea, issue, and/or problem and its context, making connections between their learning and their personal experiences, to demonstrate their understanding.

The Capstone is one course at the 300-level or above with 3 to 4.5 credit hours. Departmental (major) capstones, including student teaching, practicums, internships, co-op experiences, exhibitions, Honors and departmental theses, portfolio courses, and the like may also serve as General Education Capstones if they meet the defined student learning outcomes.

Student Learning Outcomes

Students will be able to:

1. Apply knowledge and skills from the stages of the General Education Program across a discipline or multiple disciplines to explore a big idea, issue of practice, or complex problem.
2. Synthesize research on a big idea, issue of practice, or complex problem, culminating in an externally focused, professional genre, text, or product (e.g., a unit plan, exhibition, performance, poster session, research paper, website, etc.).
3. Reflect on their personal experiences as a learner and how they have applied knowledge in meaningful ways.

GATEWAY PROGRAM CERTIFICATES

Gateway Program Certificates are intended to include courses and experiences that address real-world issues by utilizing integration, synthesis, and innovative thinking from multiple perspectives and fields of study. Students can use these optional curricular pathways to build thematic learning experiences by completing focused study around interdisciplinary themes, concepts, and settings.

Definition: Gateway Program Certificates are optional curricular pathways designed by at least three academic departments that include a selection of interrelated courses from the Gateway stage plus a designated final course: a 3-credit Keystone (DCC or AW) or Capstone course. Certificates will total 12 to 17 credits (18 credits would be considered a minor).

Students may earn a maximum of two certificates within the context of their Gateway Program. Students may use the same courses to satisfy both Gateway Program requirements and Gateway Program Certificate requirements.

Students may also use the Capstone course of their major program as the Capstone course for a Gateway Program Certificate if that course is an approved General Education course.

STUDENT LEARNING OUTCOMES

Students will be able to:

1. Select, use, and coordinate knowledge, skills, and strategies from multiple fields of study to address the Certificate theme.
2. Apply general education skills and strategies as appropriate in new settings.
3. Articulate connections and tensions among disciplinary approaches to the Certificate theme.
4. Share new learning through a public demonstration, presentation, or publication of competence.

Undergraduate

Academic Requirements

The Baccalaureate Curriculum

A baccalaureate degree assumes a capability to deal creatively and realistically with personal, community, national and international concerns. It assumes that a University graduate is able to think logically, to act rationally, and to make appropriate decisions about the future based on past and present conditions and circumstances. It also assumes an understanding of ethics and aesthetics which provides a foundation for the development of a value system which can be translated into effective social action.

To qualify for the baccalaureate degree, a student must complete courses to:

1. Establish a foundation for general collegiate and academic success inclusive of writing, communication, and quantitative literacy.
2. Develop critical thinking skills within the context of different means of investigations/ways of knowing.
3. Engage with the cultural, environmental, economic, political, and social contexts of today’s global issues.

4. Explore and demonstrate understanding of a big idea, issue of practice, or complex problem by making connections between their learning and their personal experiences.
5. Achieve an in-depth understanding of an academic discipline.

Attainment by students of these competencies must be carefully and appropriately evaluated. In addition, the students must be made aware of their specialty's relationship to vocational or professional use.

Curriculum Requirements for Baccalaureate Degree Programs

To earn a baccalaureate degree at Millersville University a student must meet the following requirements:

1. All curricular and proficiency requirements must be met.
2. A minimum of 120 credits must be completed for a bachelor's degree.
3. A GPA of at least 2.0 must be earned in Millersville courses.
4. A GPA of at least 2.0 must be earned in Millersville courses required for the major.
5. A GPA of at least 2.0 must be earned in Millersville courses required for the minor.
6. At least 30 credits must be completed at Millersville, in addition to student teaching.
7. At least half the major requirements must be completed at Millersville.
8. At least half of the minor requirements must be completed at Millersville.
9. Students who graduate with a B.S.Ed. degree or complete an approved program of post-baccalaureate studies for teaching certification must be admitted to Advanced Professional Studies. They must also meet the Pennsylvania state requirements and other Pennsylvania certification requirements such as passing the required Praxis exams to qualify for Pennsylvania teacher certification.
10. An Application for Degree form must be submitted.

The baccalaureate programs are designed to accommodate many academic majors and a variety of specialized sequences and elective subject interests. The curriculum is structured to afford great flexibility in developing programs of study. It is geared to the individual and allows much choice in the selection of courses. Students have a challenging and responsible role in planning the substance of their academic programs. The curriculum has the following parts: The general education requirements, the major sequence plus related areas of study, other degree requirements and elective courses. There are common elements in all student programs, regardless of the degree field or the academic major selected.

Additional Degree Requirements

To earn an undergraduate degree at Millersville University, a student must meet the following requirements:

1. A GPA of 3.0 must be earned in Millersville courses to meet entrance and exit requirements for a Bachelor of Science in Education (B.S.Ed.) degree.
2. At least 30 credits (in addition to student teaching) of the last 60 credits must be completed at Millersville. Participation in approved Millersville University exchanges or attendance at programs consistent with Millersville University academic agreements will satisfy this requirement.

Proficiency Requirements

Chemistry

1. All undergraduate students who want to pursue CHEM 111 Introductory Chemistry 1 or above must demonstrate minimum levels of proficiency in chemistry.

1. All entering biology, chemistry, earth sciences and physics undergraduate students are required to take part in the chemistry placement process. Students pursuing majors in other disciplines may also need to participate; please consult your academic advisor.
2. The chemistry department determines the test(s) and the criteria for course placement.

1. Students placed in the preliminary chemistry course (CHEM 110 Fundamentals of Chemistry) are required to enroll in that course prior to taking CHEM 111 Introductory Chemistry 1. Such students must demonstrate proficiency by satisfactorily completing the course with a grade of C- or above prior to taking CHEM 111 Introductory Chemistry 1.

2. Students who must take CHEM 110 Fundamentals of Chemistry earn course credits, and the grade is counted in the cumulative grade point average, but these course credits may only be counted as elective credits needed to fulfill the 120-credit minimum required for graduation. These credits may not be counted within the major requirements set forth for degrees in chemistry or other disciplines.

Mathematics

1. All undergraduate students must demonstrate minimum levels of proficiency in mathematics.
   a. All entering undergraduate students are required to take part in the mathematics placement process.
   b. The mathematics department determines the test(s) and the criteria for course placement.
2. Students placed in a developmental mathematics course are required to enroll in that course. Such students must demonstrate proficiency by satisfactorily completing the course with a grade of C- or above prior to taking any mathematics course at the 100 level or higher.
3. Students who must take developmental mathematics earn course credits, and the grade is counted in the cumulative grade point average, but developmental course credit cannot be counted towards fulfillment of the general education or graduation requirements for the baccalaureate or associate degree.

The Major Program

Baccalaureate degree programs at Millersville University require a minimum of 120 semester credit hours unless otherwise required by statute, regulation, accreditation standards, or approved by the Chancellor of the Pennsylvania State System of Higher Education. Baccalaureate degree programs consist of two principal components—General Education (see General Education section) and study in depth through a major—which together are designed to prepare students for productive careers, engaged citizenship, and lifelong learning.

The major provides in-depth study within an academic discipline or interdisciplinary field and consists of at least 30 semester credit hours. Millersville University offers a wide range of bachelor's degree programs, many of which include options or concentrations that allow students to tailor their academic experience.

Students are responsible for meeting all requirements associated with their declared program of study and are subject to the policies and requirements established and approved through the University's curriculum review process.

Admission to the Major

Requirements for admission to the major may be established by departments for students entering the University as freshmen or as transfer students, and for current Millersville University students declaring a major. All departmental admission requirements must be in writing and kept current. Proposals for special departmental requirements for admission to the major must be approved by the appropriate school curriculum committee, the Undergraduate Course and Program Review Committee, and the University Curriculum and Academic Policies Committee. Approved requirements for admission to the major must be promulgated in the University catalog. Administrative approval of departmental proposals for admission to the major will also consider the fiscal, social equity, and enrollment management implications for the department, college, and University.

Retention in the Major

All departmental retention requirements must be in writing and made available to all majors at the time of admission to the major. Changes in the retention criteria must be available in writing on a timely basis. Students who have earned no more than 75 credits but have completed at least 1/4 of the required courses in the major may register for additional courses in the major only if they have met the departmental retention requirements. Departments have the option to substitute for the required courses in the major an equivalent number of selected courses. These include required related courses for the major, electives in the major, and/or identified general education courses. In exceptional cases where students have earned more than 75 credits but less than 1/4 of the required courses in the major, the departmental retention requirements must be met when 1/4 of the required courses in the major, or the equivalent number of selected courses, have been completed. Failure to meet departmental retention requirements may result in dismissal from the major. Proposals for special departmental requirements for retention in the major must be approved by the appropriate school curriculum committee, the Undergraduate Course and Program Review Committee, the University Curriculum and Academic Policies Committee, and University administration. Approved requirements for retention in the major must be promulgated in the University catalog.

Completion of the Major

The completion of any major program at Millersville University requires that students must complete all courses in the major (courses in the discipline but not the required related courses) with a minimum cumulative grade point average (GPA) of 2.00. In addition, fifty percent of credits in the major must be completed at Millersville University. Except for state-mandated requirements, departments may not require a cumulative GPA or major grade point average higher than the University 2.00 GPA minimum requirement. All departments must specify the courses required for completion of the major and any additional requirements not specifically related to course work such as achievement examinations, certification examinations, and evaluation of student performance as measured against competency requirements. Departments have the right to establish a competency level (minimum of C grade) for courses in the major and required related courses. Proposals for special departmental requirements for completion of the major must be approved by the appropriate school curriculum committee, the Undergraduate Course and Program Review Committee, the University Curriculum and Academic Policies Committee, and University administration. Approved requirements for completion of the major must be promulgated in the University catalog**.**

Declaring or Changing a Major

To declare or change a major, add a concentration, or add a minor, use the Academic Program Change Request Form through the Registrar's Office in the Student Forms Center. Some departments have specific requirements for admission to their major programs. Students must meet the major program requirements in effect at the time they declare or change their major. Students in undecided major status, with at least 45 credits passed, should refer to the Undecided Major Status section for specific academic requirements.

Second Majors

In some programs, through careful selection of elective courses, it is possible to complete the requirements for a second major. Upon certification by each major department that requirements have been satisfied, both majors are recorded on the student's records.

Minors

Students who wish to become proficient in a second discipline may complete the requirements for a minor. Each minor requires a minimum of 18 credits. A GPA of at least 2.0 must be earned in Millersville courses required for the minor. Half of the minor must be completed at Millersville, only one course may count toward both a major and a minor, and no student may minor in his or her major. A list of minor programs and specific course requirements for each are given in the Academic Programs section.

To declare or change a minor, use the Academic Program Change Request Form through the Registrar's Office in the Student Forms Center.

The Associate Degree Curriculum

Curriculum Requirements for Associate Degree Programs

The associate degree programs consist of 60-65 semester hours of study. The programs normally include:

1. Foundational courses in student preparation, writing, communication, and quantitative literacy;
2. Courses to develop critical thinking skills within the context of different means of investigation/ways of knowing; and
3. Courses taken to satisfy an area of concentration.

Approximately half the course work is in general education; the other half is in the area of concentration. The distribution of the amount of work in each area varies with the kind of program:

General Education	21-30 credits
Cornerstone Stage	12 credits, one course from each label
Gateway Stage	9-18 credits, from at least three labels
Concentration	30-44 credits

Associate to Bachelor's Degree

Pathway Millersville University supports the PA State Act 69 of 2024 in establishing clear pathways for students with an earned associate's degree to a bachelor's degree and accepts with full junior standing the associate degree and apply all college-level credits earned, including major and general education requirements, toward the parallel baccalaureate degree requirements.

Students holding an associate degree from a community college or PASSHE university transferring into a parallel program will be granted full junior standing towards the baccalaureate degree program and complete no more than 60 credit hours to earn a 120-credit hour baccalaureate degree unless required to meet specific accreditation, licensure or certification requirements.

Admission to Advanced Professional Studies and Certification (Education Majors)

All students enrolled in teacher preparation programs must be admitted to Advanced Professional Studies and meet Pennsylvania state requirements and University requirements prior to being enrolled in their initial Advanced Professional Studies course. Students must meet additional Pennsylvania state requirements in order to be certified. A listing of Advanced Professional Studies courses and requirements is available in the Office of Field Services and on the Certification Office website.

Earning More Than One Degree

Students who wish to complete the course requirements for two different degrees (e.g., B.A. and B.S.Ed.) simultaneously must complete at least 30 credits beyond the minimum of 120 credits needed for the first bachelor's degree earned. Students who complete fewer than 30 credits beyond the first degree but complete requirements in more than one major will choose the degree to be awarded. All majors completed will be recognized in academic records, including transcripts.

A student may earn a second associate or bachelor's degree at a later time by meeting the following requirements:

1. A minimum of 30 additional credits must be completed at Millersville at the undergraduate level following the award of the first degree. These credits must be in the major and required related fields.
2. All requirements for the major of the second degree must be satisfied.
3. Coursework completed as part of the first degree program may be used to satisfy the related coursework requirement in the second degree.
4. Coursework completed as part of the first degree program may be used to satisfy up to half of the second degree's major. If a course required in the second degree's major was completed as part of the first degree, it may not be repeated.
5. Teacher certification credits may not be counted toward a second degree.
6. When there is overlap in the majors of the first and second degrees, the 50-percent limitation in requirement 4 above and the limited course offerings in some departments may preclude the pursuit of a second degree.

Undergraduate

University Honors College

Overview of University Honors College

Millersville University offers a number of programs to help exceptionally talented students develop their potential. Students who complete the program earn special recognition.

The University Honors College challenges talented students while encouraging them to develop their intellectual potential. The program introduces students to the main currents of world thought and culture, and develops writing, research and analytical skills. Enrollments in honors classes are limited to facilitate student-faculty interaction. Students who successfully complete the program are awarded the University Honors baccalaureate at graduation.

Invitations to the program are extended to entering first year students who have combined SAT scores of 1200 or above and are in the top 10 percent of their high school class. Other interested first year students and currently enrolled students with cumulative grade point averages (CGPAs) of at least 3.35 are encouraged to apply for admission to the director of the University Honors College.

To remain in good standing in the Honors College, students must maintain a GPA of at least 3.20. University Honors College students who achieve a final overall GPA of 3.8 or higher will graduate from the University Honors College "With Distinction."

To receive the University Honors baccalaureate, students must:

1. Earn a cumulative GPA of at least 3.20 and 3.35 in honors coursework.
2. Earn a minimum of 25 honors credits and fulfill the Honors College curricular requirements. Honors credit is awarded only for those honors courses in which a B- or higher is earned.

3. Complete and successfully defend an honors thesis. The thesis satisfies the General Education Advanced Writing requirement.

For more information, visit the Honors College website and contact the director.

HONORS COURSES

Honors courses offer special academic challenges and opportunities for intellectual inquiry. These courses require a measure of independent reading, thinking and questioning. Students are expected to assume a greater portion of the responsibility for learning. Course requirements include activities to develop writing, research and analytical skills.

Honors courses are open to students in the University Honors College, students with a cumulative GPA of at least 3.35 and other students with permission from the instructor. A grade of B- or higher must be earned to qualify for the honors designation on the student's record.

Undergraduate

Special Academic Opportunities

Overview of Special Academic Opportunities

DEPARTMENTAL HONORS

This program provides an opportunity for superior and highly motivated students to pursue a specialized area of interest intensively and independently. Upon successful completion of the program, students are recognized for their achievements at graduation with the designation of Departmental Honors on their University record.

To be eligible for the program, students must have a cumulative GPA of at least 3.0 and the endorsement of the department.

The program generally consists of two to four semesters of supervised tutorial work, reading, self-instruction, creative inquiry and research, which culminates in the production of a thesis or project. One to four credits may be earned for each of the departmental honors courses (see specific departments' requirements). Grades in these courses are determined by the faculty supervisor and departmental committee.

Final theses or projects are examined by and orally defended before the departmental committee. Grades of B- or higher must be earned on them. They are then presented to the Honors and Awards Committee for review. Titles of completed works are published in the commencement program. Contact the department office for an application and more information.

WINTER AND SUMMER SESSIONS

Winter and Summer sessions allows students to complete additional courses between regular semesters. Courses are open to students from other institutions of higher education as well as Millersville students. Residence halls and dining facilities are closed during winter session. For more information, call the Registrar's Office at (717) 871-5005 or GSAL office at (717) 871-7171, or check the University website.

INDEPENDENT STUDY

Independent study allows students to pursue, with faculty supervision and guidance, an academic area of interest not available through an established course. To apply, students must complete a special studies assignment form in the online Student Forms Center and obtain approval for the proposed topic and faculty supervisor from the department chairperson and school dean before the start of the term.

INDIVIDUALIZED INSTRUCTION

Individualized instruction allows students to complete an established course during a semester in which it is not offered. Approval to pursue a course through individualized instruction is granted only under special circumstances. To apply, students must complete a special studies assignment form in the online Student Forms Center and obtain approval for the proposed topic and faculty supervisor from the department chairperson and school dean before the start of the term.

TAKING GRADUATE COURSES AS AN UNDERGRADUATE

Well-qualified Millersville University undergraduates may enroll in graduate courses for undergraduate or graduate credit. Specific conditions apply to each of these credit alternatives.

Undergraduates may enroll in 500-level graduate courses for undergraduate credit with permission of the instructor and advisor. The credits earned count toward baccalaureate-degree requirements and cannot be converted to graduate credits.

An undergraduate with a 3.0 GPA or higher may enroll in 500- and 600-level graduate courses for graduate credit. The student must have a maximum of 15 semester hours to be completed in the baccalaureate-degree program. Written permission must be acquired from the advisor, the course instructor, the graduate program coordinator and/or chair of the department offering the course, and the dean of graduate studies. The undergraduate will also need to be admitted as a nondegree graduate student.

A maximum of nine graduate credits may be earned by an undergraduate. These credits may not count toward the completion of the student's baccalaureate degree.

PASS-FAIL OPTION AND AUDITING COURSES

The pass-fail option provides students the opportunity to pursue a course without the usual pressure of earning a grade.

Auditing a course allows a student to attend classes and participate in discussions without the pressures of taking examinations, writing papers or fulfilling other requirements generally associated with earning credit. Students must submit requests to take a course on an audit or pass-fail basis by the end of the add period. See the Grades & Policies section for more information.

UNDECIDED MAJOR STATUS

Students may seek admission to Millersville without selecting a major. Special academic advisors are assigned to guide undecided students through the general education requirements and assist them in exploring potential majors through the Exploratory Program.

Students who qualify for admission to Millersville, but do not meet admission criteria for a selected major, are classified as undecided until they qualify for study in the major of their choice.

Students with at least 45 credits passed and in undecided status, or changing to undecided status, must either:

1. Declare and be accepted into a major.
2. Complete a review of academic goals as follows: The student, in consultation with an assigned advisor, must propose and have approved by the advisor each semester an academic plan of action that includes a realistic timeline for the completion of degree requirements. The approval form will indicate whether the student is waiting to get into a major and, if so, the reason for nonacceptance into that major. A copy will be filed in the Registrar's Office.
3. Sign a statement which indicates awareness of the ramifications of remaining in an undecided status but may choose to continue to remain in that status.

Permission to register will be granted only if one of the above requirements is completed.

OFF-CAMPUS ACADEMIC OPPORTUNITIES

GRADUATE AND UNDERGRADUATE COURSES

Credit-bearing courses are scheduled at off-campus sites as a convenience to part-time students and working adult students. Graduate courses are available online, at schools in local school districts and/or at off-campus locations in Lancaster and Harrisburg.

Undergraduate courses are offered each semester at several sites in central Pennsylvania. Students enrolled in off-campus sites are welcome and encouraged to use campus facilities and services. For information about off-campus courses, contact the GSAL, 717-871-7171.

NONCREDIT COURSES

CORPORATE UNIVERSITY AND NONPROFIT RESOURCE NETWORK

The Corporate University and Nonprofit Resource Network at Millersville provide customized and training solutions to businesses and community or nonprofit organizations. For information, contact the Corporate University, with offices conveniently located in Millersville and Harrisburg, 717-871-5742, or Corporate.University@millersville.edu, or the Nonprofit Resource Network, 717-871-5742, or nrninfo@millersville.edu.

STUDY ABROAD

Study abroad can be a valuable and important part of a student's undergraduate education. Regardless of a student's major, learning firsthand about another way of life and seeing the world from another culture's perspective are invaluable assets for success in our global society.

Millersville University students may study abroad in nearly every country worldwide for a summer, a semester or an academic year. Although most students who study abroad choose to do so during their junior year, students may study and/or do an internship abroad for University credit any time after completing 24 academic credits. International internships for most majors/ minors, student teaching abroad and international social work placements are also available.

Whether fluent in foreign languages or only in English, students may participate in study abroad through Millersville's own international partners, through other accredited U.S. institutions' programs or directly through many international universities. Millersville offers its own study/intern-abroad programs with universities in over 10 countries.

Traditional: Exchange Partners

MU has a direct relationship with several international universities. An exchange program allows a student from Millersville and a student from the host university to trade places for a semester or an academic year.

Traditional: Direct University Partners
MU has a relationship with several international universities that provide a discount for semester and summer options. Students pay directly to the partner in these programs.

Traditional: Affiliated Organizations
Affiliated programs are generally run by a third-party organization or program provider. IPS has a direct relationship with the organization, and in turn, the organization has direct relationships with international universities. Students participating in these programs take their courses at the Affiliates' partner institutions or centers with other international students and/or locals.

MAPS: Millersville Abroad Programs
These are shorter study abroad programs, typically between 1-3 weeks in length. They are guided experiences led by Millersville staff or faculty, who take a group of students, alumni, or community members abroad. Some programs are for credit, some are credit-optional, and others are not for credit.

Professional: Internships
There are several ways to gain professional "hands-on" experience in another culture, all while boosting your resume! International internships are available to almost all majors and minors. Students may intern abroad for a semester or a summer session.

Professional: Student Teaching
Education majors can complete half of their student teaching placement for certification in an international location. They can also participate in semester or summer placements depending on the school calendar in the host country.

Professional: Social Work
Social Work majors can complete their senior field placements in pre-approved sites.

Professional: Research
Research experiences allow students to conduct independent research or assist in faculty research abroad. Only Millersville's IRB can give approval to conduct research, however IPS will need to approve your international travel. There are several ways to participate in international research.

MU-Credit: You can conduct research through an independent study/ individualized instruction class. You will complete an application to approve the international travel.

Non-Credit: You can conduct independent or guided (with an MU professor) research to use for a future honors thesis, project, Made in Millersville, or other reasons. You would not earn credit. You will register your international travel through a Travel Registry.

Transfer-Credit: You can conduct research at an international university alongside regular academic classes as part of a traditional study abroad program and transfer the credit back to MU.

Domestic and Virtual Programs
Domestic study abroad allows students to study in the U.S. and U.S. territories.

Virtual study abroad allows students to take an online class, and earn credit, through an international university while remaining in the U.S. IPS promotes virtual study abroad programs with an included cultural component. Cultural components may include virtual engagement with local students, cultural gifts, or others.

Travel Registry
A Travel Registry is designed for independent or solo travel by students, faculty, staff, alumni, and community members participating in Millersville University-related travel or may be traveling individually with an MU faculty or staff member. These are non-credit programs.

Build-Your-Own
If you wish to pursue a study abroad destination beyond the pre-approved program offerings, you may choose to study abroad through another university's programs or study abroad company or combine various program types to create your own experience. These programs must be approved by IPS during Advising.

For more information about study abroad, contact the Office of International Programs and Services, (717) 871-7506, or email international@millersville.edu.

PASSHE VISITING STUDENTS

The purpose of the PASSHE Visiting Student program is to facilitate student enrollment at institutions of Pennsylvania's State System of Higher Education and to enable students to take advantage of courses available across the System, without loss of institutional residency, eligibility for honors or athletics, or credits toward graduation at the home institution.

The student must be matriculated at the home university with a minimum of 12 college-level credits and be in good academic standing.

Students may take a maximum of 24 credits via the Visiting Student Policy.

The student who presents evidence of good standing at the home university will be allowed to register for courses at other PASSHE universities. The visiting student priority level for registration will be determined by each university.

All credits and grades accrued at other PASSHE universities shall be accepted in full by the home university and thereafter treated as home university credits, residency and grades.

It is the responsibility of the student to work with the student's advisor at the home institution regarding applicability of credits toward graduation requirements at the home institution consistent with PASSHE procedures, and to complete the Visiting Student Notification Form and submit it to the home institution prior to enrolling in courses at another PASSHE institution.

Students cannot use the Visiting Student Program to repeat courses.

Students cannot use the Visiting Student Program for internship or practica that are required for licensure or certification without the express written permission of their appropriate university officials at the home university, and placement availability at the requested institution.

The student shall register at, and pay tuition and fees to, the State System University visited. A student wishing to divide a course load between two institutions during the same term shall register and pay appropriate tuition and fees at both universities.

The Office of the Chancellor will work with universities to establish and publish procedures to identify visiting students such that financial aid, residency, eligibility for honors, eligibility of athletics and credits to graduation are assured.

The Visiting Student Form is available from the Registrar's Office.

STUDY AT OTHER INSTITUTIONS

Millersville students may take courses at other colleges and universities for transfer back to Millersville. Many students, for example, take summer courses at a college near their home. Students must obtain approval in advance from their advisor, the department chairperson and the registrar. Authorization for Transfer of Credit forms are available in the Registrar's Office or on the Millersville website, under Student Forms Center. For more information, see the Transfer Credit section.

Exchange Agreement with Franklin & Marshall College. Through this exchange agreement, full-time Millersville students may, with approval, pursue courses not available at Millersville at Franklin & Marshall College. No tuition is charged by Franklin & Marshall College. This agreement does not include courses offered during the summer or winter at Franklin & Marshall. See the approval form, available in the Registrar's Office, for additional requirements.

Exchange Agreement with Lancaster Theological Seminary. Through this exchange agreement, full-time Millersville students who qualify for admission to graduate-level courses may, with approval, pursue courses not available at Millersville at Lancaster Theological Seminary. No tuition is charged by the seminary.

3-2 Cooperative Programs in Engineering. Physics-engineering and chemistry-engineering majors are offered in cooperation with Pennsylvania State University. In addition, the physics department has an engineering program with the University of Southern California. These programs require three years of study at Millersville, with a major in physics or chemistry, and two years in residence in the engineering program of one of the cooperating institutions. Interested students should contact the physics or chemistry department chairpersons for further information.

INTERNSHIPS

Internships provide students with the opportunity to gain professional experience in their chosen field before they graduate, and can be a valuable bridge between college and career. Millersville University offers a strong academic internship program that provides structure and awards academic credits. Students complete internships locally, regionally, nationally and internationally, in both paid and unpaid positions, in businesses, government and nonprofit organizations across a wide variety of academic and professional fields. The work-based learning is part of the total learning experience, which is supervised by a faculty member in the student's major.

Students must have completed 24 credits, be in good academic standing, and have a declared major or minor to be eligible. Individual departments may also establish additional criteria and requirements beyond the University minimum standards. Academic requirements to be completed during the internship include regular meetings with a faculty supervisor and completing an outcomes paper. Students participate in a credit-bearing internship for a minimum of 40 hours of work per credit. No more than 15 credits of internship experience and/or 4 individual internship experiences may be counted towards graduation requirements.

Internships at Millersville University are administered as an academic program through The Career Center, located in McComsey Hall. Our students benefit from the collaboration between the faculty and the internship program staff in preparing, coordinating and supervising students completing an internship.

For more information about internship opportunities and the University's internship program, please contact The Career Center in Bedford House, or visit the website at https://www.millersville.edu/careercenter/.

EARLY FIELD EXPERIENCES, PDS, STUDENT TEACHING AND CERTIFICATION

Undergraduate and graduate teaching experiences, including pre–student teaching (early field experiences) and student teaching internships and student teaching in international and Native American settings, are coordinated through the Department of Field Services.

EARLY FIELD EXPERIENCES

The University maintains a strong commitment to connecting theory and practice through early field experiences, prior to student teaching, in local school districts and childcare settings. Most early field experiences are integral parts of specific education courses, and students must successfully complete these experiences to be admitted to student teaching. Admission to Advanced Professional Studies is required for many of the courses that contain early field experiences. (Please consult the section on Admission to Advanced Professional Studies.) For the early field experiences available in your major, contact your department chairperson. Students need an Act 114 FBI clearance, an Act 34 Criminal clearance and an Act 151 Child Abuse clearance that indicate "No record exists" for eligibility for placement in early field experiences. Students also need a negative TB test. All clearances and a TB test with negative results must be updated yearly and not expire during the early field experience semester. An urban placement experience is a part of the educational program. Additional documents, trainings, personal liability insurance, etc., may be required of some placement settings. Students are responsible for their own transportation during early field experiences.

TRADITIONAL STUDENT TEACHING (NON-PDS)

After successfully completing the necessary requirements outlined below and the related field experiences, students are assigned to full-time cooperating teachers and to University supervisors in area school districts for a full semester of student teaching. This assignment is made by Millersville University's Department of Field Services, working in conjunction with school district administrators.

Millersville's Professional Development School (PDS) is a full-year internship experience that immerses future teachers in a school setting. The senior-year apprenticeship with a master teacher allows selected teacher education students to shift their focus from simply learning about teaching to implementing their learning in the classroom to make a positive impact.

Throughout the year, Millersville teacher education students work in a nurturing environment with their mentor teachers to transition from students learning about teaching to career-ready teachers prepared to be in the classroom on their own. In their fall semesters, students take several classes where their work focuses on improving their classroom environments. This takes place in regional schools. In their spring semesters, students ideally co-teach the same class from the fall, completing the official student-teaching semester. This seamless integration between the theoretical aspects in the classroom and the practical implementation simultaneously occurring in the field creates student teachers able to navigate the ever-changing environments of education.

This award-winning Professional Development School model is recognized by the National Association of Professional Development Schools (NAPDS) for its excellence in training future teachers. In 2014 Millersville University won the Exemplary Professional Development School Achievement Award.

Millersville's PDS model forges a mutually beneficial connection between the regional schools and the University through the close collaboration on this program. Millersville students benefit from this collaboration through extremely successful placement rates.

STUDENT TEACHING REQUIREMENTS

All students (PDS and non-PDS) are eligible to teach in fall or spring semesters and must sign up one year prior to the student-teaching semester. Student are responsible for their own transportation during student teaching.

For admission to the Millersville student-teaching program (PDS AND non-PDS), the following policies apply:

1. Grade point average of 3.0 at the time of student teaching. Effective spring 2010, a GPA below 3.0 and above 2.8 will be accepted; however, higher scores on the content area certification examination(s) will be required in order to meet final Certification requirements in Pennsylvania. Please see the Certification Office for a list of Certification testing scores with the GPA deviation.
2. Students must have earned at least 85 credits.
3. Must be admitted to APS.
4. Satisfactory dispositions record.
5. A negative TB test must be on file with the Department of Field Services.
6. Submission of satisfactory (no record exists) Act 34 (Criminal Record Check) report, satisfactory (no record exists) Act 114 FBI clearance (fingerprint check), and satisfactory (no record exists) Act 151 (Child Abuse History Clearance) report on file with the Department of Field Services.
7. Evidence of having current liability insurance.
8. Submission of a current Personal Information Form.
9. Additional documents/trainings may be required of some placement settings.

CERTIFICATION

Millersville University prepares students to be able to apply for the following certification areas in the state of Pennsylvania:

- Art (Pk-12)
- Biology (7-12)
- Chemistry (7-12)
- Early Childhood Education (PK-4)
- Earth and Space Science (7-12)
- English (7-12)

- Mathematics (7-12)
- Middle Level (4-8)
- Music (Pk-8)
- Social Studies (7-12)
- Special Education (Pk-12)
- Technology and Engineering Education (Pk-12)

CHINCOTEAGUE BAY FIELD STATION OF THE MARINE SCIENCE CONSORTIUM

Millersville is a founding and senior full member of the Chincoteague Bay Field Station of the Marine Science Consortium, a nonprofit educational corporation comprised of regional universities and colleges that operate a marine station at Wallops Island, Virginia. The consortium has several seagoing vessels and laboratories with biological and oceanographic equipment. Newly constructed labs and living facilities for students and staff are provided at the station.

Four 3-week sessions are offered at Wallops Island each summer. See the biology and earth sciences department listings for information on the Chincoteague Bay Field Station of the Marine Science Consortium and the many programs and courses offered there. For more information and to apply for courses, go to www.cbfieldstation.org, or contact the CST.

SPECIAL EVENTS

For more information on special events at Millersville, visit the University home page: www.millersville.edu.

Special Information Related to Courses taken in Spring, Summer, and Fall 2020

The international COVID-19 pandemic caused an interruption to the usual delivery of courses during the spring and summer 2020 terms at Millersville University. All courses not already scheduled as remote learning were converted to a remote-learning modality during this time. To support students during this unprecedented event, several academic processes and policies were amended or suspended until normal university operations were able to resume. To support students in this transition, several academic processes and policies were amended or suspended for the 2020 spring semester. The following apply only for the spring 2020 semester:

- Undergraduate students were offered the option to have courses converted to remote learning graded as pass/fail. Courses graded using the pass/fail scale were exempt from the policies and restrictions that are otherwise applied to pass/fail grades. Credits earned in these courses do count towards degree requirements (including major, minor, general education and credit minimums required for graduation) but are not used in the computation of cumulative grade point average. The adapted pass/fail policy was extended to fall semester 2020.
- Deadlines for withdrawal from a spring 2020 course were extended by one week to the end of the 11th week of classes.
- Deadlines for resolving incomplete grades from fall 2019 and winter 2020 were extended from April 3 to May 1, 2020.
- Deadlines for incomplete grades assigned in spring 2020 were extended from the 10th week of the semester to December 4, 2020.

Academic standing determination was suspended for the spring 2020 and fall 2020 semesters. The following amended scale was used to determine spring 2020 and fall 2020 academic standings:

Students with a Millersville University CGPA of 2.00 or greater are in satisfactory academic standing. Students with less than satisfactory academic standing at Millersville are subject to academic warning or continued probation, as follows:

REVIEW CREDITS	CUMULATIVE GPA	ACTION
0.5-16.0	Below 2.00	Warning Letter
16.5 or more	Below 2.00	Probation
32.5 or more	Below 2.00 while on Probation	Dismissed[1]

[1] Students on probation at the end of a summer or winter session will be continued on probation for the following semester and cannot be dismissed. A student cannot be dismissed at the end of any fall or spring semester in which he/she has earned a 2.00 or greater semester GPA, even if the CGPA remains less than 2.00.

Note: Review credits do not apply to students admitted on probation. Students admitted on probation must achieve at least a 2.00 semester GPA or face dismissal.

Undergraduate

Scholarships, Awards, and Special Funds

Scholarships, Awards, and Special Funds

Millersville University offers scholarships, awards, internship funding, and other high-impact learning opportunities to support student success. During the 2025–2026 academic year, 598 scholarships totaling more than $2.5 million were awarded through the generosity of alumni, friends, and donors to Millersville University.

Information on scholarship opportunities can be found through the Office of Financial Aid on the Scholarships for Returning Students webpage.

Students are also encouraged to utilize Scholarship Universe, Millersville University's personalized scholarship-matching platform. Scholarship Universe provides a continuously updated list of internal and external scholarship opportunities and matches students with awards based on their academic background, interests, and eligibility criteria.

Students must use their Millersville University credentials to access Scholarship Universe and apply for available opportunities. Students are encouraged to create and maintain an up-to-date Scholarship Universe profile and regularly review available scholarship opportunities throughout the academic year. Scholarship resources available through the platform include Public Scholarship Listings and Millersville University Scholarships for Returning Students.

For additional information, visit the Office of Financial Aid Scholarships for Returning Students webpage or access Scholarship Universe.

The Office of Financial Aid website and Scholarship Universe together provide the most current and comprehensive information regarding scholarships, awards, eligibility requirements, application procedures, and deadlines. If you have questions, please contact the Office of Financial Aid at 717-871-5100 to speak with a member of the team.

Undergraduate

Policies

ACADEMIC POLICIES FOR UNDERGRADUATES

ACADEMIC STANDARDS

The registrar determines the academic standing of all students at the end of each semester and session. Academic standing is based on:

1. The student’s cumulative grade point average (CGPA).
2. The total number of Millersville University credits for which the student has enrolled prior to the review. Credits for audited courses, transfer credits and advanced standing credits are not included.

Students with a CGPA of 2.00 or greater are in satisfactory academic standing. Students with less-than-satisfactory academic standing are subject to academic warning, probation or dismissal as follows:

REVIEW CREDITS	CUMULATIVE GPA	ACTION
0.5–16.0	Below 2.00	Warning letter
16.5 or more	Below 2.00	Probation
32.5 or more	Below 2.00 while on probation	Dismissal[1]

[1] Students on probation at the end of a summer or winter session will be continued on probation for the following semester and cannot be dismissed. A student cannot be dismissed at the end of any fall or spring semester in which he/she has earned a 2.00 or greater semester GPA, even if the CGPA remains less than 2.00.

ACADEMIC PROBATION

Students on probation are limited to registering for no more than 13 credits per semester unless they have the written permission of their academic advisor, their department chairperson, the Dean of University College, or an appropriate designee for each.

A student on probation will return to satisfactory academic standing at the end of the semester or session in which he/she earns a 2.00 or greater CGPA.

ACADEMIC DISMISSAL

A student dismissed for the first time is not permitted to register for or attend classes offered by the University for one semester. A student dismissed for the second time is not permitted to register for or attend classes offered by the University for two semesters. A student dismissed for the third or greater time is not permitted to register for or attend classes offered by the University for three years. A student's dismissal number accrues each time the student is dismissed, regardless of the outcome of any appeal.

Dismissed students are not permitted to register for or attend courses offered by the University during intervening winter or summer sessions. However, students who have registered for winter or summer courses prior to being dismissed may attend said courses. If such winter or summer coursework results in a cumulative GPA of 2.00 or greater, the student returns to satisfactory academic standing.

A dismissed student who wishes to be admitted to the University after his/her dismissal period must apply for admission through the Admissions Office. Students who seek readmission to the University following the completion of their third or greater dismissal sanction must submit a written letter detailing the changes they have implemented in an effort to foster academic success upon readmission. The Director of Admissions seeks the recommendation of the Academic Standards Committee (ASC) on third or greater dismissal applicants.

ACADEMIC DISMISSAL APPEAL

Students who have been dismissed will receive a Notice of Dismissal from the University. That notice will describe the procedures for appealing the dismissal. It is the student's responsibility to keep abreast of his/her academic standing and to be proactive in any appeal process.

Students who have been dismissed and believe extenuating circumstances affected their academic performance may submit a formal letter of appeal and supporting documentation to the Academic Standards Committee (ASC) in care of the Registrar's Office. In order to be considered, letters of appeal must be received within eight business days of the date that appears on the Notice of Dismissal.

Students who are dismissed for the first time have the option to appeal in person before a subcommittee of the ASC, in addition to submitting the required written appeal. Students who are dismissed for the second or greater time may only appeal in writing. The academic decision of the ASC subcommittee is on behalf of the entire ASC, and is therefore final and not subject to further review. The Chairperson of the ASC or his/her designee will provide the appellant with a letter stating the decision of the ASC and terms (if any) for future action. Examples of such terms include a reduced credit load, the repeat of coursework and the active seeking of assistance from student-support services. Under no circumstances will the Chairperson or subcommittee of the ASC modify the duration of a dismissal period prescribed herein.

After the ASC's decision, if an appellant believes the appeal process was not administered as prescribed herein, the appellant may pursue an appeal of the process, but not the academic decision, in writing, to the Associate Provost. Such an appeal must be made within ten business days from the date of the decision letter from the Chairperson of the ASC. The appellant is advised to provide as much written documentation as possible, describing why the process was not administered as prescribed herein, and any supporting materials. The decision of the Associate Provost regarding the process appeal is final and not subject to further review.

SEMESTER CREDIT-LOAD POLICIES

FULL-TIME/PART-TIME STATUS

To be considered full-time, undergraduates must be registered for at least 12 credits by the end of the drop/add period. Audited courses are included in the computation of semester credit load.

RECOMMENDED CREDIT LOADS

The normal semester load for undergraduates is 15 credits during the first year, and 15 or more credits in subsequent years. Students with GPAs below 2.00 are strongly advised to take fewer than 15 credits; students on academic probation are limited to 13 credits per semester.

Students who have completed fewer than 80 credits may not register for more than 17 credits. Additional courses may be added at the beginning of the semester during the drop/add period.

More than 18 credits will require additional payment at the current charge per credit hour.

During the semester in which a student is enrolled in student teaching, one additional course may be taken, provided the course does not conflict with the student-teaching assignment.

Students should recognize that some programs require more than 120 credits. Completing these programs or a second major or minor may require carrying semester loads above 15 credits, attending summer school and/or taking more than four years to complete a degree.

SUMMER AND WINTER SESSIONS

The recommended course load during any summer session or winter session is two simultaneous courses. Students should consult their academic advisor before registering for more than two courses in any session.

OVERLOADS

Normally, students may not carry more than 21 credits in any one semester. Students enrolled in student-teaching courses may enroll for one additional course if it does not conflict with the student-teaching assignment.

LEAVING MILLERSVILLE UNIVERSITY

Students who wish to leave Millersville before graduating may take a temporary leave of absence or withdraw completely from the University.

LEAVE OF ABSENCE

Students who wish to interrupt their studies at Millersville for up to two consecutive semesters may request a leave of absence. This allows them to register for courses upon their return without applying for readmission. To be eligible for a leave of absence, a student must be enrolled in degree status and have a minimum CGPA of 2.00.

To request a leave of absence, complete an official Leave of Absence form, available from the Registrar's Office or on the Millersville website in the Student Forms Center. Contact the Registrar's Office for information on the effects of a leave of absence.

Students who take a leave of absence to study at another institution during the fall or spring semester should also complete an Authorization for Transfer of Credit form, available from the Registrar's Office or on the web in the Student Forms Center.

A leave of absence is cancelled, and the student considered withdrawn, if the student fails to return by the established ending time or is dismissed by the University.

MILITARY LEAVE OF ABSENCE

Students who are called to active duty must contact the registrar's office for assistance with arranging a leave of absence and their subsequent return to the University. A copy of the student's military orders must be presented to the Registrar. Students who expect to return to class within the current semester to complete their coursework, or who are called to duty after completing a significant part of the course requirements, should contact their faculty regarding missed work. Students who cannot complete the current semester will be granted a leave of absence for military duty and will be allowed to return for the next semester without penalty.

WITHDRAWING FROM THE UNIVERSITY

Students who wish to withdraw from the University must complete an official Withdrawal form, available from the Registrar's Office or on the Millersville website in the Student Forms Center. This applies to all students, whether withdrawing during or between semesters, regardless of reason for withdrawal. Failure to complete this form will jeopardize a student's chances of future readmission.

Students who have officially withdrawn from the University and wish to return should contact the admissions office, Lombardo Welcome Center, for an application for readmission. See the Admissions section for more information.

REVIEW OF PROGRAMMATIC STANDARDS

The University's programmatic and assessment standards are established by the respective college and monitored by the college dean. A student may discuss issues related to these standards with the college dean. The college dean(s) and the University's provost, however, maintain ultimate authority to determine whether a student has successfully satisfied the programmatic and assessment standards, including preliminary, qualifying and comprehensive examinations.

Faculty members are charged with the responsibility of evaluating a student's academic performance in accordance with the faculty member's professional and academic judgment. The deans of the University's colleges establish the programmatic standards for their respective colleges and will review any issues related to those standards. The following procedures must be followed by students challenging these academic determinations or those encountering a problem with an academic affairs process. Appeals dealing with Academic Dismissal from the University, violations of the Academic Honesty Policy or violations of the Student Code of Conduct are handled by separate processes.

ACADEMIC APPEALS

ACADEMIC DETERMINATION

When a student disagrees with an academic determination by a faculty member, the student and the faculty member must meet, within 30 days of the beginning of the subsequent semester, to discuss the disputed issue and attempt, in good faith, to resolve the matter. The student has the responsibility to contact the faculty member so that the meeting can be arranged. If the student and faculty member are unable to meet within the specified time period, the student must contact the faculty member's department chair within 10 calendar days of the above time period to move to the next phase of the appeal.

If the student and the faculty member are unable to mutually resolve the dispute, the student must file a written appeal with the faculty member's department chair within 10 calendar days of the student/faculty member discussion. The student is advised to set forth in detail the basis for the appeal and provide written documentation in support of the appeal. The department chair will request a written statement from the faculty member and may meet with the faculty member as well. The department chair will review the appeal and any supporting documentation and then meet with the student. The department chair will notify the student and the faculty member of his or her decision within 10 calendar days of receipt of the appeal.

If the department chair's decision does not resolve the dispute, the student may submit a written appeal with the appropriate college dean within 10 calendar days from the date of the department chair's decision. The student should include any written documentation in support of the appeal. The college dean will request a written statement from the faculty member and may meet with the faculty member as well. The college dean will review the appeal and any supporting documentation and will meet with the student. The college dean will notify the student, the department chair and the faculty member of his or her decision within 10 calendar days of receipt of the appeal. The decision of the college dean is final and not subject to further review.

ACADEMIC AFFAIRS PROCESS

When a student encounters a problem with an academic process at the University (e.g., transfer of credit from another institution, missing or incomplete information in a student record, etc.), the student should attempt to resolve the problem by contacting the staff member, or appropriate administrative office, within 30 days of identifying the error. The student and the staff member must discuss the disputed issue and attempt, in good faith, to resolve the matter.

If the student and the staff member are unable to mutually resolve the dispute, the student must file a written appeal with the staff member's supervisor within 10 calendar days of the student/staff member discussion. The student is advised to set forth in detail the basis for the appeal and provide written documentation in support of the appeal. The supervisor will request a written statement from the staff member and may meet with the staff member as well. The supervisor will review the appeal and any supporting documentation and then meet with the student. The supervisor will notify the student and the staff member of their decision within 10 calendar days of receipt of the appeal.

If the supervisor's decision does not resolve the dispute, the student may submit a written appeal to the University Provost within 10 calendar days from the date of the supervisor's decision. The student should include any written documentation in support of the appeal. The Provost will request a written statement from the staff member and may meet with the staff member as well. The Provost will review the appeal and any supporting documentation and will meet with the student. The Provost will notify the student, the supervisor and the staff member of their decision within 10 calendar days of receipt of the appeal. The decision of the Provost is final and not subject to further review.

CLASS STANDING

Class standing is based on total credits earned, including those transferred from other colleges and earned through advanced standing programs, such as CLEP, as follows:

CREDITS EARNED	CLASS STANDING
0–29.5	First Year
30–59.5	Sophomore
60–89.5	Junior
90 or more	Senior

CLASS ATTENDANCE POLICY

The University supports departmental and faculty class attendance policies that are reflective of and consistent with University-approved guidelines. Faculty will include their class attendance policy in their syllabi given to all students in their classes at the start of the semester.

University-Approved Guidelines:

1. Students are expected to attend all classes. It is the student's responsibility to complete all course requirements even if a class is missed. If a student misses class for an officially excused reason, they are entitled to make up the missed work, but only at the convenience of the faculty member. Responsibility for materials presented in, assignments made for, and tests/quizzes given in regularly scheduled classes lies solely with the student.
2. The University policy is that faculty will excuse absences for the following reasons:
    1. personal illness
    2. death or critical illness in the family
    3. participation in a University-sponsored activity
    4. jury duty
    5. military duties
    6. religious holidays
3. Faculty judge the validity of student absences from class within the University's approved guidelines and may require documentation for excused absences. Faculty will evaluate any reason, other than those listed above, for a student missing class and determine whether the absence is justified. In these circumstances, a student may make up missed work at the discretion of the instructor.
4. In the case of foreseeable absences, students are encouraged to notify the faculty member in advance. A student who will miss class due to participation in an official University activity must notify the instructor well in advance of the activity to assure that the absence is excused.

COURSE NUMBER SYSTEM

Millersville University uses the following course-numbering system:

COURSE NUMBERS	DESCRIPTIONS
000-099	Precollege developmental courses.
100-199	Courses primarily designed for first year students.
200-299	Courses primarily designed for sophomores.
300-399	Courses primarily designed for juniors and seniors.
400-499	Courses primarily designed for seniors.
500-599	First-level graduate courses (these courses may be taken by advanced undergraduates).
600-699	Graduate masters level courses
700-899	Graduate doctoral level courses

The following course numbers are reserved:

COURSE NUMBERS	DESCRIPTION
300, 400, 500	Cooperative Education experiences.
179, 279, 379, 479, 579, 679	Experimental courses.
489	Honors courses.
498	Independent study.
499	Departmental honors/thesis/University Honors College thesis.

DEAN'S LIST

A student is eligible for the dean's list after a given semester if he or she has:

1. Earned a semester GPA of 3.50 or higher, and
2. Attempted at least 12 credits of undergraduate coursework in that semester, excluding those courses not used to compute the GPA.

GRADUATION HONORS FOR A BACCALAUREATE DEGREE

Students who have earned consistently superior grades in their coursework at Millersville University are recognized for their achievements at graduation with the designation of graduation honors. The student's diploma and University record carry the appropriate honors designation:

- Cum laude for a cumulative GPA between 3.50 and 3.74.
- Magna cum laude for a cumulative GPA between 3.75 and 3.94.
- Summa cum laude for a cumulative GPA between 3.95 and 4.00.

Eligibility for graduation with honors is determined based on the Millersville grade point average. Neither transfer work nor in-progress courses are included in the honors GPA. For students who have been awarded academic amnesty, the preamnesty work is not included in calculating the honors GPA.

Changes in the eligibility for, or the level of, honors following the posting of grades for the final semester at Millersville will be reflected on the student's diploma and Millersville transcript.

To qualify for graduation honors, students must:

1. Earn a GPA of 3.50 or higher in work done at Millersville, and
2. Complete at least 60 credits of Millersville coursework.

Graduation Honors for Associate Degree Candidates. To qualify for the designation "with honors" on their diploma and University record, associate-degree candidates must:

1. Earn a GPA of 3.50 or higher in work done at Millersville, and
2. Complete at least 30 credits with grades A through D- of Millersville coursework.

Graduate

Overview

A graduate catalog is published every year by the Millersville University of Pennsylvania Council of Trustees. This document at www.millersville.edu provides announcements for the 2026-2027 academic year. The catalog is for informational purposes only and does not constitute a contract. The provisions of this catalog are not intended to create any substantive rights beyond those created by the laws and constitutions of the United States and the Commonwealth of Pennsylvania. They are not intended to create, in and of themselves, any cause of action against the State System of Higher Education, the Board of Governors, the Chancellor, an individual, President or University, or any other officer, agency, agent or employee of the State System of Higher Education.

Information contained herein was current at the time of publication. Courses and programs may be revised; faculty lists and other information are subject to change without notice; course frequency is dependent on faculty availability. Not all courses are necessarily offered each session of each year. Individual departments should be consulted for the most current information. The provisions of this catalog are not to be regarded as an irrevocable contract between the student and Millersville University of Pennsylvania. The University reserves the right to change any provisions or requirements at any time.

Student Body

Millersville University enrolls approximately 7,000 students, including 1,200 graduate students from several states and countries. Graduate programs in the College of Arts, Humanities and Social Sciences are focused on supporting our students' current and future career goals, strengthening their research and applied skills, and helping them advance to the next professional level in their fields. The College of Education and Human Services prepares graduates to meet the evolving workforce needs of schools, agencies, and communities through rigorous academic programs, experiential learning, and strong professional partnerships. The Lombardo College of Business prepares graduate students for leadership careers in the sport industry through its M.Ed. in Sport Management program, combining interdisciplinary coursework, hands-on learning, and internship experiences with professional, collegiate, scholastic, fitness, and recreation organizations. The College of Science & Technology prepares graduate students to meet the needs of a 21st Century workforce by implementing new and innovative directions in science and technology education and by utilizing emerging technologies and immersive learning strategies to ready students for the future of work.

State Authorization Reciprocity Agreement (SARA)

Effective January 1, 2017, The Commonwealth of Pennsylvania joined the National Council for State Authorization Reciprocity Agreements (NC-SARA). Millersville University has been approved by the state of Pennsylvania to participate in the National Council for State Authorization Reciprocity Agreements. NC-SARA is a voluntary, regional approach to state oversight of postsecondary distance education. For more information on NC-SARA, please visit www.nc-sara.org.

In compliance with 34 CFR 668.43(b) Code of Federal Regulation and U.S. Department of Education (USDOE) rules, an institution offering distance education must "provide its students or prospective students with contact information for filing complaints with its accreditor and with its State approval or licensing entity and any other relevant State official or agency that would appropriately handle a student's complaint." This process refers to the student's available recourse if the distance education student has exhausted all possible avenues for complaints at the institution related to consumer protection and the issue has not been resolved to the student's satisfaction.

All current, former, and prospective distance education students, regardless of their residency, must first submit any grievances, complaints, or concerns directly to Millersville University in accordance with university policies located in the Catalog. This step must be completed prior to seeking external resolution for an issue. Please note that student complaints about grades or student conduct cannot be addressed through the SARA/distance education complaint process and must be addressed by the university.

A student may appeal to the portal agency of the home state in which the institution is legally domiciled for consumer protection issues. The Pennsylvania Department of Education is the state portal agency and will notify NC-SARA of an appealed complaint in efforts to seek resolution. Complaints can be addressed to the Pennsylvania Department of Education, Higher and Career Education, 333 Market Street, Harrisburg, PA 17126, or via email at ra-distanceeducation@pa.gov. Students may also file consumer protection complaints with the Pennsylvania State System of Higher Education or the university's accreditor, the Middle States Commission on Higher Education.

Communicating With Students

At Millersville, an important way we keep in touch with our graduate students is through email, and we provide all graduate students with a free Millersville University student email account. Because we use email as an official way of communicating with students, you are required to activate your new Millersville University account and use it regularly. If you need assistance, contact the Help Desk at 717-871-7777.

The Graduate Studies website, available at Graduate Studies & Adult Learning | Millersville University, is an important resource for graduate students, containing orientation resources, access to graduate student forms, and contact information for graduate studies staff.

For more information on these programs please contact the Director of Graduate Recruitment or the Admissions team: 717-871-4625 or 717-871-4723.

Graduate

Graduate Degree Requirements

Graduate Degree Requirements

Semester Hours

Specific departmental requirements and the student's undergraduate preparation will determine the maximum number of credits for a master's degree; the minimum credits required are as follows:

1. 30 credits of approved graduate work beyond a bachelor's degree, including a thesis or research project or capstone; or
2. 33-60 credits of departmentally approved graduate work of an extended course sequence.

Students should consult with their advisor and discuss the specific program requirements to ascertain the semester hours required in a particular degree program.

Research Option

The specific requirements pertaining to the capstone, research project and/or thesis are determined by the University curricular process.

Residency Requirement

Students must complete a minimum of two-thirds of their degree program at Millersville University in order to meet residency requirements.

Time Limit

Work for the degree may be pursued over several years which need not be in succession but must be concluded within a five-year period. If a graduate student remains unenrolled in a course for more than one calendar year, they will be changed to inactive status. The five-year period begins the semester a student is accepted into a degree program. A re-evaluation of course work taken prior to admission to a degree program and an extension of time, usually an additional year, beyond this five-year limit may be granted by the college Dean, at the request of the student, upon the recommendation of the advisor and graduate program coordinator.

Second Master's Degree

Students interested in earning a second master's degree at MU must meet all course requirements for the second degree and complete not fewer than 24 credits of approved course work beyond the requirements for the initial degree.

Full-time/Part-time Status

To be considered full-time, a graduate student must be registered for at least 6 credits by the end of the drop/add period for any given term. Audited courses are included in the computation of semester credit load.

Graduate

Masters Programs

Explore our Masters Programs

The graduate programs at Millersville University are designed to provide opportunities for post-baccalaureate students to pursue scholarly and research activity, and to obtain knowledge in an advanced field of study.

For more information on these programs please contact the Director of Graduate Recruitment or the Admissions team: 717-871-4625 or 717-871-4723.

ADMISSION

Each applicant must submit a completed admissions application and supporting credentials. Admission will depend upon the academic and professional background of each applicant.

View master program offerings below:

- Master of Arts
- Master of Science
- Master of Education
- Master of Science in Nursing
- Master of Social Work

Graduate

Post-Masters Certificates

View Post-Masters Certificates

Millersville University offers a range of professional development programs at the post-masters level. For more information on these programs please contact the Director of Graduate Recruitment or the Admissions team: 717-871-4625 or 717-871-4723.

Each applicant must submit a completed admissions application and supporting credentials. Admission will depend upon the academic and professional background of each applicant.

- View all post-masters certificates

Graduate

Post-Bacc Teacher Certification

Overview of Post Baccalaureate Teacher Certification

Students seeking to become K-12 teachers can become certified by enrolling in a post baccalaureate certification program. These programs are designed for students who have earned a bachelor's degree in a content area but may not have completed the requirements of a Bachelor of Science in education.

For more information on these programs please contact the Director of Graduate Recruitment or the Admissions team: 717-871-4625 or 717-871-4723 or the College of Education and Human Services: 717-871-7333.

ADMISSION

Each applicant must submit a completed admissions application and supporting credentials. Admission will depend upon the academic and professional background of each applicant.

- View all post-baccalaureate certifications

TEACHER CERTIFICATION TESTING

All Millersville University students who complete the requirements for an initial teacher education certificate through a master’s degree—or an approved program of post-baccalaureate or postgraduate studies—will be required to take specialty area tests before receiving the certificate. Official test scores must be received by Millersville University directly from the testing agency.

Mandated by the State Board of Education, Commonwealth of Pennsylvania, these tests must be passed to qualify for Instructional or other Professional Personnel Certificates.

INSTRUCTIONAL I CERTIFICATION

Instructional I certification is required for entry into a teaching position in Commonwealth of Pennsylvania schools.

Applicants interested in earning teacher certification, whether in addition to certification obtained through an undergraduate teacher education program or as a supplement to a liberal arts baccalaureate program, should contact the Certification Office, 717- 871-7362.

INSTRUCTIONAL II CERTIFICATION

Requests for Instructional II certification are made directly by in-service teachers to the Pennsylvania Department of Education at 333 Market Street, Harrisburg, PA 17126-0333; 717-787-3356.

Those planning to satisfy continuing professional education requirements at the graduate level are encouraged to consider a master's degree program. Through academic advisement and careful development of a program of study, teachers can simultaneously pursue certification and a master's degree.

Teachers interested in completing Instructional II certification requirements at the graduate level must contact Graduate Studies for admission information.

READING SPECIALIST CERTIFICATION

Millersville University is an approved provider of a Reading Specialist Certification. Persons who have a valid Pennsylvania Instructional I or Instructional II certificate and have enrolled in and completed the Millersville University Reading Specialist courses are eligible to receive reading specialist certification from the Pennsylvania Department of Education.

ESL CERTIFICATION

Millersville University is an approved provider of a Program Specialist-ESL certificate program. Persons who have a valid Pennsylvania Instructional I or Instructional II certificate and have enrolled in and completed the Millersville University ESL program are eligible to receive ESL add-on certification from the Pennsylvania Department of Education.

EDUCATIONAL SPECIALIST I CERTIFICATION

Educational Specialist I certification is required for entry into guidance and school psychology positions in Commonwealth of Pennsylvania schools. An Educational Specialist II certificate is acquired through the recommendation of the school district superintendent.

Graduate

Supervisory Certification Program

Overview of Supervisory Certification Program

The supervisory certification program prepares experienced school personnel to assume leadership roles in an educational setting. This program, offered on a post-master's level, complies with the Commonwealth's certification mandate for educational supervisors and meets Supervisory I certification requirements.

ADMISSION REQUIREMENTS

Eligible applicants should contact the appropriate coordinator at the time they apply to the program.

The standard degree application must be completed: three letters of recommendation, a professional goals statement and an official transcript of undergraduate and graduate work. Miller Analogies Test and Graduate Record Exam scores do not need to be submitted.

The application materials will be evaluated by the appropriate department, and an admission recommendation will be forwarded to Graduate Studies.

Applicants must hold *Instructional II* certification in the subject area in which the supervisory certification is sought and have earned a master's degree (or be pursuing one concurrently).

Note: Before supervisory certification is granted, five years of appropriate experience is required. For supervisory certification in reading, five years of instruction in a literacy setting is required.

- View supervisory certification programs

Graduate

Non-Degree Certificate Programs

Overview of Non-Degree Certificate Programs

Students looking to develop their career have the opportunity to enroll in short-forum credentials at Millersville University. For more information on these programs please contact the Director of Graduate Recruitment or the Admissions team: 717-871-4625 or 717-871-4723.

ADMISSION

Each applicant must submit a completed admissions application and supporting credentials. Admission will depend upon the academic and professional background of each applicant.

Graduate

PA Dept. of Education Endorsements & Certificates

Overview of PA Dept. of Education Endorsements & Certificates

Educators employed in school districts in PA have the opportunity to earn endorsements and additional certifications at Millersville University. For more information on these programs please contact the Director of Graduate Recruitment or the Admissions team: 717-871-4625 or 717-871-4723.

ADMISSION

Each applicant must submit a completed admissions application and supporting credentials. Admission will depend upon the academic and professional background of each applicant.

- Online Instruction Endorsement
- STEM Education Endorsement
- Reading Specialist Certification
- ESL Program Specialist Certificate
- Literacy Coaching Endorsement
- School Nursing, Post-Baccalaureate Certification

Graduate

Educational Specialist

Overview of the Educational Specialist degree (Ed.S.)

The Educational Specialist degree (Ed.S.) program in school psychology is a 64-credit graduate course of study, leading to certification in school psychology in the Commonwealth of Pennsylvania. The program is fully approved by the National Association of School Psychology. Upon completion of a specified 30 credit hours of coursework, a Master of Science (M.S.) in Psychology, School Psychology, is awarded. Following successful completion of the program, which includes a 1200-hour internship, the candidate earns an Educational Specialist degree (Ed. S.) and is recommended for certification as a school psychologist to the Pennsylvania Department of Education. Students may also transfer graduate coursework or a master's degree in psychology or a related area into the program. When that is the case, a review of previous work will be conducted to determine which competencies have been met and the remaining program requirements.

- View Educational Specialist degree

Graduate

Doctoral Programs

Overview of Doctoral Programs

Students seeking advanced work have the opportunity to earn a professional doctorate in a select number of areas. For more information on these programs please contact the Director of Graduate Recruitment or the Admissions team: 717-871-4625 or 717-871-4723.

ADMISSION

Each applicant must submit a completed admissions application and supporting credentials. Admission will depend upon the academic and professional background of each applicant.

View Doctoral Programs

- Educational Leadership, Ed.D.
- Nursing, D.N.P.
- Social Work, D.S.W.

Graduate

Policies

ACADEMIC POLICIES FOR GRADUATE STUDENTS

STUDENT RIGHTS AND RESPONSIBILITIES

Upon admission to a graduate studies program, the student assumes responsibility for knowing program requirements and following established procedures. Conversely, the student has the right to expect that all program requirements will be made clear and that all course requirements, including grading criteria and procedures, will be made known. The student has the right to instruction that encourages the free and open discussion of ideas and which respects reasonable student needs and aspirations. It is the student's responsibility to contribute to classroom decorum and an atmosphere that encourages maximum learning. Further, each student is entitled to academic advisement but must initiate the advisement process by scheduling appointments with either the graduate program coordinator in the case of degree admission, or with the dean of Graduate Studies in the case of nondegree admission status.

ADVISEMENT

Each student is assigned a faculty advisor upon admission to a graduate program. It is the student's responsibility to initiate contact with that advisor to develop an initial program of study and to meet with him/her prior to each registration period. It is the responsibility of the advisor to provide academic counseling in light of program requirements and the student's personal and professional goals.

ACADEMIC STANDING

Graduate degree students are required to maintain a 3.0 grade-point average. A student who fails to meet the scholarship standards may be dismissed from a graduate degree program. If a student falls below a 3.0 average, he/she will be placed on probation. Failure to raise the grade-point average to a minimum of 3.0 during the next semester in which the student is enrolled will result in dismissal from graduate studies at Millersville University. (Summer is considered a semester.)

Graduate students who earn two grades of C+, C or C-, or any combination thereof, will receive an academic warning, regardless of GPA. Earning a third grade of C+, C or C- will result in academic dismissal, regardless of GPA. This includes any courses which have been repeated and replaced with a higher grade. A C+, C or C- grade earned at Millersville University may not be made up at another institution of higher learning for the same course.

A graduate student earning an F grade in any course will be dismissed from graduate study at Millersville University. An F grade earned at Millersville University may not be made up at another institution of higher learning for the same course.

Individual departments may have scholarship requirements beyond this minimum level; students should consult their advisor and the *Academic Programs* section of the catalog.

ACADEMIC DISMISSAL AND APPEAL

Students may appeal dismissal to the Graduate Academic Appeals Committee (GAAC). Students who have been dismissed and believe specific, unusual circumstances affected their academic performance may request a review by following the directions provided with the notice of dismissal. For the appeal to be considered before the next semester, it must be received by the committee by the date specified in the notice of dismissal. Information and forms regarding graduate appeals may be found on the Office of Graduate Studies and Adult Learning website: www.millersville.edu/gsal. After GAAC's decision, if an appellant believes the appeal process was not administered as prescribed herein, the appellant may pursue an appeal of the process, but not the academic decision, in writing, to the Dean of Graduate Studies. Such an appeal must be made within 10 business days from the date of the decision letter from the chairperson of the GAAC. The appellant is advised to provide as much written documentation as possible, describing why the process was not administered as prescribed herein, and any supporting materials. The decision of the Dean of Graduate Studies regarding the process appeal is final and not subject to further review.

Any student who is dismissed from the University for poor academic performance may apply to be readmitted to their academic program one calendar year from the date of the dismissal, provided it is their first dismissal. A student may only appeal for reinstatement one time. Upon the second dismissal the student may not appeal and is no longer eligible for admission to any Millersville University graduate program.

GRADUATE GRADING POLICIES

REGULAR GRADUATE COURSES

Graduate-level courses are those regular courses taught at the 500, 600, 700 and 800 levels. Undergraduate courses (100-400 level) may not be counted for credit in a graduate degree program.

Each instructor establishes his or her own grading policy and states it clearly and in writing at the beginning of the course. Appropriate learning outcomes and measurement systems are built into each course structure to evaluate each graduate student's achievement. Instructors in dual-numbered courses (courses that have cross-listed undergraduate and graduate sections) will clearly differentiate the undergraduate assignments, grading systems and other relevant instructional methods in writing at the beginning of the semester.

The grade-point average (GPA) is a comprehensive evaluation of a student's academic standing. The letter grades used in graduate-level courses and their associated grade-point values are as follows: A (4.0), A- (3.7), B+ (3.3), B (3.0), B- (2.7), C+ (2.3), C (2.0), C- (1.7) and F (0.0). In addition, grades of H (Honors), P (Pass), W (Withdrawal), I (Incomplete) and AU (Audit) may also be used. Grades of H, P, W, I and AU are not used in computing the grade-point average. Grade-point average will be rounded to two places.

University policy accepts a C as minimum earned credit. Individual departments may have scholarship requirements beyond this minimum level; students should consult their advisor.

The *semester GPA* is the number of grade points earned in Millersville courses in a semester divided by the number of credits in the semester for which grades calculated in the GPA were earned. Grade points for each course are calculated by multiplying the grade-point value by the number of credits for the course.

The *cumulative GPA* (CGPA) is the total number of grade points earned in Millersville courses divided by the number of Millersville GPA credits. Credits from audited courses, subsequently repeated courses and transfer credits are not included in the CGPA.

INCOMPLETE GRADES

A student, upon consultation with the instructor, may receive a grade of Incomplete. The student has the responsibility to complete the appropriate work as outlined by the instructor by the end of the following regular term. In the case of research reports and theses, the grade of Incomplete must be resolved within one calendar year. If a change of grade is not made by the instructor to indicate completion of requirements in the appropriate time span, the grade will be changed to an F. Under extenuating circumstances, the student may petition the Dean of Graduate Studies, with the recommendation of the instructor, for an extension of time to complete the course or research requirements.

DISSERTATIONS, THESES, RESEARCH REPORTS/PROJECTS AND PRACTICUM COURSES

These are evaluated on the basis of H (Honors), P (Pass), F (Fail) or I (Incomplete).

GRADUATE RECORDS POLICIES

CHANGE OF CURRICULUM OR DEGREE STATUS

Students wishing to change admission status or curriculum must initiate the process by completing the appropriate forms available on the Office of Graduate Studies and Adult Learning website: www.millersville.edu/gsal. Additional admission requirements may apply to these changes; further, curriculum and degree status changes must be approved by both the Dean of Graduate Studies and the student's department(s).

For post-baccalaureate certification students, a new application must be submitted for students to be reevaluated in a new area of certification.

CHANGE OF NAME AND ADDRESS

It is the responsibility of each student to provide accurate and current information for all University records. Address changes may be completed by students online through their MAX account. Students must submit official documentation (copy of marriage license, divorce decree, etc.) for a name change to be made.

TRANSCRIPTS

A student or graduate wishing to obtain an official copy of their academic record must request a transcript using the online Credentials Service accessible through the Millersville website or complete the form available in the registrar's office, Lyle Hall. Forms are also available on the Millersville University website, Student Forms Center. If the requester wishes to obtain an official copy for a third party, the requested transcript must be sent directly to the designated third party or requested in a signed, sealed envelope. There is a $10 fee per transcript when ordered directly from the University's registrar's office.

GRADUATION

Students who plan to graduate at the end of any semester must apply for graduation by the deadline published. A $30 graduation fee is charged. A student who applies for graduation but does not complete degree requirements by the anticipated date may be required to reapply in the semester when they expect to graduate. Students are billed by the Office of Student Accounts for the graduation fee. Additional details and appropriate forms are available on the Millersville commencement web page at www.millersville.edu/commencement.

COMMON POLICY FOR COMPREHENSIVE EXAMS

Comprehensive exams are a common method for assessing students' mastery of core learning objectives in graduate programs. At Millersville, graduate programs have the option of using graduate comprehensive examinations, so students should be aware of their own graduate program's policy and timeline. Several graduate programs use the comprehensive exam as a means to advance to degree candidacy early in their program, while others use the exam as a culminating evaluation at the end of the program.

For those programs that require an exam as a method of comprehensive evaluation, the following guidelines have been developed by the Graduate Curriculum and Program Review Committee.

REGISTRATION AND ADMINISTRATION

Comprehensive exams are generally administered on or about the 12th week of the fall and spring terms (November and March) and summer session (July-August). Some programs may not offer their comprehensive exam all three times a year, so it is important to check with the program coordinator. Registration is generally required six weeks prior to the test date; students should check with individual programs for forms and specific dates.

GRADING

A committee and/or faculty member from the appropriate program will grade comprehensive exams on a pass/fail (P/F) basis. There is also the opportunity for a grade of passing with honors (H) to be awarded.

FAILURE AND REATTEMPTS

If a student fails a comprehensive exam, or any part thereof, they must retake the exam, or the sections they failed, per their graduate program's policy. If a student fails to successfully pass the exam a second time, a third attempt may be permitted upon approval of the program coordinator and/or department graduate committee. Prior to the third attempt, the student should

examine, with the assistance of an advisor or coordinator, their preparation for the exam and any measures that could be taken to improve performance. The third attempt at a comprehensive exam is considered final, and failure to pass will result in dismissal from the graduate program.

POLICIES GOVERNING GRADUATE COURSES

ACADEMIC PETITION

Students who believe that an academic injustice has occurred must try to resolve the problem at the lowest appropriate level of authority. The levels of authority from lowest to highest are as follows: individual faculty member; department graduate coordinator and department graduate committee (if existing); department chairperson; Dean of Graduate Studies; and lastly, the Provost/ Vice President for Academic Affairs. The case should be presented to progressively higher levels of authority until resolved.

AUDITING

Students who audit must be officially admitted to the University. With the consent of the Dean of Graduate Studies and the instructor, a student may be permitted to register for any course as an auditor if space is available. An auditor is registered and required to attend at least half of the sessions, but is not required to participate in any of the work of the course. No credit toward a degree is issued for an audited course. A student enrolled as an auditor may be dropped from the course when in the judgment of the instructor and the Dean of Graduate Studies such action is justified. A student shall pay the regular graduate course tuition and fees for the privilege of auditing. To register to audit a course, contact the registrar's office, for information and a permission form, and submit it by the end of the add period. Audit privilege may not be changed to credit status. Audit privileges are ordinarily limited to one course per semester. A student who has audited a course may, with the advisor's and the appropriate graduate program coordinator's permission, repeat that course for credit. The student must register again for the course and remit the appropriate tuition and fees.

GRADUATE-LEVEL COURSES FOR UNDERGRADUATES

Well-qualified Millersville University undergraduates may enroll in graduate courses for undergraduate or graduate credit. Specified conditions apply to each of these two credit alternatives:

1. Undergraduates may enroll in 500-level graduate courses for undergraduate credit with permission of the instructor and advisor. The credits earned count toward baccalaureate degree requirements and cannot be converted to graduate credits.
2. An undergraduate with an overall 3.0 GPA or higher may enroll in 500- and 600-level graduate courses for graduate credit. The student must have a maximum of 15 semester hours to be completed in the baccalaureate degree program. Written permission must be acquired from the advisor, the course instructor, the graduate program coordinator, and/or chair of the department offering the course, and the Dean of Graduate Studies. The undergraduate student will also need to be admitted as a non-degree graduate student. A maximum of nine graduate credits may be earned by an undergraduate. These credits may not count toward the completion of the student's baccalaureate degree.
3. Undergraduate students accepted into an accelerated bachelors-master's program may enroll in the appropriate course work at the graduate level.

GRADUATE COURSEWORK OUTSIDE MAJOR FIELD

A student may elect up to, but not more than, six semester hours of work in a discipline outside the major field, provided the courses elected are approved by the advisor and graduate program coordinator. Required professional core courses (M.Ed. programs) are not included in this limit.

REPEATING A GRADUATE COURSE

Graduate students may repeat an individual course only once for grade improvement. Transcripts will reflect grades each time the course is taken. Only the most recent grade and credits will be counted in the cumulative GPA.

Graduate students may repeat an individual course not designed to be repeatable only once for grade improvement.

TRANSFER-OF-CREDIT POLICY

CREDITS PRIOR TO ADMISSION AT MILLERSVILLE

Students must request approval from their department and the Dean of Graduate Studies for the transfer of graduate credit completed at a regionally accredited institution prior to admission to Millersville. Forms for the approval of transfer credits are available on the Office of Graduate Studies and Adult Learning website: www.millersville.edu/gsal. The student must arrange for this office to receive official transcripts directly from the institution at which the graduate work was taken. The transfer credit amount is subject to completion of the residency requirement and is subject to the time limit for the completion of all degree requirements. Except in the most extenuating circumstances, no transfer credit will be allowed for work completed more than five years prior to admission to Millersville University.

All work recommended by the department for transfer credit must be taken in a regular program of studies offered by a four-year, regionally accredited institution. Grades of B- or higher (or documented equivalency) must be achieved in these courses. Requested transfer course grades must come from an accredited graduate program. Extension work and courses offered in a nonacademic institutional setting may not transfer in for credit.

PERMISSION TO COMPLETE CREDITS IN TRANSFER FOLLOWING ADMISSION TO A DEGREE PROGRAM

Following acceptance into a graduate degree program, students desiring to pursue graduate work at another institution for transfer purposes must receive the prior recommendation of their advisor and graduate coordinator, and the prior approval of the Dean of Graduate Studies. Approval forms are available on the Office of Graduate Studies and Adult Learning website: www.millersville.edu/gsal.

DEGREE CANDIDACY REVIEW

Degree candidacy is a screening and advising process that is used by some graduate programs. If used in their academic program, students are expected to apply to their respective departments for admission to degree candidacy at the earliest possible time. It is the student's responsibility to initiate the candidacy review process within the required semester-hour limitation. See the *Academic Programs* section for specific degree candidacy requirements.

THESIS AND DISSERTATION

THESIS

Several programs offer a master's thesis option. A master's thesis is an approved creative project or an interpretive, analytical work that offers evidence of an original point of view, supported by original research and the results of that research. The final written thesis demonstrates originality, critical and independent thinking, appropriate format, organization and thorough documentation.

If students are planning to pursue a doctoral program, they may want to strongly consider completing a thesis as part of their master's degree requirements. Many doctoral programs look to this as a requirement for admission.

The Graduate Course and Program Review Committee has adopted thesis guidelines to aid in the preparation and completion of theses. View a full copy of the Thesis and Dissertation Guidelines which is also available on the Office of Graduate Studies and Adult Learning website at www.millersville.edu/gsal.

DISSERTATION

In order to achieve a doctorate degree, a doctoral student is required to complete the theory, research and presentation of a dissertation. Writing a dissertation requires an ability to do competent research, organize materials effectively, write clearly, and make sound interpretations and conclusions from facts presented. The essence of a dissertation is the demonstration of critical-thinking skills, not merely presenting experimental data. Dissertations are expected to make a new and creative contribution to a field of study. A dissertation will result in a publishable paper which is submitted to the MU Institutional Repository and the academic department.

The Graduate Course and Program Review Committee has adopted dissertation guidelines to aid in the preparation and completion of dissertations. View a full copy of the Thesis and Dissertation Guidelines which is also available on the Office of Graduate Studies and Adult Learning website at www.millersville.edu/gsal.

UNIVERSITY ACADEMIC HONESTY POLICY

Students of the University are expected to adhere to Millersville University's values and be honest and forthright in their academic endeavors. To falsify the results of one's research, to steal the words or ideas of another, to cheat on an examination, to allow another person to commit, or assist another in committing an act of academic dishonesty, corrupts the essential process by which knowledge is advanced.

Actions that Violate the Academic Honesty Policy - The below lists are for illustration only. They should not be construed as restrictive or as an exhaustive enumeration of the various forms of conduct that constitute violations of the academic honesty policy

PLAGIARISM

Plagiarism is defined as intentionally or unintentionally using ideas, images, words, or data from another source without crediting that source (including online sources). Students are required to accurately acknowledge any ideas, images, words, or data they use from another source by properly citing the source with (1) an in-text citation in the body of the paper and (2) a complete entry in the reference list at the end of the paper. By placing their name on an assignment/paper/project, students certify that, unless properly cited, all work is original. Students will avoid being charged with plagiarism if they properly acknowledge/cite when doing one or all of the following:

1. quoting source's actual words, including words generated by Artificial Intelligence (AI);
2. using another person's ideas, opinions, or theories, including those generated by an AI, even if they are completely paraphrased in their own words;
3. borrowing facts, statistics, or other illustrative materials, including those generated by an AI, unless the information is common knowledge.

These guidelines should be followed for all source types, including books, newspapers, pamphlets, journal articles, websites, AI-generated content, and other online resources. *The above list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various forms of plagiarism that constitute violations of the academic honesty policy.*

FABRICATION

Fabrication is the falsification of research or other findings, or sources. The below list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various forms of fabrication that constitute violations of the academic honesty policy.

1. Citation of information not taken from the source indicated.
2. Listing in a bibliography fabricated sources or sources not actually consulted.
3. Inventing data or other information for research or other academic projects.

CHEATING

Cheating is the act or attempted act of deception by which students try to misrepresent that they have mastered subject matter in an academic project or the attempt to gain an advantage by the use of illegal or illegitimate means. The below list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various forms of cheating that constitute violations of the academic honesty policy.

1. Copying from another student's test or assignment (e.g., paper, project, homework).
2. Allowing another student to copy from their test or assignment.
3. Using the course textbook, or other material such as a notebook, brought to class meetings but unauthorized for use during a test.
4. Collaborating during a test with another person by receiving or providing information without the permission of the instructor.
5. Using or possessing unauthorized materials during a test or assignment (e.g., notes, formula lists, AI chatbots, online test repositories such as Chegg, formulas within calculators or other electronic devices, notes written on student's' clothing or person) that are unauthorized.
6. Unauthorized collaboration with other students on a test or assignment meant to be completed individually.

ACADEMIC MISCONDUCT

Academic misconduct is the violation of University policies by tampering with grades or participating in the distribution of any part of a test before its administration. The below list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various forms of academic misconduct that constitute violations of the academic honesty policy.

1. Stealing, buying, or otherwise obtaining all or part of test or assignment (e.g., paper, project, homework).
2. Selling or giving away all or part of test or assignment, including answers to test.
3. Bribing, or attempting to bribe, any other person to obtain test or assignment, or any information about it.
4. Buying, or otherwise acquiring, another's coursework and submitting it as their own work, whether altered or not.
5. Entering a building, office, computer, or network for the purpose of changing a grade in a grade book, on a test, or another assignment.
6. Changing, altering, or being an accessory to changing and/or altering a grade in a grade book, on a test or assignment on a "Change of Grade" form, or other official academic University record which relates to grades.
7. Entering a building, office, computer, or network for the purpose of obtaining an unadministered test or assignment.
8. Continuing to work on an exam or assignment after the specified allotted time has elapsed.
9. Completing an assignment or taking a test or course for someone else or permitting someone else to do the same in their place.
10. Giving or receiving unauthorized aid in a take-home exam, online exam, or other assignment.
11. Submitting work for a class that was already submitted for another class, when unauthorized, or allowing another student to submit or copy from previously submitted class work.

Actions which may be taken for violations of the Academic Honesty Policy.

When a faculty member suspects that a violation of the academic honesty policy has occurred, they will meet with students to:

- discuss the alleged act;
- hear any defense students may have;
- discuss any proposed academic sanctions;
- inform students of their rights to appeal faculty-imposed sanctions to the department chair and/or dean of the college

Academic sanctions that may be imposed by the faculty member include:

- verbal reprimands;
- written reprimands;
- requiring the students to redo/resubmit the assignment, test, or project;
- lowering the grade for the assignment, test, or project;
- not accepting the assignment, test, or project which results in a zero on the assessment.

The above list is for illustration only. It should not be construed as restrictive or as an exhaustive enumeration of the various sanctions that may be imposed by instructors for violations of the academic honesty policy. Academic sanctions that require a formal charge be filed with the Associate Provost for Academic Administration include:

- any sanction in excess of lowering the grade for or not accepting an assignment, test, or project;
- assigning students a failing grade for the course;
- recommending temporary or permanent suspension from the academic major or University.

Regardless of the level of academic sanction imposed or requested above, faculty members are encouraged to submit a report for each violation of the Academic Honesty Policy to the Associate Provost for Academic Administration. If more than one (1) such report is filed for a student, even in the case of sanctions imposed only by the faculty member, then the Associate Provost for Academic Administration will meet with the student to discuss these occurrences and possibly impose additional academic sanctions.

Confidentiality

In accordance with the provisions of the Family Educational Rights and Privacy Act of 1974, any information relating to an alleged violation of the University's Student Code of Conduct or to the outcome of a judicial hearing must be treated as strictly confidential by members of the faculty.

Accounting & Finance Department

The Department of Accounting and Finance offers a Bachelor of Science in Accounting, Bachelor of Science in Finance, and a Bachelor of Science in Business Administration with two possible concentrations (General Business and International Business). We also offer minors in Accounting, Finance and General Business.

The BS in General Business program equips students with the essential elements of Accounting, Finance, International Business, Management and Marketing to pursue employment in any business or organization, or to continue their professional studies. Through their coursework, students will be able to integrate concepts learned across the main areas of business to solve complex business problems.

The program's core curriculum provides you with knowledge, skills and experience across a wide range of business topics including financial and managerial accounting, principles of management and marketing, information systems, business law, finance and more. Our minors and concentration allow you to dig deeper into fields of interest. Our flexible curriculum encourages hands-on learning and provides opportunities for internships with businesses and not-for-profit organizations. You can earn credits, develop skills and gain valuable work experience, often while being paid.

FACULTY LIST
Blazer, Eric; Department Chairperson, Professor Lombardo College of Business B.S., Virginia Tech., 1984; M.S., Ibid., 1986; Ph.D., Ibid., 1996
Chen, Baizhou; Assistant Professor Lombardo College of Business B.S., University of Minnesota, 2003; M.B.A., St. John's University, 2005; D.B.A., Jacksonville University, 2020
Galante, Joseph; Professor Lombardo College of Business B.B.A., Iona College, 1978; M.B.A., Ibid., 1980; M.A., Rutgers University, 1989; J.D., Western Michigan University, The Thomas M. Cooley Law School, 1992
Li, Yuan; Assistant Professor Lombardo College of Business B.A., Shenyang Polytech University (China), 2000; M.B.A., Tsinghua University (China), 2012; M.S., Florida Atlantic University, 2019; Ph.D., Ibid, 2024
Trout, Brian; Associate Professor Lombardo College of Business B.S., Millersville University, 2000; M.S., Stetson University, 2013; D.B.A., Wilmington University, 2019

Programs

Accounting Minor

Overview

The Accounting Minor is for non-business majors who want a better understanding accounting systems and financial information, but without pursuing a full degree in business. It is a popular choice and provides important knowledge for students pursuing a variety of majors including Math (Actuarial Science), Computer Science, Pre-Law, and Economics.

Curriculum

Simple Requirements

REGULATIONS GOVERNING MINOR COURSE WORK

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Accounting (18 credits)

Type
Completion Requirement

Introduction to Business (3 credits)

Complete at least 1 of the following courses:

- BUSN101A - Introduction to Business
- BUSN101B - Introduction to Business

Required Courses (15 credits)

Complete ALL of the following Courses:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- ACCT361 - Intermediate Accounting 1
- ACCT364 - Cost Accounting
- ACCT366 - Federal Income Tax 1

General Business Minor

Overview

The General Business Minor is for non-business majors who want a broad understanding of business, but without pursuing a full degree in business. It is a popular choice and provides important knowledge for students pursuing a variety of majors.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Business Administration/General Business (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Intro to Business (3 credits)

Complete at least 1 of the following courses:

- BUSN101A - Introduction to Business
- BUSN101B - Introduction to Business

AND

Required Courses (12 credits)

Complete ALL of the following Courses:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management
  OR BUSN251H - Hnrs:Principles of Management

AND

Managerial Finance or Personal Finance (3 credits)

Complete at least 1 of the following courses:

- BUSN341 - Managerial Finance 1
- FINA203 - Personal Finance
  OR FINA203H - Hon: Personal Finance

Finance Minor

Overview

The Finance Minor is for non-business majors who want a better understanding corporate finance, investments, financial modeling, and financial markets pursuing a full degree in business. It is a popular choice and provides important knowledge for students pursuing a variety of majors including Math (Actuarial Science), Computer Science, Pre-Law, and Economics.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Finance (18 credits)

Type
Completion Requirement

Finance Minor for Non-Business Majors

Fulfill ALL of the following requirements:

Intro to Business (3 credits)

Complete at least 1 of the following courses:

- BUSN101A - Introduction to Business
- BUSN101B - Introduction to Business

AND

Required Courses (12 credits)

Complete ALL of the following Courses:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN341 - Managerial Finance 1
- FIN342 - Managerial Finance 2

AND

Investment Analysis or Financial Markets (3 credits)

Complete at least 1 of the following courses:

- FIN345 - Investment Analysis
- FIN445 - Financial Markets

Accounting, B.S.

Overview

Accounting is your path to challenging and rewarding careers in industry, public accounting, or not-for-profit and public sector organizations. The curriculum includes courses in intermediate and cost accounting, tax, audit, information systems, fraud awareness and more. Upon graduation students have available all the necessary coursework to sit for the CPA, CMA, CIA or CFE examinations. Most courses incorporate review material for professional certifications.

Curriculum

Simple Requirements

Major in Accounting (63 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Business Foundations Block (9 credits)

Complete ALL of the following Courses:

- BUSN161 - Intro to Financial Accounting

AND

Required Business Courses (24 credits)

Complete ALL of the following Courses:

- BUSN206 - Business Research Methods
- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management
  OR BUSN251H - Hnrs:Principles of Management
- BUSN307 - Management Information Systems
- BUSN341 - Managerial Finance 1
- BUSN352 - Human Resource Management
  OR BUSN352H - H:Human Resource Management
- BUSN358 - Management Science
- BUSN455 - Strategy and Policy

A grade of C- or higher is required in BUSN231 Principles of Marketing (Marketing), BUSN251 Principles of Management (Management), and BUSN341 Managerial Finance 1 (Finance) is a pre-requisite for the upper level courses in the respective areas.

AND

Upper Level Accounting Courses (24 credits)

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- ACCT361 - Intermediate Accounting 1
- ACCT362 - Intermediate Accounting 2
- ACCT364 - Cost Accounting
- ACCT366 - Federal Income Tax 1
- ACCT461 - Auditing

AND

Seminar in Business Administration (3 credits)

Complete at least 1 of the following courses:

- BUSN488A - Seminar in Accounting and Finance
- BUSN488B - Seminar in Management and Marketing
- FINA447 - Cases in Finance

AND

Internship in Accounting (3 credits)

Earn at least 3 credits from the following:

- ACFN300 - Co-Op Ed Exp in Acct/Fin

AND

Accounting Elective (3 credits)

Earn at least 3 credits from the following:

- Any 36-level ACCT course(s)
- Any 46-level ACCT course(s)

May also take ACCT302 Organizations and Transactions or ACCT405 Topics in Accounting.

Note: This requirement may not be satisfied with

ACCT361 Intermediate Accounting 1, ACCT362 Intermediate Accounting 2, ACCT364 Cost Accounting, ACCT366 Federal Income Tax 1, or ACCT461 Auditing.

AND

Departmental Electives (6 credits)

Earn at least 6 credits from the following:

- Any ACCT course(s)
- Any BUSN course(s)
- Any FINA course(s)
- Any MGMT course(s)
- Any MKTG course(s)
- Any ACFN course(s)
- Any MGMK course(s)
- Any INTB course(s)
- Any ITAN course(s)

Note: This requirement may not be satisfied with BUSN 161, BUSN 162, BUSN 202, BUSN 206, BUSN 231, BUSN 251, BUSN 307, BUSN 341, BUSN 352, BUSN 358, or BUSN 455.

For 'Departmental Electives', you may select any two BUSN courses (including COOP/Internships), or you may also take certain approved non-business elective courses to fill this requirement. View the current list of non-business electives. Declaring more than one business concentration, a second major, or a minor will waive departmental electives.

Req Related for Accounting (13-16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C- in the following:

- ECON101 - Principles of Macroeconomics
- ECON102 - Principles of Microeconomics

AND

Data Visualization and Communication (1-4 credits)

Complete at least 1 of the following courses:

- MATH256 - Data Visualization and Communication
- MATH279 - Experimental

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics
- WRIT316 - Business Writing

Business Administration, B.S. - General Business

Overview

The B.S. in General Business program equips students with the essential elements of Accounting, Finance, International Business, Management and Marketing to pursue employment in any business or organization, or to continue their professional studies.

Curriculum

Simple Requirements

Major in Business Administration (42 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Business Foundations Block (9 credits)

Earn a minimum grade of C- in the following:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN202 - Legal Environment of Business **OR** BUSN202H - Hon: Legal Environment of Business

AND

Business Core Requirements (24 credits)

Complete ALL of the following Courses:

- BUSN206 - Business Research Methods
- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management
- BUSN307 - Management Information Systems
- BUSN341 - Managerial Finance 1
- BUSN352 - Human Resource Management **OR** BUSN352H - H:Human Resource Management
- BUSN358 - Management Science
- BUSN455 - Strategy and Policy

A grade of C- or higher is required in BUSN231 Principles of Marketing (Marketing), BUSN251 Principles of Management (Management), and BUSN341 Managerial Finance 1 (Finance) as a pre-requisite for the upper level courses in the respective areas.

AND

Departmental Electives (9 credits)

Earn at least 9 credits from the following:

- Any ACCT course(s)
- Any BUSN course(s)
- Any FINA course(s)
- Any MGMT course(s)
- Any MKTG course(s)
- Any ACFN course(s)
- Any MGMK course(s)
- Any INTB course(s)
- Any ITAN course(s)

Note: This requirement may not be satisfied with BUSN 161, BUSN 162, BUSN 202, BUSN 206, BUSN 231, BUSN 251, BUSN 307, BUSN 341, BUSN 352, BUSN 358, or BUSN 455.

For 'Departmental Electives', you may select any three BUSN courses (including COOP/Internships), or you may also take certain approved non-business elective courses to fill this requirement. View the current list of non-business electives. Declaring more than one business concentration, a second major, or a minor will waive departmental electives.

AND

Concentration in General Business

See separate block

Concentration in General Business (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Electives for General Business

Earn at least 15 credits from the following:

- Any 3-level ACCT course(s)
- Any 4-level ACCT course(s)
- Any 3-level FINA course(s)
- Any 4-level FINA course(s)
- Any 3-level MGMT course(s)
- Any 4-level MGMT course(s)
- Any 3-level MKTG course(s)
- Any 4-level MKTG course(s)
- Any 3-level INTB course(s)
- Any 4-level INTB course(s)

Other course options include BUSN488A Seminar in Acct and Fin and BUSN488B Seminar in Mgmt and Mktg.

Internships/Co-ops numbered 300 and 400 will not count as General Business concentration electives. However, they may be used as Departmental electives in the major requirements.

Req Related for Business Administration (10-13 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C- in the following:

- ECON101 - Principles of Macroeconomics
- ECON102 - Principles of Microeconomics

AND

Data Visualization and Communication (1-4 credits)

Complete at least 1 of the following courses:

- MATH256 - Data Visualization and Communication
- MATH279 - Experimental

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics

Business Administration, B.S. - International Business

Overview

The International Business concentration, which is housed within the General Business major, emphasizes the importance of foundations in finance, accounting, management and marketing to ground a growing perspective of international business. A degree in International Business enables students to succeed in organizations throughout our interconnected world. This program of study prepares students to work in international businesses or global financial firms. Millersville University's General Business program is internationally accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Curriculum

Simple Requirements

Major in Business Administration (42 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Business Foundations Block (9 credits)

Earn a minimum grade of C- in the following:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN202 - Legal Environment of Business **OR** BUSN202H - Hon: Legal Environment of Business

AND

Business Core Requirements (24 credits)

Complete ALL of the following Courses:

- BUSN206 - Business Research Methods
- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management
- BUSN307 - Management Information Systems
- BUSN341 - Managerial Finance 1
- BUSN352 - Human Resource Management **OR** BUSN352H - H:Human Resource Management
- BUSN358 - Management Science
- BUSN455 - Strategy and Policy

A grade of C- or higher is required in BUSN231 Principles of Marketing (Marketing), BUSN251 Principles of Management (Management), and BUSN341 Managerial Finance 1 (Finance) as a pre-requisite for the upper level courses in the respective areas.

AND

Departmental Electives (9 credits)

Earn at least 9 credits from the following:

- Any ACCT course(s)
- Any BUSN course(s)
- Any FINA course(s)
- Any MGMT course(s)
- Any MKTG course(s)
- Any ACFN course(s)
- Any MGMK course(s)
- Any INTB course(s)
- Any ITAN course(s)

Note: This requirement may not be satisfied with BUSN 161, BUSN 162, BUSN 202, BUSN 206, BUSN 231, BUSN 251, BUSN 307, BUSN 341, BUSN 352, BUSN 358, or BUSN 455.

For 'Departmental Electives', you may select any three BUSN courses (including COOP/Internships), or you may also take certain approved non-business elective courses to fill this requirement. View the current list of non-business electives. Declaring more than one business concentration, a second major, or a minor will waive departmental electives.

AND

Concentration in International Business

See separate block

Concentration in International Business-BUSN (15

credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Introduction to International Business (3 credits)

Complete at least 1 of the following courses:

- INTB321A - Intro to Internationl Business
- INTB321B - Intro to Internationl Business

AND

International Business Directed Electives (9 credits)

Complete at least 3 of the following courses:

- FINA344 - International Finance
- MGMT357 - International Management
- MKTG435 - International Marketing
- ECON325 - International Economics **OR** ECON325H - Hon: International Economics

AND

International Business Electives

Complete at least 1 of the following:

Option 1

Complete at least 1 of the following courses:

- ANTH121 - Cultural Anthropology
- BUSN488A - Seminar in Accounting and Finance
- BUSN488B - Seminar in Management and Marketing
- GEOG222 - Economic Geography
- GOVT251 - Introduction to Global Politics
- GOVT325 - Modern Asia

OR

Option 2

Complete at least 1 course in the following course sets:

- Any 33-level MKTG course(s)
- Any 43-level MKTG course(s)
- Any 34-level FINA course(s)
- Any 44-level FINA course(s)
- Any 35-level MGMT course(s)
- Any 45-level MGMT course(s)
- Any 36-level ACCT course(s)
- Any 46-level ACCT course(s)

Req Related for Business Administration (10-13 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirement

Required Related Credits

AND

Required Courses (6 credits)

Earn a minimum grade of C- in the following:

- ECON101 - Principles of Macroeconomics
- ECON102 - Principles of Microeconomics

AND

Data Visualization and Communication (1-4 credits)

Complete at least 1 of the following courses:

- MATH256 - Data Visualization and Communication
- MATH279 - Experimental

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics

AND

Recommended Foreign Language Proficiency

Foreign language courses at the intermediate level or above.

Students with an International Business option are recommended to fulfill the business electives by attaining proficiency in a foreign language at the intermediate level or above.

Finance, B.S.

Overview

The B.S. in Finance offers a variety of courses including corporate and international finance, financial markets, spreadsheets modeling and investments. It provides the tools, skills and knowledge necessary for careers in corporate finance, banking, wealth management, public finance and more. While in school students are encouraged to sit for a variety of professional licensing exams including the Series 6, 7, 63, and 66 exams.

Curriculum

Simple Requirements

Major in Finance

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Business Foundations Block (9 credits)

Earn a minimum grade of C- in the following:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN202 - Legal Environment of Business

AND

Required Business Courses (24 credits)

Complete ALL of the following Courses:

- BUSN206 - Business Research Methods
- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management
  OR BUSN251H - Hnrs:Principles of Management
- BUSN307 - Management Information Systems
- BUSN341 - Managerial Finance 1
- BUSN352 - Human Resource Management
  OR BUSN352H - H:Human Resource Management
- BUSN358 - Management Science
- BUSN455 - Strategy and Policy

A grade of C- or higher is required in BUSN231 Principles of Marketing (Marketing) and BUSN251 Principles of Management (Management) and and BUSN341 Managerial Finance 1 (Finance) as a pre-requisite for the upper level courses in the respective areas.

AND

Upper Level Finance Courses (24 credits)

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- FIN342 - Managerial Finance 2
- FINA447 - Cases in Finance

AND

Internship in Finance (3 credits)

Earn at least 3 credits from the following:

- ACFN300 - Co-Op Ed Exp in Acct/Fin

AND

Finance Electives (15 credits)

Complete at least 5 of the following:

Course Options

Complete ANY of the following Courses:

- FINA203 - Personal Finance **OR** FINA203H - Hon: Personal Finance
- FIN405 - Topics in Finance
- ACCT368 - Business Applications: Excel

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 34-level FINA course(s)
- Any 44-level FINA course(s)

Courses must be a minimum of 15 credits.

AND

Departmental Electives (6 credits)

Earn at least 6 credits from the following:

- Any ACCT course(s)
- Any BUSN course(s)
- Any FINA course(s)
- Any MGMT course(s)
- Any MKTG course(s)
- Any ACFN course(s)
- Any MGMK course(s)
- Any INTB course(s)
- Any ITAN course(s)

For 'Departmental Electives', you may select any two BUSN courses (including COOP/Internships), or you may also take certain approved non-business elective courses to fill this requirement. View the current list of non-business electives. Declaring a concentration, a second major, or a minor will waive departmental electives.

Note: This requirement may not be satisfied with BUSN 161, BUSN 162, BUSN 202, BUSN 206, BUSN 231, BUSN 251, BUSN 307, BUSN 341, BUSN 352, BUSN 358, or BUSN 455.

Req Related for Finance (13-16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C- in the following:

- ECON101 - Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

AND

Data Visualization and Communication (1-4 credits)

Complete at least 1 of the following courses:

- MATH256 - Data Visualization and Communication
- MATH279 - Experimental

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics
- WRIT316 - Business Writing

Finance, B.S. - Wealth Management

Overview

The wealth management concentration builds upon Millersville's very successful finance program. The demand for financial planners is on an upward trajectory in the United States, lifted by rising income levels and life expectancies. These trends are exacerbated in our area; the Lancaster region's demographics show an increasing population, driven in part by families and retirees moving from the Maryland-DC area. This program's curriculum is designed to build students' expertise in portfolio choice, risk, behavior-based investing decisions, and financial literacy. The wealth management concentration helps our students enter this field with the business skills and interpersonal training to excel in their careers.

Curriculum

Simple Requirements

Major in Finance (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Business Foundations Block (9 credits)

Complete ALL of the following Courses:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN202 - Legal Environment of Business **OR** BUSN202H - Hon: Legal Environment of Business

AND

Required Business Courses (24 credits)

Complete ALL of the following Courses:

- BUSN206 - Business Research Methods
- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management
- BUSN307 - Management Information Systems

- BUSN341 - Managerial Finance 1
- BUSN352 - Human Resource Management **OR** BUSN352H - H:Human Resource Management
- BUSN358 - Management Science
- BUSN455 - Strategy and Policy

A grade of C- or higher is required in BUSN231 Principles of Marketing (Marketing) and BUSN251 Principles of Management (Management) and and BUSN341 Managerial Finance 1 (Finance) as a pre-requisite for the upper level courses in the respective areas.

AND

Concentration in Wealth Management

See separate block

Concentration in Wealth Management

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- FINA203 - Personal Finance **OR** FINA203H - Hon: Personal Finance
- FIN422 - Behavioral Finance
- FIN345 - Investment Analysis
- FIN347 - Risk and Insurance

AND

Series Exams Capstone (3 credits)

Complete ALL of the following Courses:

- FIN405 - Topics in Finance

AND

Internship (1 credit)

Complete ALL of the following Courses:

- ACFN300 - Co-Op Ed Exp in Acct/Fin

AND

Wealth Management Electives (6 credits)

Complete at least 2 of the following courses:

- ACCT367 - Federal Income Tax 2
- ECON215 - Money, Credit, and Banking
- MKTG333 - Personal Selling
- FIN445 - Financial Markets
- FIN405 - Topics in Finance

AND

Business Electives

Complete at least 2 courses in the following course sets:

- Any ACCT course(s)
- Any BUSN course(s)
- Any FINA course(s)
- Any MGMT course(s)
- Any MKTG course(s)
- Any ACFN course(s)
- Any MGMK course(s)
- Any INTB course(s)
- Any ITAN course(s)

Req Related for Finance (13-16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C- in the following:

- ECON101 - Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

AND

Data Visualization and Communication (1-4 credits)

Complete at least 1 of the following courses:

- MATH256 - Data Visualization and Communication
- MATH279 - Experimental

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics
- WRIT316 - Business Writing

Courses

ACCT179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ACCT	179	Undergraduate

Course Description
Experimental course in Accounting.

ACCT279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ACCT	279	Undergraduate

Course Description
Experimental Course in Accounting

ACCT302 - Organizations and Transactions

Course Information

Course Title
Organizations and Transactions

Subject code	Course Number	Academic Level
ACCT	302	Undergraduate

Course Description
Continuation of BUSN 202. Includes such topics as consumer law, debtor-creditor law, secured transactions, bankruptcy, forms of business organization, securities regulation, antitrust, labor-management relations, employment discrimination, environmental law, international business, wills and trusts. Recommended for students studying for the CPA exam, or for business students who wish to broaden their knowledge of the legal environment of business. Counts as a business administration departmental elective, or as an accounting elective in the accounting option. Offered annually. Prereq: BUSN 202.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 202 or BUSN 202H

Complete ANY of the following Courses:
- BUSN202 - Legal Environment of Business
- BUSN202H - Hon: Legal Environment of Business

ACCT361 - Intermediate Accounting 1

Course Information

Course Title
Intermediate Accounting 1

Subject code	Course Number	Academic Level
ACCT	361	Undergraduate

Course Description
Financial statement preparation with special attention to revenue recognition and asset valuation. Emphasis on generally accepted accounting principles and accounting theory. Students will develop a familiarity with the official pronouncements. Offered in fall, spring. Prereq: C- or higher in BUSN 162.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 162

Earn a minimum grade of C- in the following:
- BUSN162 - Intro to Managerial Accounting

ACCT362 - Intermediate Accounting 2

Course Information

Course Title
Intermediate Accounting 2

Subject code	Course Number	Academic Level
ACCT	362	Undergraduate

Course Description
Examination of generally accepted accounting principles as they apply to long term liabilities and equity. This course is a continuation of Intermediate Accounting I. Includes issues of current interest. Selected readings from pronouncements. Offered in fall, spring. Prereq: C- or higher in BUSN 341 and ACCT 361.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 341 and ACCT 361

Earn a minimum grade of C- in the following:

- BUSN341 - Managerial Finance 1
- ACCT361 - Intermediate Accounting 1

ACCT363 - Accounting Information System

Course Information

Course Title
Accounting Information System

Subject code	Course Number	Academic Level
ACCT	363	Undergraduate

Course Description
Special emphasis on current problems and issues using small business accounting software. Offered infrequently. Prereq: C- or higher in ACCT 361.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ACCT 361

Earn a minimum grade of C- in the following:

- ACCT361 - Intermediate Accounting 1

ACCT364 - Cost Accounting

Course Information

Course Title
Cost Accounting

Subject code	Course Number	Academic Level
ACCT	364	Undergraduate

Course Description
Investigates cost accounting techniques such as budgeting, accounting controls, standard cost, operation evaluation techniques, variance analysis and performance analysis. The role of cost accounting in profit planning and decision making is examined. Offered in fall, spring. Prereq: C- or higher in BUSN 162, 206 (formerly 306).

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 162 and BUSN 206

Earn a minimum grade of C- in the following:
- BUSN162 - Intro to Managerial Accounting
- BUSN206 - Business Research Methods

ACCT365 - Not-For-Profit Accounting

Course Information

Course Title
Not-For-Profit Accounting

Subject code	Course Number	Academic Level
ACCT	365	Undergraduate

Course Description
A review of fund accounting, application of fund accounting to nonprofit organizations such as state and local governments and health care institutions. Offered infrequently. Prereq: BUSN 161.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 161

Complete ALL of the following Courses:
- BUSN161 - Intro to Financial Accounting

ACCT366 - Federal Income Tax 1

Course Information

Course Title
Federal Income Tax 1

Subject code	Course Number	Academic Level
ACCT	366	Undergraduate

Course Description
Study of federal income tax laws as they relate to individuals and businesses. Topics include gross income, deductions, basis, gains and losses and tax computations. Students are introduced to tax research techniques and applications. Offered annually. Prereq: C- or higher in both BUSN 162 and 202.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 162 and BUSN 202 or BUSN 202H

Earn a minimum grade of C- in the following:

- BUSN162 - Intro to Managerial Accounting
- BUSN202 - Legal Environment of Business **OR** BUSN202H - Hon: Legal Environment of Business

ACCT367 - Federal Income Tax 2

Course Information

Course Title
Federal Income Tax 2

Subject code	Course Number	Academic Level
ACCT	367	Undergraduate

Course Description
Study of corporate, S Corporations and partnership taxation. Topics include corporate organization, distribution, reorganization, accumulated earnings, S elections, partnership formation, operation, and transfers. Introduction to estate planning and wealth accumulation. Offered annually. Prereq: ACCT (formerly BUSN) 366.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ACCT 366

Earn a minimum grade of C- in the following:

- ACCT366 - Federal Income Tax 1

ACCT368 - Business Applications: Excel

Course Information

Course Title
Business Applications: Excel

Subject code	Course Number	Academic Level
ACCT	368	Undergraduate

Course Description
Application of Microsoft Excel for accounting and other business functions. Preparation for the official Microsoft Excel Certification exams. Prereq: BUSN 206

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 206

Earn a minimum grade of C- in the following:
- BUSN206 - Business Research Methods

ACCT379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ACCT	379	Undergraduate

Course Description
Experimental Course in Accounting

ACCT405 - Topics in Accounting

Course Information

Course Title
Topics in Accounting

Subject code	Course Number	Academic Level
ACCT	405	Undergraduate

Course Description
Advanced, innovative, or exploratory topics and disciplines within accounting. Specific content items developed by instructor. Most topics will be for business majors only. Offered periodically. Prerequisites may vary. Consult the current course offering.

ACCT461 - Auditing

Course Information

Course Title
Auditing

Subject code	Course Number	Academic Level
ACCT	461	Undergraduate

Course Description
Study of the attest function of the independent auditor and review of theory and procedures for evaluating internal control and financial information. Includes generally accepted auditing standards as developed and applied to different audit areas in order to establish the fairness of financial information. Offered annually. Prereq: C- or higher in ACCT 361.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ACCT 361

Earn a minimum grade of C- in the following:
- ACCT361 - Intermediate Accounting 1

ACCT465 - Advanced Accounting

Course Information

Course Title
Advanced Accounting

Subject code	Course Number	Academic Level
ACCT	465	Undergraduate

Course Description
Accounting formation, operation and liquidation of the partnership and corporate forms of business. Emphasis on preparing consolidated financial statements. Review of topics such as nonprofit accounting and multinational business. Offered annually. Prereq: ACCT 362.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ACCT 362

Complete ALL of the following Courses:

- ACCT362 - Intermediate Accounting 2

ACCT479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ACCT	479	Undergraduate

Course Description
Experimental Course in Accounting

ACCT499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
ACCT	499	Undergraduate

Course Description
Departmental Honors

ACFN300 - Co-Op Ed Exp in Acct/Fin

Course Information

Course Title
Co-Op Ed Exp in Acct/Fin

Subject code	Course Number	Academic Level
ACFN	300	Undergraduate

Course Description
Cooperative Education in Accounting and/or Finance

ACFN400 - Co-Op Ed Exp in Acct/Fin

Course Information

Course Title
Co-Op Ed Exp in Acct/Fin

Subject code	Course Number	Academic Level
ACFN	400	Undergraduate

Course Description
Cooperative Education Experience in Accounting/Finance

ACFN489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ACFN	489	Undergraduate

Course Description
Honors Course

ACFN498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
ACFN	498	Undergraduate

Course Description
Independent Study in Accounting and Finance. See catalog or department for eligibility and registration information.

ACFN500 - Co-Op Ed Exp in Acct/Fin

Course Information

Course Title
Co-Op Ed Exp in Acct/Fin

Subject code	Course Number	Academic Level
ACFN	500	Graduate

Course Description
Cooperative Education Experience in Accounting/Finance

BUSN101A - Introduction to Business

Course Information

Course Title
Introduction to Business

Subject code	Course Number	Academic Level
BUSN	101A	Undergraduate

Course Description
Introduction of basic business concepts such as institutional setting, organizational structures, decision making, accounting, finance, labor relations, management, marketing and government-business relations. No credit for BUSN majors, except as departmental elective if taken before becoming a BUSN major. Offered in spring, fall.

BUSN161 - Intro to Financial Accounting

Course Information

Course Title
Intro to Financial Accounting

Subject code	Course Number	Academic Level
BUSN	161	Undergraduate

Course Description
Examination of the account cycle and systems and procedures for developing financial information; introduction to the conceptual and theoretical foundation of financial information systems; and interpretation of financial statements. Offered in fall, spring. Prereq: MATH 101 or MATH placement beyond MATH 101 (MATH 151, 155H, 160, 161, 163H).

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 101

Complete ALL of the following Courses:

- MATH101 - College Algebra

Or MATH placement beyond MATH 101 (MATH 151, MATH 155H, MATH 160, MATH 161, MATH 163H).

BUSN162 - Intro to Managerial Accounting

Course Information

Course Title
Intro to Managerial Accounting

Subject code	Course Number	Academic Level
BUSN	162	Undergraduate

Course Description
Problem-oriented introduction to the interpretation and application of accounting information from the viewpoint of management with emphasis on planning and control and long-range strategies. Offered in fall, spring. Prereq: C- or higher in BUSN 161.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 161

Earn a minimum grade of C- in the following:

- BUSN161 - Intro to Financial Accounting

BUSN202 - Legal Environment of Business

Course Information

Course Title
Legal Environment of Business

Subject code	Course Number	Academic Level
BUSN	202	Undergraduate

Course Description
The American legal system and its impact on business. Includes the court system, litigation and alternative dispute resolution, contract law, torts in the business environment, product and service liability, property, and criminal law. Offered in fall, spring.

BUSN202H - Hon: Legal Environment of Business

Course Information

Course Title
Hon: Legal Environment of Business

Subject code	Course Number	Academic Level
BUSN	202H	Undergraduate

BUSN310 - Economics of Justice

Course Information

Course Title
Economics of Justice

Subject code	Course Number	Academic Level
BUSN	310	Undergraduate

Course Description
Economic concepts and models used to explain legal principles. The effects of legal decision-making on economic efficiency. Topics include property, contracts, torts and criminal law. Offered annually. Prereq: BUSN 202, ECON 102, COMM 100, ENGL 110, junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 202 or BUSN 202H and ECON 102 or ECON 102H

Complete ALL of the following Courses:
- BUSN202 - Legal Environment of Business **OR** BUSN202H - Hon: Legal Environment of Business
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

BUSN310H - H:Economics of Justice

Course Information

Course Title
H:Economics of Justice

Subject code	Course Number	Academic Level
BUSN	310H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 202 or BUSN 202H and ECON 102 or ECON 102H

Complete ALL of the following Courses:
- BUSN202 - Legal Environment of Business **OR** BUSN202H - Hon: Legal Environment of Business
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

BUSN341 - Managerial Finance 1

Course Information

Course Title
Managerial Finance 1

Subject code	Course Number	Academic Level
BUSN	341	Undergraduate

Course Description
Fundamental topics in corporate finance, including: use of financial statements, time value of money, capital budgeting and working capital management. Offered in fall, spring. Prereq: ECON 102, C- or higher in BUSN 162, and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 102 or ECON 102H

Complete ANY of the following Courses:
- ECON102 - Principles of Microeconomics
- ECON102H - Hnrs:Principles of Microeconomics

BUSN 162

Earn a minimum grade of C- in the following:
- BUSN162 - Intro to Managerial Accounting
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BUSN488A - Seminar in Accounting and Finance

Course Information

Course Title
Seminar in Accounting and Finance

Subject code	Course Number	Academic Level
BUSN	488A	Undergraduate

Course Description
Research on a topic including preparation and critical analysis of a paper. Topic need not be from student's option. Offered in fall, spring. Prereq: ENGL 110 and senior status. Prerequisites will vary.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

FIN179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
FIN	179	Undergraduate

Course Description
Experimental Finance Course

FIN279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
FIN	279	Undergraduate

Course Description
Experimental Course in Finance

FIN342 - Managerial Finance 2

Course Information

Course Title
Managerial Finance 2

Subject code	Course Number	Academic Level
FIN	342	Undergraduate

Course Description
Advanced topics in corporate finance, including risk analysis of operating and financial decisions, capital budgeting and cash flow analysis. Offered fall. Prereq: MATH 235 and BUSN 206 or ECON 332 or ECON 333 and C- or higher in BUSN 341,

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 235 and BUSN 206 or ECON 333 or ECON 333H

Complete ALL of the following Courses:
- MATH235 - Survey of Statistics
- BUSN206 - Business Research Methods
  OR ECON333 - Econometrics
  OR ECON333H - H:Econometrics

BUSN 341

Earn a minimum grade of C- in the following:
- BUSN341 - Managerial Finance 1

FIN343 - Real Estate Fundamentals

Course Information

Course Title
Real Estate Fundamentals

Subject code	Course Number	Academic Level
FIN	343	Undergraduate

Course Description
Introduces special characteristics of real estate and how real estate decisions are made. Includes real estate terms, laws, commercial and residential markets, and property valuation. Offered periodically. Prereq: C- or higher in BUSN 341.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 341

Earn a minimum grade of C- in the following:
- BUSN341 - Managerial Finance 1

FIN345 - Investment Analysis

Course Information

Course Title
Investment Analysis

Subject code	Course Number	Academic Level
FIN	345	Undergraduate

Course Description
Analysis of investment objectives and functioning of capital markets, including market trading strategies and techniques of portfolio management. Study of stocks and bonds, mutual funds, options and futures. Offered annually. Prereq: C- or higher in BUSN 341.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 341

Earn a minimum grade of C- in the following:
- BUSN341 - Managerial Finance 1

FIN346 - Princp of Bank Administration

Course Information

Course Title
Princp of Bank Administration

Subject code	Course Number	Academic Level
FIN	346	Undergraduate

Course Description
Bank investment practices, liquidity management, deposits acquisition and administration, branch location decisions, optimal bank capital, mathematical model in banking, management science in banking, computers and checkless banking. Offered periodically. Prereq: C- or higher in BUSN 341.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 341

Earn a minimum grade of C- in the following:
- BUSN341 - Managerial Finance 1

FIN347 - Risk and Insurance

Course Information

Course Title
Risk and Insurance

Subject code	Course Number	Academic Level
FIN	347	Undergraduate

Course Description
Introduces principles and mechanics of insurance. Includes the conceptual and historical framework of insurance and the actual mechanics of insurance risk management as they pertain to personal and business needs. Offered periodically. Prereq: C- or higher in BUSN 341.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 341

Earn a minimum grade of C- in the following:

- BUSN341 - Managerial Finance 1

FIN379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
FIN	379	Undergraduate

Course Description
Experimental Course in Finance

FIN405 - Topics in Finance

Course Information

Course Title
Topics in Finance

Subject code	Course Number	Academic Level
FIN	405	Undergraduate

Course Description
Advanced, innovative, or exploratory topics and disciplines within finance. Specific content items developed by instructor. Most topics will be for business majors only. Offered periodically. Prerequisites may vary. Consult the current course offering.

FIN422 - Behavioral Finance

Course Information

Course Title
Behavioral Finance

Subject code	Course Number	Academic Level
FIN	422	Undergraduate

Course Description
A comprehensive examination of the relatively new discipline of behavioral finance. Designed to expose students to the decision-making biases that cause investors and managers to deviate from actions predicted by economic and financial models, and that cause financial markets to behave in ways counter to these theories. Experiments are used throughout the semester to help students better understand the effects of human behavior and conflicting goals on individual investors and market outcomes. Prerequisites a C- or better in FINA203 and BUSN341.

Simple Requirements

Course Prerequisites

Type
Prerequisite

FINA203 and BUSN341

Earn a minimum grade of C- in the following:

- BUSN341 - Managerial Finance 1
- FINA203 - Personal Finance

FIN445 - Financial Markets

Course Information

Course Title
Financial Markets

Subject code	Course Number	Academic Level
FIN	445	Undergraduate

Course Description
Classical and modern thought on markets. Numerous modern markets are investigated in terms of functionality, strategy and development. Offered annually. Prereq: ECON 101 and C- or higher in BUSN 341.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H

Complete ANY of the following Courses:

- ECON101 - Principles of Macroeconomics
- ECON101H - Hnrs:Principles of Macroeconomics

BUSN341

Earn a minimum grade of C- in the following:

- FINA203 - Personal Finance

FIN479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
FIN	479	Undergraduate

Course Description
Experimental Course in Finance

FINA203 - Personal Finance

Course Information

Course Title
Personal Finance

Subject code	Course Number	Academic Level
FINA	203	Undergraduate

Course Description
Theoretical tools of economics and business management are applied to personal financial planning and management. Topics include financial planning, consumer credit, budgeting, insurance, retirement and estate planning.

FINA203H - Hon: Personal Finance

Course Information

Course Title
Hon: Personal Finance

Subject code	Course Number	Academic Level
FINA	203H	Undergraduate

FINA344 - International Finance

Course Information

Course Title
International Finance

Subject code	Course Number	Academic Level
FINA	344	Undergraduate

Course Description
The international financial environment and a comprehensive analysis of foreign exchange rates and instruments. Topics include the international monetary system, balance of payments, contemporary currency trading and quotation, forward contracts, international parity conditions and foreign currency options. Offered annually. Prereq: C- or higher in BUSN 341.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 341

Earn a minimum grade of C- in the following:

- BUSN341 - Managerial Finance 1

FINA447 - Cases in Finance

Course Information

Course Title
Cases in Finance

Subject code	Course Number	Academic Level
FINA	447	Undergraduate

Course Description
Continuation of the study of financial theory and its application using the case method. Real-world financial problems for which elementary or traditional analysis may be deficient. Emphasizes the interrelationship of finance to other areas of study (such as marketing, personnel). Offered spring. Prereq: C- or higher in FINA 342 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

FINA 342 and ENGL 110 or ENGL 110H

Earn a minimum grade of C- in the following:

- FIN342 - Managerial Finance 2
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

FINA499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
FINA	499	Undergraduate

Course Description
Departmental Honors

INTB179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
INTB	179	Undergraduate

Course Description
Experimental Course International Business

INTB279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
INTB	279	Undergraduate

Course Description
Experimental Course in International Business

INTB321A - Intro to Internationl Business

Course Information

Course Title
Intro to Internationl Business

Subject code	Course Number	Academic Level
INTB	321A	Undergraduate

Course Description
A survey of international business (IB). Introduces major issues, institutions, opportunities, problems and managerial processes unique to international business. Includes micro and macro context, theory, impact of environmental factors on international business operations, and identification and analysis of managerial issues. Course content relates to current events. Offered in fall, spring. Prereq: ECON 101, 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON101 or ECON101H and ECON102 or ECON102H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

INTB379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
INTB	379	Undergraduate

Course Description
Experimental Course in International Business

INTB405 - Topics in Internatl Business

Course Information

Course Title
Topics in Internatl Business

Subject code	Course Number	Academic Level
INTB	405	Undergraduate

Course Description
Advanced, innovative, or exploratory topics and disciplines within international business. Specific content items developed by instructor. Most topics will be for business majors only. Offered periodically. Prerequisites may vary. Consult the current course offering.

INTB479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
INTB	479	Undergraduate

Course Description
Experimental Course in International Business

African American Studies Department

KARIBU! (WELCOME!)

African-American Studies is an 18 credit interdisciplinary minor focusing on the history and socio-culture of African-Americans. The minor offers an introduction to issues, theories, and research concerning African-Americans in various disciplines. Courses in the minor emphasize African-American perspectives, as well as the development of critical thinking and written and oral communication skills.

The minor will present opportunities to examine, compare and contrast African-American perspectives with those of other American cultures. It offers students in a variety of disciplines important perspectives on African-American history and culture that will help them to understand the possibilities and values of cultural differences. Students will be encouraged to connect issues about African-American culture raised in the classroom to current society.

Fifteen of the 18 credits satisfy General Education requirements and knowledge of African-American culture will complement many majors, especially Elementary and Secondary Education, Business, Communications and Theatre, English, History, Sociology, Art, Music and majors in the Department of Applied Engineering, Safety and Technology. It appears to be both essential and beneficial that all students have a multi-cultural perspective of themselves and the world around them.

GOAL

The goal of the African American studies Minor is to educate students about the history and culture of African Americans by exposing them to issues, theories and research concerning African Americans. Students will be encouraged to connect issues about African-American culture raised in the classroom to society.

In the 21st century, it will be both essential and beneficial for all students to have a multi-cultural perspective of themselves and the world around them. An African American studies minor will present opportunities to examine, compare and contrast African-American perspective with those of other American cultures.

FACULTY LIST
Dr. Adyanga, Onek; Associate Professor, coordinator

Programs

African-American Studies Minor

Overview

African-American Studies is an 18-credit interdisciplinary minor focusing on the history and socio-culture of African Americans. The minor offers an introduction to issues, theories and research concerning African Americans in various disciplines. Courses in the minor emphasize African-American perspectives, as well as the development of critical thinking and written and oral communication skills. The minor will present opportunities to examine, compare and contrast African-American perspectives with those of other American cultures. It offers students in a variety of disciplines important perspectives on African-American history and culture that will help them to understand the possibilities and values of cultural differences. Students will be encouraged to connect issues about African-American culture raised in the classroom to current society.

Fifteen of the 18 credits satisfy general education requirements, and knowledge of African-American culture will complement many majors, especially elementary and secondary education, business, communication and theatre, English, history, sociology, art, music, and industry and technology. It appears to be both essential and beneficial that all students have a multicultural perspective of themselves and the world around them.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in African American Studies (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum Residency 50% of minor credits
- 3 Courses Must be Upper-Division

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- AFAM201 - Intro to African American Studies
- AFAM401 - Senior Seminar in African American Studies

AND

African American History (3 credits)

Complete at least 1 of the following courses:

- HIST272 - Afro-American History 1
- HIST273 - Afro-American History 2
- HIST282 - Transatlantic Slave Trade

AND

African American Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL333 - African-American Literature 1 **OR** ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2 **OR** ENGL334H - Hnrs:African American Literature 2

AND

Electives (2) in African American Studies

Complete at least 2 of the following:

Option 1. Humanities (3 credits)

Complete ALL of the following Courses:

- COMM227 - Movements & Digital Activism
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945
- MUSI369 - Intro to West African Music and Dance

OR

Option 2. Social Sciences (3 credits)

Complete ALL of the following Courses:

- ANTH227 - Culture Through Film
- ANTH344 - Gender, Race, and Class
- HIST272 - Afro-American History 1
- HIST273 - Afro-American History 2
- HIST280 - Pre-Colonial Africa
- HIST281 - African History
- HIST282 - Transatlantic Slave Trade
- HIST383 - Eur Imprlsm in Africa 1870-1914
- HIST388 - Twentieth-Century Africa
- HIST401 - Cultural Interactions across the Atlantic World, 1450-1820
- HIST308 - Topics in History
- HIST308 - Topics in History
- HIST308 - Topics in History
- SOCI307 - African-Americn Social Thought
- SOCI315 - Race and Ethnic Relations
- SOCI308 - Soc of Afr-Amer and Lat Educ
- SOCI441 - Urban Society
  OR SOCI441H - Hnrs: Urban Society
- SOWK350 - Encounters in Human Diversity
  OR SOWK350H - H:Encounters in Human Diversity
- SOSC212 - The Black Woman
  OR SOSC212H - Hon: The Black Woman
- GNDW220 - Introduction to Women's & Gender Studies

OR

Option 3. Education (3 credits)

Complete ALL of the following Courses:

- ECPK315 - Family & Community: Aspects of Diversity
- EDUC403 - Pluralism in Society
  OR EDUC403H - Hon: Pluralism in Society
- EDUC433 - Gender and Race Issues
  OR EDUC433H - Hnrs:Gender and Race Issues
- PSYC318 - Psychology of Racism
  OR PSYC318H - H:Psychology of Racism

Note: HIST308 will only count if taken with one of the following topics:

- Topics: Contemporary Africa
- Topics: Caribbean 1492-1820
- Top:Wmns Actvsm/Blck Liberatn

OR

Option 4. Mathematics and Science (3 credits)

Complete ALL of the following Courses:

- MATH102 - Math in Non-European Cultures

Courses

AFAM179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
AFAM	179	Undergraduate

Course Description
Experimental

AFAM201 - Intro to African American Studies

Course Information

Course Title
Intro to African American Studies

Subject code	Course Number	Academic Level
AFAM	201	Undergraduate

Course Description
Provides an overview of African-American culture and history. African-American perspectives and contributions in the areas of literature, art, theater, music, politics, economics, science and technology, medicine, male-female relationships, family, the church and the media will be presented. Offered annually.

AFAM300 - Co-Op Ed Experience in Afam

Course Information

Course Title
Co-Op Ed Experience in Afam

Subject code	Course Number	Academic Level
AFAM	300	Undergraduate

Course Description
Co-Op Ed Experience in Afam

AFAM400 - Co-Op Ed Experience in Afam

Course Information

Course Title
Co-Op Ed Experience in Afam

Subject code	Course Number	Academic Level
AFAM	400	Undergraduate

Course Description
Co-Op Ed Experience in Afam

AFAM401 - Senior Seminar in African American Studies

Course Information

Course Title
Senior Seminar in African American Studies

Subject code	Course Number	Academic Level
AFAM	401	Undergraduate

Course Description
An examination and discussion of current research issues in African-American studies. May be taken in conjunction with a 2 to 3 credit independent study.

AFAM496 - Topics African American Study

Course Information

Course Title
Topics African American Study

Subject code	Course Number	Academic Level
AFAM	496	Undergraduate

Course Description
Presents a detailed investigation on a topic of current interest in African-American studies. Topics will be announced.

AFAM498 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
AFAM	498	Undergraduate

Course Description
Ind Stdy:

Applied Engineering, Safety & Technology Department

The Department of Applied Engineering, Safety & Technology (AEST) offers nationally accredited programs of study leading to an A.T. in applied engineering and technology or a B.S. in applied engineering and technology management, a B.S. in occupational safety and environmental health, a B.S. in automation & intelligent robotics, a B.S. in manufacturing engineering technology, and a B.S.Ed. in Technology Education. Minors are offered in applied engineering and technology, and occupational safety and environmental health. A post-baccalaureate technology education teacher certification program is also offered.

Students may participate in the activities of the Technology & Engineering Education Collegiate Association; Association of Technology, Management and Applied Engineering (Robotics Club); Society of Manufacturing Engineers; American Society of Safety Engineers; Submersible Research Team; Construction Club and Marauder Graphics Club. An invitation to join Epsilon Pi Tau, the international honor society for professions in technology, may also be extended to department majors who excel.

Qualified department majors pursuing a bachelor’s degree may earn departmental honors by proposing, conducting and defending thesis research. Eligibility for graduation with AEST departmental honors includes having a minimum CGPA of 3.0 overall, with 3.35 in the major, and a grade of B or higher on an honors thesis. Contact the department chairperson for guidelines and an enrollment application to participate in the department’s honors program.

FACULTY LIST
Bowers, Betty-Jo; Associate Professor College of Science and Technology B.S., The Pennsylvania State University, 1995; M.B.A., Ibid., 1998; Ph.D., Alvernia University, 2016
English, Cindy; Assistant Professor College of Science and Technology B.S., Bemidji State University, 1988; B.S., Pennsylvania College of Technology, 1988, M.F.A., Marywood University, 1999
Haughery, John; Associate Professor College of Science and Technology B.S., Millersville University, 2006; M.S., Morehead State University, 2014; Ph.D., Iowa State University, 2017
Johnson, Alex; Associate Professor College of Science and Technology B.S., University of North Dakota, 2000; M.S., Ibid., 2001; Ph.D., Ibid., 2010
Khalighi, Mehdi; Associate Professor College of Science and Technology B.S., Iran University of Science and Technology (Tehran); M.S., University of Utah, 1994; Ph.D., Ibid., 2001
Miler, Molly; Assistant Professor College of Science and Technology B.S., Millersville University, 2013; M.S., Millersville University, 2017; Ed.D., University of Pittsburgh, 2020
Ogutu, Jack; Department Chairperson, Professor College of Science and Technology B.S., University of Nairobi (Kenya), 2004; M.S., Auburn University, 2011; Ph.D., Ibid., 2013
Painter, Donna; Associate Professor College of Science and Technology B.S., California University of Pennsylvania, 1988; M.Ed., Seton Hall University, 2005
Warner, Scott; Professor College of Science and Technology B.S., Millersville University, 1985; M.A., Ball State University; Ed.D., West Virginia University, 2000
Wright, John; Professor College of Science and Technology B.S.I.T., Central Connecticut State University, 1993; M.S., Ibid., 1996; Ph.D., Iowa State University 1998

Programs

Technology and Innovation, M.S., Occupational Safety & Health Management Concentration

Overview

The Occupational Safety and Health Management Concentration in the M.S. in Technology & Innovation degree program is designed so students can develop their problem solving and leadership skills within the context of occupational safety and health management. Students in this program take courses in safety program management, risk management, industrial hygiene and toxicology, and sustainability. Students who have an undergraduate degree in safety and are seeking professional growth, or those who have an undergraduate degree in other related fields but are working in the field of safety and are seeking the necessary professional development will benefit from this program of study.

Curriculum

Simple Requirements

The requirements for admission to the Occupational Safety and Health Management concentration will be the same ones used for the other concentrations. Applicants must:

• Have a bachelor's degree

• Have an undergraduate 3.00 GPA for full admission to the program

• Apply for probationary admission if their undergraduate GPA is between a 2.70 or 2.99 (Probationary admission would require that the applicant earn a 3.0 grade for the first four courses in their program of study or they will be dismissed from the program for failure to achieve academic expectations)

• Submit acceptable GRE scores if they have an undergraduate GPA of less than 3.00

Technology and Innovation Program Common Core

Type
Completion Requirement

Technology and Innovation Core

Complete ALL of the following Courses:

- TEIN603 - Fostering Creativity by Design
- TEIN604 - Engineering, Ethics, and AI
- TEIN605 - Applying Critical Thinking and Decision Making

Occupational Safety & Health Management Concentration

Type
Completion Requirement

Research Area

Complete ALL of the following Courses:

- OSEH600 - Research Methods in OSEH

OSEH Health Management Core Electives

Complete at least 2 of the following courses:

- OSEH522 - Advanced Industrial Hygiene - Physical Hazards
- OSEH535 - Advanced Environmental Health
- OSEH601 - Toxicology
- OSEH602 - Environmental, Health, and Safety Management Systems
- OSEH630 - Risk Management and Loss Control

Analytics/Statistics Requirement

Complete at least 1 of the following courses:

- MATH535 - Statistical Methods 1
- MATH610 - Problem Solving Seminar

Degree Completion Options

Type
Completion Requirement

Thesis

Fulfill ANY of the following requirements:

Thesis Option

Earn at least 6 credits from the following:

- TEIN699 - Thesis

Capstone Project and one elective

Earn at least 6 credits from the following:

- TEIN698 - Capstone

Complete 3 credits of Capstone (TEIN 698) and 3 credits from the list of approved Technology and Innovation Electives.

Electives

Earn at least 9 credits
Select 9 credits of electives from the list of approved Technology and Innovation Electives.

Additional Comments:
Completion of this program also requires the completion of a culminating experience and a field experience which can be part of your selected coursework/requirements above, but must be verified as complete by the program coordinator for degree to be cleared.

Computer Aided Drafting/Design Minor

Overview

Students taking the Computer-Aided Drafting minor complete 18 credits of technical courses. One of these is a foundational course in drafting and design and then students choose five technical courses from topics like production materials and processes, computer-aided engineering drawing, product design, architectural drawing, and several others.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Computer Aided Drafting/Design (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- AENG241 - Drafting Communications

AND

Computer Aided Drafting/Design Electives (15 credits)

Complete at least 5 of the following courses:

- AENG130 - Production Materials & Processes
- AENG243 - Technical Sketching, Design & Rendering
- AENG342 - Solid Modeling and 3D Prototyping
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design
- AENG345 - Statics/Strength of Materials
- AENG346 - Architectural Drawing
- AENG347 - Engineering Visualization
- AENG446 - Advanced Applications in Design
- AENG448 - Machine Tool Design

Construction Technology Minor

Overview

The minor in Construction Technology is available to students who complete 18 credits of technical courses. Four foundational classes explore safety, materials processing and computer-aided drafting and design. Students then select two technical courses focused specifically in construction technologies.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Construction Technology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes
- AENG241 - Drafting Communications
- AENG271 - Processing Nonmetallic Materials
- OSEH120 - Fundamentals of Safety,

Health, Environmental Issues

AND

Construction Technology Electives (6 credits)

Complete at least 2 of the following courses:

- AENG331 - Construction Technology 1
- AENG332 - Construction Technology 2
- AENG346 - Architectural Drawing
- AENG348 - Green Building and Sustainable Systems

Control Systems Technology Minor

Overview

The Control Systems Technology curriculum helps students establish a foundation of knowledge about science principles before focusing on the application that knowledge to technology. Laboratory courses encourage students to design, program, develop and construct projects independently and collaborate in small groups. The minor in Control Systems Technology is available to students who complete 18 credits of technical courses related to the study of robotics and control systems.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Control Systems Technology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems
- AENG262 - Semiconductor Electronics

- AENG325 - Power Conversion and Control

AND

Control Systems Technology Electives (9 credits)

Complete at least 3 of the following courses:

- AENG130 - Production Materials & Processes
- AENG241 - Drafting Communications
- AENG326 - Fluid Power
  OR AENG326H - Hon: Fluid Power
- AENG342 - Solid Modeling and 3D Prototyping
- AENG364 - Digital Electronics
- AENG425 - Industrial Robotic Systems 2
- AENG427 - Programmable Logic Controllers 2
- AENG467 - Mobile Robotics
  OR AENG467H - Hon: Mobile Robotics

General Technology Minor

Overview

The General Track option is the most flexible of all minors offered within the AEST department. It is built from a foundation of three broad-based introductory technical courses that provide students with a basic technical background in various technologies. After completing these three courses students are able to choose three more advanced technical courses offered within the department. This provides students with the opportunity to concentrate in a specific area such as material processing, manufacturing, communications or automation, or take a variety of courses from different areas to customize your minor for your own specific needs and interests.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in General Technology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Communication & Info Systems (3 credits)

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes

AND

General Technology Electives (9 credits)

Complete at least 3 of the following courses:

- AENG241 - Drafting Communications
- AENG243 - Technical Sketching, Design & Rendering
- AENG251 - Graphic Communication Systems
- AENG252 - Web Publishing Systems
- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems
- AENG262 - Semiconductor Electronics
- AENG271 - Processing Nonmetallic Materials
- AENG281 - Processing Metallic Materials
- AENG325 - Power Conversion and Control
- AENG326 - Fluid Power
  OR AENG326H - Hon: Fluid Power
- AENG331 - Construction Technology 1
- AENG332 - Construction Technology 2
- AENG342 - Solid Modeling and 3D Prototyping
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design
- AENG345 - Statics/Strength of Materials
- AENG346 - Architectural Drawing
- AENG347 - Engineering Visualization
- AENG348 - Green Building and Sustainable Systems
- AENG351 - Digital Imaging
- AENG355 - Contemporary Printing
- AENG356 - Digital Publishing
- AENG357 - Packaging Specialty Printing
  OR AENG357H - Hon: Packaging Specialty Printing
- AENG364 - Digital Electronics
- AENG375 - Polymer and Ceramic Technology
- AENG376 - Woodworking Technology
- AENG382 - Automated Manufacturing
- AENG425 - Industrial Robotic Systems 2
- AENG427 - Programmable Logic Controllers 2
- AENG446 - Advanced Applications in Design
- AENG448 - Machine Tool Design
- AENG455 - R&D in Graphic Communications and Packaging
- AENG467 - Mobile Robotics
  OR AENG467H - Hon: Mobile Robotics
- AENG492 - Technical Entrepreneurship

3 electives from the list are required. 2 of the electives MUST be 300/400 level.

To meet the requirement for General Technology Electives, classes must include at least 2 of: AENG 325, AENG 326, AENG 331, AENG 332, AENG 342, AENG 344, AENG 345, AENG 346, AENG 347, AENG 348, AENG 351, AENG 355, AENG 356, AENG 357, AENG 364, AENG 375, AENG 376, AENG 382, AENG 425, AENG 427, AENG 446, AENG 448, AENG 455, AENG 466, AENG 467, and/or AENG 492.

Integrative STEM Education Methods Minor

Overview

The Integrative STEM Education Methods (ISEM) minor is specifically designed for students pursuing a Bachelor of Science in Education (BSE), especially those that include elementary level certification such as ERCH, SPED, and MDLV. The overall goal of this minor is to prepare future PreK-6 teachers to develop the knowledge, skills, and habits of mind that would best prepare them to use integrative teaching-learning approaches to enhance their students' learning of science, technology, engineering, and mathematics (STEM), as well as other areas of the curriculum (e.g., social studies, art, music, physical education, social-emotional learning).

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Integrative STEM Educ Methods (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- ECPK110 - Introduction to Early Childhood Education
  OR SPED101 - Orientation to Special Educ
- ERCH190 - Introduction to Integrative STEM Pedagogy
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design
- EDTE490 - Integrative Learning Using Experiential Strategies

AND

Children's Engineering (3 credits)

Complete at least 1 of the following courses:

- ERCH290 - Children's Engineering
- EDTE290 - Children's Engineering

AND

Integrative STEM Education Practicum (3 credits)

Complete at least 1 of the following courses:

- ECPK495 - Integrative STEM Practicum
- EDTE495 - Integrative STEM Practicum

Degree/Major/Field of Study Restrictions

Restricted to BSE majors only
This major is open to any BSE program major.

Advanced Manufacturing Technology Minor

Overview

Manufacturing is the largest sector in Pennsylvania's economy and currently there are over 565,000 people employed in manufacturing positions throughout the Commonwealth. The Advanced Manufacturing minor provides students with significant experiences in material processing and manufacturing processes. A minor in Advanced Manufacturing Technology gives students a technical skillset that can be highly valued in industry. Skills such as Computer Numerical Machining and Materials Science are highly sought after by many companies.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Advanced Manufacturing Technology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes
- AENG241 - Drafting Communications
- AENG271 - Processing Nonmetallic Materials
- AENG281 - Processing Metallic Materials

AND

Advanced Manufacturing Technology Electives (6 credits)

Complete at least 2 of the following courses:

- AENG375 - Polymer and Ceramic Technology
- AENG376 - Woodworking Technology
- AENG382 - Automated Manufacturing

Occupational Safety & Environmental Health Minor

Overview

The OSEH minor is designed for persons interested in the safety and environmental health professions. This minor places emphasis on the core studies in the technical and managerial aspects of occupational safety and health. The six core courses required to complete the minor will provide you with sufficient technical skills to function in any safety and health role. Graduates of this program typically work as safety and health managers, loss-control consultants, compliance officers and environmental safety specialists. The OSEH minor should be an attribute to majors in biology, business administration, chemistry, applied engineering & technology management, political science and nursing. A minor in OSEH will enable you to function in multiple roles in your professional career if you so wish to.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Occupational Saf & Env Health

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses

Complete ALL of the following Courses:

- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- OSEH220 - Legal Aspects Environmental Safety
- OSEH221 - Industrial Fire Prevention, Protection and Control
- OSEH320 - Safety Engineering Principles
- OSEH323 - Human Factors in OSEH
- OSEH410 - Safety and Hygiene Management

Technology & Engineering Education Minor

Overview

The minor in Technology & Engineering Education is designed to help students prepare for the Praxis subject area specialty examination in Technology & Engineering Education. Successful completion of these courses, combined with a passing score on the subject area exam, should provide adequate preparation for teachers of other subjects to effectively deliver courses in Technology & Engineering Education at the K-8 level as these programs tend to be broad-based survey types of courses. It is likely that individuals would need more preparation to deliver courses with more depth at the high school level, but the certification is for all courses K-12.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Technology and Engineering Education

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Communications and Information Technology (3 credits)

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems

AND

Required Courses (15 credits)

Complete ALL of the following Courses:

- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- AENG241 - Drafting Communications
- EDTE291 - Foundations of Technology & Engineering Ed
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design

Applied Engineering & Technology, A.T.-Advanced Manufacturing Technology

Overview

The associate-degree program in Applied Engineering and Technology prepares technicians with the liberal arts, technological literacy and technical preparation for either direct employment or for the continuation to a bachelor's-degree program in Automation and Robotics Engineering Technology (AURO), Applied Engineering and Technology Management (AETM), Manufacturing Engineering Technology (MFET), or Occupational Safety and Environmental Health (OSEH).

Curriculum

Simple Requirements

Major in Appl Eng Tech-AT (31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (31 credits)

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes
- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems
- AENG241 - Drafting Communications
- AENG271 - Processing Nonmetallic Materials
- AENG281 - Processing Metallic Materials
- AENG325 - Power Conversion and Control
- AENG342 - Solid Modeling and 3D Prototyping
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

Required Related Math (3-4 credits)

Complete ANY of the following Courses:

- MATH130 - Elements of Statistics 1
  OR MATH151 - Calculus for Management
  OR MATH161 - Calculus 1

Required Related Science (3-4 credits)

Complete ANY of the following Courses:

- CHEM101 - Chemistry in Society
  OR CHEM103 - Gen Organic and Biochemistry 1
  OR PHYS103 - Elements of Physics
  OR PHYS104 - Applied Physics
  OR PHYS131 - Physics 1 with Algebra

Applied Engineering & Technology, A.T. - Computer Aided Design

Overview

The associate-degree program in Applied Engineering and Technology prepares technicians with the liberal arts, technological literacy and technical preparation for either direct employment or for the continuation to a bachelor's-degree program in Automation and Robotics Engineering Technology (AURO), Applied Engineering and Technology Management (AETM), Manufacturing Engineering Technology (MFET), or Occupational Safety and Environmental Health (OSEH).

Curriculum

Simple Requirements

Major in Appl Eng Tech-AT (31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (22 credits)

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems
- AENG130 - Production Materials & Processes
- AENG241 - Drafting Communications
- AENG342 - Solid Modeling and 3D Prototyping
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

AND

Directed Technical Electives (9 credits minimum)

Complete at least 3 of the following courses:

- AENG243 - Technical Sketching, Design & Rendering
- AENG251 - Graphic Communication Systems
- AENG345 - Statics/Strength of Materials
- AENG346 - Architectural Drawing
- AENG347 - Engineering Visualization
- AENG351 - Digital Imaging
- AENG356 - Digital Publishing
- AENG446 - Advanced Applications in Design
- AENG448 - Machine Tool Design

Required Related Math (3-4 credits)

Complete ANY of the following Courses:

- MATH130 - Elements of Statistics 1
  OR MATH151 - Calculus for Management
  OR MATH161 - Calculus 1

Required Related Science (3-4 credits)

Complete ANY of the following Courses:

- CHEM101 - Chemistry in Society
  OR CHEM103 - Gen Organic and Biochemistry 1
  OR PHYS103 - Elements of Physics
  OR PHYS104 - Applied Physics
  OR PHYS131 - Physics 1 with Algebra

Applied Engineering & Technology, A.T.-Construction Technology

Overview

The associate-degree program in Applied Engineering and Technology prepares technicians with the liberal arts, technological literacy and technical preparation for either direct employment or for the continuation to a bachelor's-degree program in Automation and Robotics Engineering Technology (AURO), Applied Engineering and Technology Management (AETM), Manufacturing Engineering Technology (MFET), or Occupational Safety and Environmental Health (OSEH).

Curriculum

Simple Requirements

Major in Appl Eng Tech-AT (31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (25 credits)

Complete ALL of the following Courses:

- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- AENG241 - Drafting Communications
- AENG331 - Construction Technology 1
- AENG332 - Construction Technology 2
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- OSEH222 - Construction Safety

AND

Directed Technical Electives (6 credits)

Complete at least 2 of the following courses:

- AENG345 - Statics/Strength of Materials
- AENG346 - Architectural Drawing
- AENG347 - Engineering Visualization
- AENG348 - Green Building and Sustainable Systems

Required Related Math (3-4 credits)

Complete ANY of the following Courses:

- MATH130 - Elements of Statistics 1
  OR MATH151 - Calculus for Management
  OR MATH161 - Calculus 1

Required Related Science (3-4 credits)

Complete ANY of the following Courses:

- CHEM101 - Chemistry in Society
  OR CHEM103 - Gen Organic and Biochemistry 1
  OR PHYS103 - Elements of Physics
  OR PHYS104 - Applied Physics
  OR PHYS131 - Physics 1 with Algebra

Applied Engineering & Technology, A.T.-Control Systems Technology

Overview

The associate-degree program in Applied Engineering and Technology prepares technicians with the liberal arts, technological literacy and technical preparation for either direct employment or for the continuation to a bachelor's-degree program in Automation and Robotics Engineering Technology (AURO), Applied Engineering and Technology Management (AETM), Manufacturing Engineering Technology (MFET), or Occupational Safety and Environmental Health (OSEH).

Curriculum

Simple Requirements

Major in Appl Eng Tech-AT Control Sys Tech (31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (31 credits)

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes
- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems
- AENG225 - Industrial Robotic Systems I (Inactive)
- AENG241 - Drafting Communications
- AENG262 - Semiconductor Electronics
- AENG325 - Power Conversion and Control
- AENG365 - Programmable Logic Controllers 1
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

Required Related Math (3-4 credits)

Complete ANY of the following Courses:

- MATH130 - Elements of Statistics 1
  OR MATH151 - Calculus for Management
  OR MATH161 - Calculus 1

Required Related Science (3-4 credits)

Complete ANY of the following Courses:

- CHEM101 - Chemistry in Society
  OR CHEM103 - Gen Organic and Biochemistry 1
  OR PHYS103 - Elements of Physics
  OR PHYS104 - Applied Physics
  OR PHYS131 - Physics 1 with Algebra

Applied Engineering & Technology, A.T.-Occupational Safety and Environmental Health

Overview

The associate-degree program in Applied Engineering and Technology prepares technicians with the liberal arts, technological literacy and technical preparation for either direct employment or for the continuation to a bachelor's-degree program in Automation and Robotics Engineering Technology (AURO), Applied Engineering and Technology Management (AETM), Manufacturing Engineering Technology (MFET), or Occupational Safety and Environmental Health (OSEH).

Curriculum

Simple Requirements

Major in Appl Eng Tech-AT (32-33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (29 credits)

Complete ALL of the following Courses:

- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- OSEH220 - Legal Aspects Environmental Safety
- OSEH221 - Industrial Fire Prevention, Protection and Control
- OSEH320 - Safety Engineering Principles
- OSEH321 - Environmental & Industrial Hygiene I - Chemical and Biological Hazards
- OSEH323 - Human Factors in OSEH
- CHEM104 - Gen Organic and Biochemistry 2

AND

Directed Elective (3-4 credits)

Complete at least 1 of the following courses:

- AENG300 - Co-Op Ed Experience in AENG
- AENG392 - Intro to Industrial Training
- OSEH333 - Introduction to System Safety
- OSEH410 - Safety and Hygiene Management
- OSEH422 - Environmental & Industrial Health II - Physical Hazards

Required Related Math (3-4 credits)

Complete ANY of the following Courses:

- MATH101 - College Algebra
  OR MATH130 - Elements of Statistics 1
  OR MATH151 - Calculus for Management
  OR MATH161 - Calculus 1

Required Related Science (7 credits)

Complete ALL of the following Courses:

- CHEM103 - Gen Organic and Biochemistry 1
- PHYS103 - Elements of Physics
  OR PHYS104 - Applied Physics
  OR PHYS131 - Physics 1 with Algebra

Technology & Engineering Education, B.S.Ed. - Engineering Design Education Concentration

Overview

TECE majors with the Engineering Design Education concentration meet all of the same requirements of the Technology & Engineering Education major, including broad preparation in all technology & engineering content areas. However, this concentration would ensure that students are being challenged to take some courses that best fit an engineering design-focused curriculum, including specific math and science courses and a narrower set of engineering-focused technical electives.

Curriculum

Simple Requirements

Major in Technology and Engineering Ed - BSE (55-57 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Technology Literacy Core (12 credits)

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems
- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- AENG140 - Bio-related Technologies

AND

Technical Core (27 credits)

Fulfill ALL of the following requirements:

Required Courses (21 credits)

Complete ALL of the following Courses:

- AENG241 - Drafting Communications
- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems
- AENG322 - Transportation
- AENG327 - Engineering Structures
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design
- AENG346 - Architectural Drawing
- AENG435 - Manufacturing Enterprise

AND

Print Media Systems or Web Publishing & Interactive Media (3 credits)

Complete at least 1 of the following courses:

- AENG251 - Graphic Communication Systems
- AENG252 - Web Publishing Systems

AND

Processing Nonmetallic or Metallic Materials (3 credits)

Complete at least 1 of the following courses:

- AENG271 - Processing Nonmetallic Materials
- AENG281 - Processing Metallic Materials

AND

Technical Lab Courses for Engineering Design: Laboratory Electives for Engineering Design (7-9 credits)

Complete at least 3 of the following courses:

- AENG262 - Semiconductor Electronics
- AENG325 - Power Conversion and Control
- AENG326 - Fluid Power
  OR AENG326H - Hon: Fluid Power
- AENG332 - Construction Technology 2
- AENG342 - Solid Modeling and 3D Prototyping
- AENG345 - Statics/Strength of Materials
- AENG347 - Engineering Visualization
- AENG357 - Packaging Specialty Printing
  OR AENG357H - Hon: Packaging Specialty Printing
- AENG364 - Digital Electronics
- AENG382 - Automated Manufacturing

- AENG446 - Advanced Applications in Design
- AENG448 - Machine Tool Design
- AENG467 - Mobile Robotics
  OR AENG467H - Hon: Mobile Robotics
- AENG498 - Independent Study
- OSEH320 - Safety Engineering Principles
- OSEH323 - Human Factors in OSEH

Only one OSEH course may be counted as a laboratory elective.

AND

Required EDTE Courses (9 credits)

Complete ALL of the following Courses:

- EDTE291 - Foundations of Technology & Engineering Ed
- EDTE391 - Curr & Inst in Tech & Eng Ed
- EDTE491 - Seminar in Techn & Engring Ed
- EDTE496 - Innovatn/Design Methodologies

Count in major GPA

Professional Education (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (5 credits)

Fulfill ALL of the following requirements:

Foundations of Technology & Engineering Education (3 credits)

Complete ALL of the following Courses:

- EDTE291 - Foundations of Technology & Engineering Ed

AND

Innovation and Design Methodologies (2 credits)

Complete ALL of the following Courses:

- EDTE496 - Innovatn/Design Methodologies

AND

Accommodations and Adaptations (9 credits)

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Curr & Instruction in Technology & Engineering Education (3 credits)

Complete ALL of the following Courses:

- EDTE391 - Curr & Inst in Tech & Eng Ed

AND

Student Teaching (13 credits)

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

AND

Seminar in Technology & Engineering Education (1 credit)

Complete ALL of the following Courses:

- EDTE491 - Seminar in Techn & Engring Ed

AND

Student Teaching (9 credits)

Complete ALL of the following Courses:

- EDTE461 - Edte Stu Teaching

Req Related for Technology and Engineering Ed

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (7 credits)

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1
- MATH151 - Calculus for Management

AND

Science (4 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

AND

Literature Requirement

Complete at least 1 of the following:

Option 1

Complete ALL of the following Courses:

- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature

OR

Option 2

Complete ALL of the following Course Sets:

- Any ENGL 230-237 course(s)

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature

- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Technology & Engineering Education (K-12), B.S.Ed.

Overview

The TECE program is a teacher preparation program for persons seeking Pennsylvania teacher certification in technology education, K-12.

The three themes of professional education at Millersville are supported and implemented, including engagement in learning communities of inquiry and action, a focus on students and demonstration of exemplary professional practices. Professional dispositions are developed and assessed in communicating professionally, demonstrating professional growth, demonstrating professional relationships, exhibiting attributes suitable to the profession, and displaying responsible and ethical behavior.

TECE majors are broadly prepared in general education, technology and engineering, and professional teacher education. Emphasis is on understanding, applying, managing and assessing design, biorelated, communication, energy and power, transportation and production technologies. Students may specialize in a technical area of their choice and must devote one semester to full-time student teaching in a public school.

An advisory committee of technology and engineering education teachers and supervisors assists with providing program relevancy. This program is accredited and nationally recognized as an outstanding technology teacher education program by the International Technology and Engineering Educators Association/Council on Technology and Engineering Teacher Education.

Curriculum

Simple Requirements

Major in Technology and Engineering Ed - BSE (51 credits minimum)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Technology Literacy Core (14 credits)

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems
- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- AENG140 - Bio-related Technologies

AND

Technical Core (37 credits minimum)

Fulfill ALL of the following requirements:

Required Courses (28 credits)

Complete ALL of the following Courses:

- AENG261 - Electronic Systems
- AENG241 - Drafting Communications
- AENG251 - Graphic Communication Systems
- AENG322 - Transportation
- AENG344 - Product Design
- AENG342 - Solid Modeling and 3D Prototyping

AND

Processing Nonmetallic or Metallic Materials (4 credits)

Complete at least 1 of the following courses:

- AENG271 - Processing Nonmetallic Materials
- AENG281 - Processing Metallic Materials

AND

Technical Lab Courses: Laboratory Electives (9-11 credits)

Complete at least 3 of the following courses:

- AENG225 - Industrial Robotic Systems I (Inactive)
- AENG243 - Technical Sketching, Design & Rendering
- AENG262 - Semiconductor Electronics
- AENG271 - Processing Nonmetallic Materials

- AENG281 - Processing Metallic Materials
- AENG325 - Power Conversion and Control
- AENG326 - Fluid Power
- AENG331 - Construction Technology 1
- AENG332 - Construction Technology 2
- AENG345 - Statics/Strength of Materials
- AENG347 - Engineering Visualization
- AENG351 - Digital Imaging
- AENG356 - Digital Publishing
- AENG364 - Digital Electronics
- AENG375 - Polymer and Ceramic Technology
- AENG382 - Automated Manufacturing
- AENG425 - Industrial Robotic Systems 2
- AENG427 - Programmable Logic Controllers 2
- AENG446 - Advanced Applications in Design
- AENG448 - Machine Tool Design
- AENG467 - Mobile Robotics
- AENG468 - Control Network Integration
- AENG485 - Adv Manufacturing Systems
- AENG498 - Independent Study
- AENG515 - Adv Prob:
- AENG525 - Adv Prob:
- AENG535 - Adv Prob:

AND

Required EDTE Courses (9 credits)

Complete ALL of the following Courses:

- EDTE291 - Foundations of Technology & Engineering Ed
- EDTE391 - Curr & Inst in Tech & Eng Ed
- EDTE491 - Seminar in Techn & Engring Ed
- EDTE496 - Innovatn/Design Methodologies

Count in major GPA

Professional Education (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (5 credits)

Fulfill ALL of the following requirements:

Foundations of Technology & Engineering Education (3 credits)

Complete ALL of the following Courses:

- EDTE291 - Foundations of Technology & Engineering Ed

AND

Innovation and Design Methodologies (2 credits)

Complete ALL of the following Courses:

- EDTE496 - Innovatn/Design Methodologies

AND

Accommodations and Adaptations (9 credits)

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Curr & Instruction in Technology & Engineering Education (3 credits)

Complete ALL of the following Courses:

- EDTE391 - Curr & Inst in Tech & Eng Ed

AND

Student Teaching (13 credits)

Fulfill ALL of the following requirements:

These credits will count as CAP (capstone)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

AND

Seminar in Technology & Engineering Education (1 credit)

Complete ALL of the following Courses:

- EDTE491 - Seminar in Techn & Engring Ed

AND

Student Teaching (9 credits)

Complete ALL of the following Courses:

- EDTE461 - Edte Stu Teaching

Req Related for Technology and Engineering Ed

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

MATH Requirements

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1
- MATH100 - Survey of Mathematical Ideas
  OR MATH102 - Math in Non-European Cultures
  OR MATH107 - Math Survey: Sports & Games
  OR MATH160 - Precalculus
  OR MATH151 - Calculus for Management
  OR MATH161 - Calculus 1

Take MATH 130 (QL) and one other Math course.

AND

Science Requirements

Choose TWO Investigations in Science Reasoning (SCI) from BIOL, CHEM, PHYS or ESCI. BIOL100 General Biology, CHEM103 Gen Organic and Biochemistry 1, CHEM 205, PHYS103 Elements of Physics or PHYS104 Applied Physics are strongly recommended. One course will count in Gateway SCI, the other course will fill Gateway Elective.

AND

Literature Requirement

Complete at least 1 of the following:

Option 1

Complete ANY of the following Courses:

- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature

OR

Option 2

Complete ALL of the following Course Sets:

- Any ENGL 230-237 course(s)

This will count in Gateway CE

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Applied Engineering & Technology Management, B.S. - Computer-Aided Design Concentration

Overview

The Bachelor of Science degree program prepares applied engineers, technologists and technical managers with qualifications in general education, technology management, and an applied engineering/technical concentration. Technical concentrations are available in Computer-aided Design (CAD), Construction Management, and General Technology. The Association of Technology, Management & Applied Engineering (ATMAE) has accredited this program.

Supervised technical and management-oriented internships in industry are elective in both the A.T. and B.S. programs to enable relevant work experiences and the transition into employment. Industry professionals who represent the technical concentrations serve as an advisory committee for the program. Graduates are commonly employed in design, production, training, sales and service careers in business, industry, education and government.

An applied engineering and technology minor complements majors in art, business, speech communication, computer science, economics, physics and OSEH. This minor enables specialization in several of the baccalaureate-degree technical concentrations.

Curriculum

Simple Requirements

Major in Appl Engineering & Tech Mgt (60 credits)

Type
Completion Requirement

Technical Core

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems
- AENG130 - Production Materials & Processes
- AENG241 - Drafting Communications
- AENG243 - Technical Sketching, Design & Rendering
- AENG342 - Solid Modeling and 3D Prototyping
- AENG344 - Product Design
- AENG347 - Engineering Visualization
- AENG446 - Advanced Applications in Design

Drafting and Design (CADD) Track or Graphics Track

Complete at least 1 course in the following course sets:

- Computer-Aided Drafting & Design (CADD) Track
- Computer Aided Design - Graphics Track

Select one of the Tracks (of 3 courses) and complete all three courses in that Track. It is not necessary to complete both Tracks.

Technology Management Core

Complete ALL of the following Courses:

- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- AENG492 - Technical Entrepreneurship
- AENG494 - Total Quality Management
- AENG470 - Senior Seminar
- BUSN251 - Principles of Management
- MGMT452 - Operations and Supply Chain Management

Elective Courses in Technology Management

Complete at least 2 of the following courses:

- AENG300 - Co-Op Ed Experience in AENG
- AENG400 - Co-Op Ed Experience in AENG
- AENG392 - Intro to Industrial Training
- OSEH221 - Industrial Fire Prevention, Protection and Control
- OSEH320 - Safety Engineering Principles
- OSEH323 - Human Factors in OSEH
- OSEH333 - Introduction to System Safety
- BUSN352 - Human Resource Management
- MGMT353 - Labor-Management Relations
- MGMT357 - International Management
- PSYC329 - Industrial Psychology
- SOCI318 - Soc Of Complex Organizations

Req Related for Applied Engineering, Tech/Mgt (13-15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1

AND

Calculus (4 credits)

Complete at least 1 of the following courses:

- MATH151 - Calculus for Management
- MATH160 - Precalculus
- MATH161 - Calculus 1

AND

Directed Science (6-8 credits)

Complete at least 2 of the following courses:

- CHEM101 - Chemistry in Society
- CHEM103 - Gen Organic and Biochemistry 1
- CHEM104 - Gen Organic and Biochemistry 2
- PHYS103 - Elements of Physics
- PHYS104 - Applied Physics
- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

Can receive credit for either PHYS103 Elements of Physics or PHYS104 Applied Physics and but not both

Applied Engineering & Technology Management, B.S. - Construction Management

Overview

The Bachelor of Science degree program prepares applied engineers, technologists and technical managers with qualifications in general education, technology management, and an applied engineering/technical concentration. Technical concentrations are available in Computer-aided Design (CAD), Construction Management, and General Technology. The Association of Technology, Management & Applied Engineering (ATMAE) has accredited this program.

Supervised technical and management-oriented internships in industry are elective in both the A.T. and B.S. programs to enable relevant work experiences and the transition into employment. Industry professionals who represent the technical concentrations serve as an advisory committee for the program. Graduates are commonly employed in design, production, training, sales and service careers in business, industry, education and government.

An applied engineering and technology minor complements majors in art, business, speech communication, computer science, economics, physics and OSEH. This minor enables specialization in several of the baccalaureate-degree technical concentrations.

Curriculum

Simple Requirements

Major in Applied Engineering & Tech Mgt (64 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Technical Core (40 credits)

Fulfill ALL of the following requirements:

Required Courses (40 credits)

Complete ALL of the following Courses:

- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes

- AENG331 - Construction Technology 1
- AENG332 - Construction Technology 2
- AENG241 - Drafting Communications
- AENG345 - Statics/Strength of Materials
- AENG346 - Architectural Drawing
- AENG347 - Engineering Visualization
- AENG348 - Green Building and Sustainable Systems
- AENG433 - Construction Project Management
- BUSN161 - Intro to Financial Accounting
- OSEH222 - Construction Safety

AND

Technology Management Core (14 credits) - 4 credits for AENG 494 will count as Big Idea Capstone

Complete ALL of the following Courses:

- AENG492 - Technical Entrepreneurship
- AENG494 - Total Quality Management
- AENG470 - Senior Seminar
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management
- MGMT452 - Operations and Supply Chain Management
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

AND

Elective Courses in Technology Management (6 credits)

Complete at least 2 of the following courses:

- AENG300 - Co-Op Ed Experience in AENG
- AENG400 - Co-Op Ed Experience in AENG **OR** AENG400H - H: Co-Op Ed Experience in AENG
- AENG392 - Intro to Industrial Training
- BUSN352 - Human Resource Management **OR** BUSN352H - H:Human Resource Management
- MGMT353 - Labor-Management Relations
- MGMT357 - International Management
- OSEH221 - Industrial Fire Prevention, Protection and Control
- OSEH320 - Safety Engineering Principles
- OSEH323 - Human Factors in OSEH
- OSEH333 - Introduction to System Safety
- PSYC329 - Industrial Psychology **OR** PSYC329H - Hon: Industrial Psychology
- SOCI318 - Soc Of Complex Organizations

A maximum of 6 internship credits (ITEC 300,400) may be counted for this degree.

Req Related for Applied Engineering, Tech/Mgt (13-15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related Math Courses (7 credits) - MATH 130 to count as QL Requirement

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1
- MATH151 - Calculus for Management **OR** MATH160 - Precalculus **OR** MATH161 - Calculus 1 **OR** MATH161H - Hon: Calculus 1

AND

Directed Science (6-8 credits)

Complete at least 2 of the following courses:

- CHEM101 - Chemistry in Society
- CHEM103 - Gen Organic and Biochemistry 1
- CHEM104 - Gen Organic and Biochemistry 2
- PHYS103 - Elements of Physics
- PHYS104 - Applied Physics
- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

Can receive credit for either PHYS103 Elements of Physics or PHYS104 Applied Physics and but not both.

Applied Engineering & Technology Management, B.S. - General Technology

Overview

The Bachelor of Science degree program prepares applied engineers, technologists and technical managers with qualifications in general education, technology management, and an applied engineering/technical concentration. Technical concentrations are available in Computer-aided Design (CAD), Construction Management, and General Technology. The Association of Technology, Management & Applied Engineering (ATMAE) has accredited this program.

Supervised technical and management-oriented internships in industry are elective in both the A.T. and B.S. programs to enable relevant work experiences and the transition into employment. Industry professionals who represent the technical concentrations serve as an advisory committee for the program. Graduates are commonly employed in design, production, training, sales and service careers in business, industry, education and government.

An applied engineering and technology minor complements majors in art, business, speech communication, computer science, economics, physics and OSEH. This minor enables specialization in several of the baccalaureate-degree technical concentrations.

Curriculum

Simple Requirements

Major in Applied Engineering & Tech Mgt (64 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Technical Core (40 credits)

Fulfill ALL of the following requirements:

Core Courses

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems
- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems
- AENG241 - Drafting Communications
- AENG251 - Graphic Communication Systems
- AENG271 - Processing Nonmetallic Materials
  OR AENG281 - Processing Metallic Materials
- AENG342 - Solid Modeling and 3D Prototyping

AND

Directed Electives

Earn at least 10 credits from the following:

- Any AENG course(s)

Select 10 credits of AENG coursework at the 300 or 400 level in consultation with your advisor.

Complete all of the courses specified below and select additional 300-level or higher courses in consultation with advisor to earn a minimum of 10 credits. (Note: one may select any combination of approved three or four credit AENG lab-based classes.

AND

Technology Management Core (18 credits) - 4 credits for AENG 494 will count as the Big Idea Capstone

Complete ALL of the following Courses:

- AENG492 - Technical Entrepreneurship
- AENG494 - Total Quality Management
- AENG470 - Senior Seminar
- BUSN251 - Principles of Management
  OR BUSN251H - Hnrs:Principles of Management
- MGMT452 - Operations and Supply Chain Management
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

AND

Elective Courses in Technology Management (6 credits)

Complete at least 2 of the following courses:

- AENG300 - Co-Op Ed Experience in AENG
- AENG400 - Co-Op Ed Experience in AENG **OR** AENG400H - H: Co-Op Ed Experience in AENG
- AENG392 - Intro to Industrial Training
- BUSN352 - Human Resource Management **OR** BUSN352H - H:Human Resource Management
- MGMT353 - Labor-Management Relations
- MGMT357 - International Management
- OSEH221 - Industrial Fire Prevention, Protection and Control
- OSEH320 - Safety Engineering Principles
- OSEH323 - Human Factors in OSEH
- OSEH333 - Introduction to System Safety
- PSYC329 - Industrial Psychology **OR** PSYC329H - Hon: Industrial Psychology
- SOCI318 - Soc Of Complex Organizations

A maximum of 6 internship credits (AENG 300, 400) may be counted for this degree.

Req Related for Applied Engineering, Tech/Mgt (13-15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related Math (7 credits) - Math 130 will count as QL

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1
- MATH151 - Calculus for Management **OR** MATH160 - Precalculus **OR** MATH161 - Calculus 1 **OR** MATH161H - Hon: Calculus 1

AND

Directed Science (6-8 credits)

Complete at least 2 of the following courses:

- CHEM101 - Chemistry in Society
- CHEM103 - Gen Organic and Biochemistry 1
- CHEM104 - Gen Organic and Biochemistry 2
- PHYS103 - Elements of Physics
- PHYS104 - Applied Physics
- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

Can receive credit for either PHYS103 Elements of Physics or PHYS104 Applied Physics, but not both

Automation and Robotics Engineering Technology, B.S.

Overview

The Bachelor of Science in Automation & Robotics Engineering Technology (AURO) program provides students with a strong foundation in engineering principles, power systems, electronic systems, and programming techniques essential to modern industry. The curriculum integrates in-depth technical knowledge in electronics, control systems, mechanical systems, software development, and system integration. Students gain hands-on experience in designing, programming, and optimizing robotic and automated process control systems.

Laboratory-based coursework emphasizes the design, modeling, simulation, integration, and automation of complex control systems, preparing graduates to develop innovative solutions for real-world engineering challenges. Students work independently and in teams to design, construct, and implement automation solutions that require advanced programming and system integration skills.

Graduates of this program are equipped to apply engineering principles to robotics, automation, and control systems across diverse industries, including manufacturing, aerospace, healthcare, and energy. Typical entry-level career paths include robotics, automation, process control, and systems engineering across industries including manufacturing, aerospace, healthcare, automotive, food & beverage, and energy.

Curriculum

Simple Requirements

Major in Automation & Robotics Engineering Tech (56-57 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Major Courses (56-57 credits)

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes
- AENG261 - Electronic Systems
- AENG225 - Industrial Robotic Systems I (Inactive)
- AENG241 - Drafting Communications
- AENG262 - Semiconductor Electronics
- AENG325 - Power Conversion and Control
- AENG326 - Fluid Power
- AENG342 - Solid Modeling and 3D Prototyping
- AENG365 - Programmable Logic Controllers 1
- AENG425 - Industrial Robotic Systems 2
- AENG427 - Programmable Logic Controllers 2
- AENG467 - Mobile Robotics
- AENG468 - Control Network Integration
- AENG470 - Senior Seminar
- AENG494 - Total Quality Management

AENG Technical Elective

Earn at least 3 credits from the following:

No selection provided

Any AENG 300-level or higher lab, internship, or independent study course in consultation with advisor

Additional Comments:
Any AENG 300-level or higher technical, internship, or independent study course

Req Related Math and Science (20 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (20 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- MATH130 - Elements of Statistics 1
- MATH161 - Calculus 1
  OR MATH151 - Calculus for Management
- CMSC161 - Introduction to Programming 1
- PHYS231 - Physics 1 with Calculus
  OR PHYS131 - Physics 1 with Algebra

Manufacturing Engineering Technology, B.S.

Overview

Students in the Bachelor of Science in manufacturing engineering technology major will be introduced to the fundamentals and advanced concepts of engineering, materials and production processes used within industry. The program provides in-depth technical content of advanced manufacturing, with emphasis on automated manufacturing, robotics, and computer-aided drafting and design, often collectively referred to as computer-integrated manufacturing (CIM). Laboratory courses require students to design, develop and construct projects independently as well as in small groups. Technologies commonly used by major corporations are emphasized throughout the curriculum. Juniors and seniors are encouraged to participate in a cooperative education or internship experience to further enhance their knowledge in technical areas within an industrial environment.

Manufacturing engineers are responsible for planning the production process of manufactured products. Typical entry-level employment titles for graduates of this program include production managers, production engineers, manufacturing engineers, manufacturing process engineers, technical salespersons and quality assurance engineers. Graduates of the MFET major enjoy outstanding placement in their field at present with salaries among the highest of any majors on campus.

Curriculum

Simple Requirements

Major in Manufacturing Engineering Technology (62 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Requirements (48)

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes
- AENG225 - Industrial Robotic Systems I (Inactive)
- AENG241 - Drafting Communications
- AENG261 - Electronic Systems
- AENG271 - Processing Nonmetallic Materials
- AENG281 - Processing Metallic Materials
- AENG325 - Power Conversion and Control
- AENG342 - Solid Modeling and 3D Prototyping
- AENG365 - Programmable Logic Controllers 1
- AENG375 - Polymer and Ceramic Technology
- AENG382 - Automated Manufacturing
- AENG448 - Machine Tool Design

AND

Directed Electives (3-4 credits)

Earn at least 3 credits from the following:

- AENG300 - Co-Op Ed Experience in AENG
- AENG400 - Co-Op Ed Experience in AENG **OR** AENG400H - H: Co-Op Ed Experience in AENG
- AENG392 - Intro to Industrial Training
- AENG345 - Statics/Strength of Materials
- AENG326 - Fluid Power
- AENG344 - Product Design
- AENG364 - Digital Electronics

Technology Management (11 credits)

Complete ALL of the following Courses:

- AENG470 - Senior Seminar
- AENG492 - Technical Entrepreneurship
- AENG494 - Total Quality Management
- BUSN251 - Principles of Management
- MGMT452 - Operations and Supply Chain Management

Req Related for Manufacturing Engineering Tech (17 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry Course (4 credits)

Complete ANY of the following Courses:

- CHEM103 - Gen Organic and Biochemistry 1
- CHEM111 - Introductory Chemistry 1

AND

Math Requirements (6-7 credits)

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1
- MATH151 - Calculus for Management
  OR MATH160 - Precalculus
  OR MATH161 - Calculus 1

AND

Physics Course (4-5 credits)

Complete ANY of the following Courses:

- PHYS131 - Physics 1 with Algebra
  AND PHYS103 - Elements of Physics

OSEH 120 (3 credits)

Complete ALL of the following Courses:

- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

Occupational Safety & Environmental Health, B.S.

Overview

The OSEH program is designed for persons interested in the safety, industrial hygiene and environmental health professions. OSEH includes general education studies, with emphasis on the sciences and core studies in the technical and managerial aspects of industrial safety and hygiene. An internship is required in industry or in an insurance or government agency. Continuous improvement of the program is guided by an advisory committee of safety professionals. Graduates of this program typically work as safety and health managers, industrial hygienists, loss-control consultants, compliance officers and environmental safety specialists. The OSEH minor should be an attribute to majors in biology, business administration, chemistry, applied engineering and technology management, political science and nursing. OSEH is nationally accredited by the Accreditation Board for Engineering and Technology (ABET).

Curriculum

Simple Requirements

Major in Occupational Saf & Env Health, BS (45 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (33 credits)

Complete ALL of the following Courses:

- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- OSEH220 - Legal Aspects Environmental Safety
- OSEH221 - Industrial Fire Prevention, Protection and Control
- OSEH222 - Construction Safety
- OSEH320 - Safety Engineering Principles
- OSEH321 - Environmental & Industrial Hygiene I - Chemical and Biological Hazards
- OSEH323 - Human Factors in OSEH

- OSEH333 - Introduction to System Safety
- OSEH422 - Environmental & Industrial Health II - Physical Hazards
- OSEH430 - Topics in Occupational Safety & Environmental Health
- OSEH435 - Environmental Health

AND

OSEH Internship (12 credits)

Complete ALL of the following Courses:

- OSEH440 - Internship

Big Idea Capstone

Complete ALL of the following Courses:

- OSEH410 - Safety and Hygiene Management

Note: OSEH 410 will be counted toward Stage 4 Capstone (3 credits) for the Gateway General Education Model. It is not counted as credits in the major.

Req Related for Occupatnl Safety & Env. Health (26-30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (6-7 credits)

Fulfill ALL of the following requirements:

Statistics Course (3 credits)

Complete at least 1 of the following courses:

- MATH130 - Elements of Statistics 1
- MATH235 - Survey of Statistics
- ECON231 - Applied Statistcs 1
  OR ECON231H - Hon: Applied Statistcs 1

AND

Calculus (3-4 credits)

Complete at least 1 of the following courses:

- MATH101 - College Algebra
- MATH151 - Calculus for Management
- MATH160 - Precalculus
- MATH161 - Calculus 1
- MATH211 - Calculus 2

AND

Chemistry (6-8 credits)

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

No selection provided

AND

Chemistry I (3-4 credits)

Complete at least 1 of the following courses:

- CHEM103 - Gen Organic and Biochemistry 1
- CHEM111 - Introductory Chemistry 1
- CHEM231 - Organic Chemistry 1

AND

Chemistry II (3-4 credits)

Complete at least 1 of the following courses:

- CHEM104 - Gen Organic and Biochemistry 2
- CHEM112 - Introductory Chemistry 2
- CHEM232 - Organic Chemistry 2

AND

Physics and Industrial Technology (14-15 credits)

Fulfill ALL of the following requirements:

Required Courses (7credits)

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes
- AENG392 - Intro to Industrial Training

Note: AENG 130 will be changed 3 to 4 credits. The change from 3 to 4 credits aligns our courses with CBA 2023-2027 Article 23.A.1.a workload contact hour ratio based on course description lecture and lab hours.

AND

Physics Options (7-8 credits)

Complete at least 1 of the following:

Option 1. Physics Elective and Energy & Power Systems (7 credits)

Fulfill ALL of the following requirements:

Energy & Power Systems (3 credits)

Complete ALL of the following Courses:

- AENG120 - Energy Systems

AND

Physics Elective (4 credits)

Complete at least 1 of the following courses:

- PHYS103 - Elements of Physics
- PHYS104 - Applied Physics
- PHYS131 - Physics 1 with Algebra

OR

Option 2. Physics Courses (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

Courses

AENG101 - Introduction to Engineering

Course Information

Course Title
Introduction to Engineering

Subject code	Course Number	Academic Level
AENG	101	Undergraduate

Course Description
This course engages learners in using scientific and mathematical reasoning to explore and engage in engineering design, covers the fundamentals of the engineering design process, and exposes students to a wide range of career paths available to engineers, including engineering, applied engineering, and engineering technology areas. In this course, students will follow the creativity-based engineering design process through laboratory-based activities. Students will design and manufacture physical artifacts to meet a specific engineering challenge, and must defend their decisions with scientific and mathematical reasoning. This course focuses on how engineers apply their creativity, resourcefulness, mathematical, scientific and technical knowledge and skills in the creation or refinement of technological products/ systems.

AENG110 - Communication and Information Systems

Course Information

Course Title
Communication and Information Systems

Subject code	Course Number	Academic Level
AENG	110	Undergraduate

Course Description
Overview of communication technologies used by humans to design, compose, send, receive, and interpret information. Emphasis is on graphic communication media. Experiences will be gained through activities using selected methods for communicating information, such as: visual design, graphic reproduction, webpage development, photography, and videography. Communication technologies and their impacts on humans will be explored.

Gateway Stage Labels
Technological Competency (TC)

AENG120 - Energy Systems

Course Information

Course Title
Energy Systems

Subject code	Course Number	Academic Level
AENG	120	Undergraduate

Course Description
An introduction to energy and power systems. Principles of conventional and alternative energy resources and energy conseNation, and electrical, fluid, and mechanical power will be studied along with environmental concerns associated with power production. 2 hours lecture, 3 hours lab.

Gateway Stage Labels
Technological Competency (TC)

AENG130 - Production Materials & Processes

Course Information

Course Title
Production Materials & Processes

Subject code	Course Number	Academic Level
AENG	130	Undergraduate

Course Description
The integration and interrelationships of materials and processes for construction and manufacturing, including the application of math and scientific principles and the technological impacts on industry and society. Requires experiences in materials processing and production tooling. 2 hrs. lec., 3 hrs lab.

Gateway Stage Labels
Technological Competency (TC)

AENG140 - Bio-related Technologies

Course Information

Course Title
Bio-related Technologies

Subject code	Course Number	Academic Level
AENG	140	Undergraduate

Course Description
Agriculture, medicine and other technologies in which living organisms are used to solve problems and modify products and systems. Includes problem solving, design and research activities for understanding biorelated technologies, issues and impacts. 2 hrs. lec., 3 hrs. lab. Reserved for Technology Education majors.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Technology Education Majors Only

Reserved for Technology Education majors.

AENG179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
AENG	179	Undergraduate

Course Description
Experimental

AENG241 - Drafting Communications

Course Information

Course Title
Drafting Communications

Subject code	Course Number	Academic Level
AENG	241	Undergraduate

Course Description
Introductory technical sketching, conventional drafting and computer-aided drafting (CAD). Experiences with equipment use and care, lettering, geometric constructions, multiview projection, dimensioning, sectioning and pictorial representation. 2 hrs. lec., 3 hrs. lab.

AENG243 - Technical Sketching, Design & Rendering

Course Information

Course Title
Technical Sketching, Design & Rendering

Subject code	Course Number	Academic Level
AENG	243	Undergraduate

Course Description
Freehand sketching and basic elements of two-dimensional design and rendering. Various sketching and shading techniques are developed. Elements and principles of design, methods of designing, and evaluation and design of products are included. An application software is used to render design sketches.

AENG251 - Graphic Communication Systems

Course Information

Course Title
Graphic Communication Systems

Subject code	Course Number	Academic Level
AENG	251	Undergraduate

Course Description
Contemporary resources, processes and impacts of graphic communication. Emphasis on workflows relative to mechanical and digital print processes. Covers graphic layout; digital-image composition; prepress, press and postpress production systems. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 110

Complete ANY of the following Courses:
- AENG110 - Communication and Information Systems

Or by permission.

AENG252 - Web Publishing Systems

Course Information

Course Title
Web Publishing Systems

Subject code	Course Number	Academic Level
AENG	252	Undergraduate

Course Description
Planning, creating, and publishing of web media. Topics include information design, optimization of graphic and audio files, navigation systems and website technologies. Multimedia authoring software will be utilized to produce and publish websites that include digital animations and interactive forms. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 110, DESN 201 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 110

Complete ALL of the following Courses:
- AENG110 - Communication and Information Systems

Course Prerequisites

Type
Prerequisite

DESN 201

Complete ALL of the following Courses:
- DESN201 - Understanding Web Design

Or must have permission of instructor.

AENG258 - Package Engineering Fundamentals

Course Information

Course Title
Package Engineering Fundamentals

Subject code	Course Number	Academic Level
AENG	258	Undergraduate

Course Description
An introduction to the packaging industry with an emphasis on package design and engineering. Includes a study of materials used in packaging and an introduction to the purposes and requirements of packaging. Laboratory activities include the structural design of package components using software. Prereq: AENG 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 251

Complete ALL of the following Courses:
- AENG251 - Graphic Communication Systems

AENG261 - Electronic Systems

Course Information

Course Title
Electronic Systems

Subject code	Course Number	Academic Level
AENG	161	Undergraduate

Course Description
Survey of electricity and electronics, including typical direct current and alternating current applications, safe practices and technological impacts. Experiences include breadboarding, design and problem solving, use of test equipment and electronic project assembly/troubleshooting. 2 hrs. lec., 3 hrs. lab.

AENG261H - H:Electronic Systems

Course Information

Course Title
H:Electronic Systems

Subject code	Course Number	Academic Level
AENG	261H	Undergraduate

AENG262 - Semiconductor Electronics

Course Information

Course Title
Semiconductor Electronics

Subject code	Course Number	Academic Level
AENG	262	Undergraduate

Course Description
In-depth study of semiconductor theory, including diodes, transistors and silicon-controlled rectifiers. Emphasizes digital, linear and hybrid integrated circuits. Covers surface mount and emerging technologies, such as nanotechnology and biotechnology. Practical applications include prototyping circuits, design and problem solving, use of test equipment and troubleshooting. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 261 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 161 or AENG 261 or AENG 261H

Complete ANY of the following Courses:
- AENG261H - H:Electronic Systems
  OR AENG261 - Electronic Systems

Or must have permission of instructor.

AENG271 - Processing Nonmetallic Materials

Course Information

Course Title
Processing Nonmetallic Materials

Subject code	Course Number	Academic Level
AENG	271	Undergraduate

Course Description
Various nonmetallic materials, processes, products and impacts, including polymers, ceramics, wood, clay, composites and glass. Instruction and experiences provided on safety and the use of tools and machines associated with nonmetallics. Includes production activities in each of the specified nonmetallic material areas. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 130.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 130

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes

AENG279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
AENG	279	Undergraduate

Course Description
AENG 279

AENG281 - Processing Metallic Materials

Course Information

Course Title
Processing Metallic Materials

Subject code	Course Number	Academic Level
AENG	281	Undergraduate

Course Description
Examination of metallic materials, including their structures, properties and the processes used to convert them into products. Particular attention is paid to the relationship between microstructural characteristics, physical and mechanical properties and production methods. Connections are made between the properties of metals and their applications. Laboratory experiences include manual and automated production techniques, conditioning processes and characterization methods to quantify process-property-performance relationships. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 130.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 130

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes

AENG300 - Co-Op Ed Experience in AENG

Course Information

Course Title
Co-Op Ed Experience in AENG

Subject code	Course Number	Academic Level
AENG	300	Undergraduate

Course Description
Co-Op Ed Experience in AENG

AENG301 - Technology and Humans

Course Information

Course Title
Technology and Humans

Subject code	Course Number	Academic Level
AENG	301	Undergraduate

Course Description
Analysis of the development of technology and its impact on humans and a realization of the importance of human technological behavior on the environment, social/cultural systems and the future. Students use analytical skills on a written independent research project and oral skills to present and defend positions on technological problems facing our society. Prereq: COMM 100, ENGL 110 and junior class standing.

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

AENG301H - Hnrs:Technology and Humans

Course Information

Course Title
Hnrs:Technology and Humans

Subject code	Course Number	Academic Level
AENG	301H	Undergraduate

Course Description
Hnrs:Technology and Humans

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

AENG302 - Futurology

Course Information

Course Title
Futurology

Subject code	Course Number	Academic Level
AENG	302	Undergraduate

Course Description
A nontechnical interdisciplinary course to help students identify and analyze forces causing technological and social change. Using an understanding of the processes of technological and social change and research techniques for forecasting the future, students complete a written independent research project. Develops skills to project future technological and social developments and their impacts. Prereq: COMM 100, ENGL 110 and junior class standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

AENG302H - H: Futurology

Course Information

Course Title
H: Futurology

Subject code	Course Number	Academic Level
AENG	302H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

AENG303 - Tech Assessmnt:Amish and Othrs

Course Information

Course Title
Tech Assessmnt:Amish and Othrs

Subject code	Course Number	Academic Level
AENG	303	Undergraduate

Course Description
A nontechnical course designed for all students to help learners analyze the use of technology, with focus on Anabaptists (particularly Amish, Old Order Mennonites and certain Brethren groups) of Lancaster County. Contrasting the way these groups assess and use technology with that of their own culture will allow students to better understand their own approach to technology. Students will develop their own technology-assessment system based on independent research. Prereq: COMM 100, ENGL 110 and junior class standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

AENG303H - H:Tech Assessmnt:Amish and Othrs

Course Information

Course Title
H:Tech Assessmnt:Amish and Othrs

Subject code	Course Number	Academic Level
AENG	303H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

AENG304 - Energy, Sustainability

Course Information

Course Title
Energy, Sustainability

Subject code	Course Number	Academic Level
AENG	304	Undergraduate

Course Description
A non-technical course for all students dealing with energy sustainability, energy resources and conservation, and the effects of energy use on our environment. This course contains up-to-date information on essential subjects such as solar energy, wind energy, nuclear energy and energy conservation. Contemporary alternatives such as photovoltaic electricity and wind power generation will be addressed. Individual transportation to field sites is required (discuss with instructor before registering for class if this is an issue). Prereq: COMM 100, ENGL 110, MATH 100 or higher and Junior class standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H and MATH 100 or Higher

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100
- Any 1-level or higher MATH course(s)

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

AENG304H - Hon: Energy, Sustainability

Course Information

Course Title
Hon: Energy, Sustainability

Subject code	Course Number	Academic Level
AENG	304H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H and MATH 100 or Higher

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100
- Any 1-level or higher MATH course(s)

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

AENG322 - Transportation

Course Information

Course Title
Transportation

Subject code	Course Number	Academic Level
AENG	322	Undergraduate

Course Description
Includes the application of scientific and mathematical principles to the solution of land, air, space, and/or water transportation challenges. Incorporates the investigation of a variety of robotics and control systems with emphasis on computational thinking. 2 hours lecture, 3 hours lab. Prerequisites: AENG 120, AENG 161, and Math 100 or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete ALL of the following Courses:
- AENG120 - Energy Systems
- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems

MATH 100 or Higher

Complete ANY of the following Course Sets:
- Any 1-level or higher MATH course(s)

AENG325 - Power Conversion and Control

Course Information

Course Title
Power Conversion and Control

Subject code	Course Number	Academic Level
AENG	325	Undergraduate

Course Description
Electric motors as conversion devices explored. Experiences include designing, creating and testing fluid and electrical energy conversion circuitry to perform specific control applications. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 261 and MATH 101 or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 161 or AENG 261 or AENG 261H

Complete ANY of the following Courses:
- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems

MATH 101 or higher

Complete ANY of the following Courses:
- MATH101 - College Algebra

MATH 101 or higher

AENG326 - Fluid Power

Course Information

Course Title
Fluid Power

Subject code	Course Number	Academic Level
AENG	326	Undergraduate

Course Description
Investigation of scientific, mathematical and technological principles. Experiences with the design, creation, use and repair of hydraulic and pneumatic systems. A research and development activity required. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 325.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 325

Complete ANY of the following Courses:

- AENG325 - Power Conversion and Control

AENG326H - Hon: Fluid Power

Course Information

Course Title
Hon: Fluid Power

Subject code	Course Number	Academic Level
AENG	326H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 325

Complete ANY of the following Courses:

- AENG325 - Power Conversion and Control

AENG327 - Engineering Structures

Course Information

Course Title
Engineering Structures

Subject code	Course Number	Academic Level
AENG	327	Undergraduate

Course Description
Students will design, construct, and evaluate model structures. Emphasis is placed on the use of science, technology, engineering, and mathematical (STEM) principles as they relate to structures. 2 hours lecture, 3 hours lab. Prerequisites: ITEC 120, 130, 241, and Math 100 or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 120 and AENG 130 and AENG 241

Complete ALL of the following Courses:

- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- AENG241 - Drafting Communications

MATH 100 or Higher

Complete ANY of the following Course Sets:

- Any 1-level or higher MATH course(s)

AENG331 - Construction Technology 1

Course Information

Course Title
Construction Technology 1

Subject code	Course Number	Academic Level
AENG	231	Undergraduate

Course Description
Utilization of materials for the construction of residential and light commercial structures. Includes the effects of these changes on people and their environment. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 130 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 130

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes

Or must have permission of instructor.

AENG332 - Construction Technology 2

Course Information

Course Title
Construction Technology 2

Subject code	Course Number	Academic Level
AENG	232	Undergraduate

Course Description
Methods, materials and processes employed in heavy and industrial construction technologies. Includes field-engineering techniques, equipment, civil engineering fundamentals and use of modeling and simulation techniques. Emphasis given to construction projects such as bridges, roads, industrial and commercial buildings, utilities, tunnels and dams. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 130 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 130

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes

Or must have permission of instructor.

AENG342 - Solid Modeling and 3D Prototyping

Course Information

Course Title
Solid Modeling and 3D Prototyping

Subject code	Course Number	Academic Level
AENG	342	Undergraduate

Course Description
This course introduces students to the principles and techniques of solid modeling and geometric dimension and tolerancing (GT&T) using industry-standard computer-aided design (CAD) software. Emphasizing parametric design, students will develop skills in creating and modifying 3D models, assemblies, and technical drawings of mechanical parts. Topics include sketching, feature-based modeling, constraints, dimensioning, analysis of mass properties, rendering and animation, and the development of physical models using rapid prototyping equipment. Hands-on projects simulating real-world engineering processes will reinforce problem-solving and design thinking skills focusing on best practices for design efficiency and manufacturability essential for careers in engineering and industrial design. 2 hrs. lec., 3 hrs. lab. Prereq: AENG241.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 241

Complete ALL of the following Courses:
- AENG241 - Drafting Communications

AENG342H - Computer-Aided Engineering Drawing

Course Information

Course Title
Computer-Aided Engineering Drawing

Subject code	Course Number	Academic Level
AENG	342H	Undergraduate

Course Description
Advanced study of threads, gears and standard fasteners; geometic dimensioning and tolerancing (GD&T); schematic, production and assembly drawings; and introduction to solids modeling. Builds on view orientation, projection systems and basic CAD. 2 hrs. lec., 3 hrs. lab. Prereq: ITEC 241.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 241

Complete ALL of the following Courses:
- AENG241 - Drafting Communications

AENG344 - Product Design

Course Information

Course Title
Product Design

Subject code	Course Number	Academic Level
AENG	344	Undergraduate

Course Description
An exploration of the thinking processes, problem solving strategies, documentation techniques, and making skills used by designers toward creating new products. The use of the elements and principles of design, aesthetics, ergonomics, and social/cultural considerations as tools toward designing for manufacture, designing for sustainability, and universal design are emphasized. Other topics explored include the role of human emotion toward design and design's influence on human history.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG241 or ERCH190

Complete ANY of the following Courses:
- AENG241 - Drafting Communications
- ERCH190 - Introduction to Integrative STEM Pedagogy

Additional Comments:
Sometimes sections are reserved for TECE, AETM, MFET & AETE seniors & juniors, and sometimes for ISEM minors only.

AENG344H - Hnrs: Product Design

Course Information

Course Title
Hnrs: Product Design

Subject code	Course Number	Academic Level
AENG	344H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG241 or ECPK190

Complete ANY of the following Courses:
- AENG241 - Drafting Communications
- ERCH190 - Introduction to Integrative STEM Pedagogy

Additional Comments:
Sometimes sections are reserved for TECE, AETM, MFET & AETE seniors & juniors, and sometimes for ISEM minors only.

AENG345 - Statics/Strength of Materials

Course Information

Course Title
Statics/Strength of Materials

Subject code	Course Number	Academic Level
AENG	345	Undergraduate

Course Description
Elementary, analytical, and practical approaches to the principles and physical concepts of statics. Covers force systems; equivalent force/moment systems; distributed forces; internal forces; principles of equilibrium; application to trusses, frames, and beams; stress and strain; and mechanical properties of materials. 3cr. Prereq: AENG241 and MATH 151, 160 or 161; or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 241

Complete ALL of the following Courses:
- AENG241 - Drafting Communications

MATH 151 or MATH 160 or MATH 161 or MATH 161H

Complete ANY of the following Courses:
- MATH151 - Calculus for Management
- MATH160 - Precalculus
- MATH161 - Calculus 1
- MATH161H - Hon: Calculus 1

Or must have permission of the instructor.

AENG346 - Architectural Drawing

Course Information

Course Title
Architectural Drawing

Subject code	Course Number	Academic Level
AENG	346	Undergraduate

Course Description
Study of principles of residential design and architectural styles with an emphasis on the development of a complete set of original working and presentation drawings using computer-aided design (CAD) and Building Information Modeling (BIM). 3 cr. Prereq: AENG 241.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG241

Complete ANY of the following Courses:
- AENG241 - Drafting Communications

AENG347 - Engineering Visualization

Course Information

Course Title
Engineering Visualization

Subject code	Course Number	Academic Level
AENG	347	Undergraduate

Course Description
Study the relationships of three-dimensional lines, angles, surfaces, and solids by projecting three-dimensional reality onto a two-dimensional surface. Visualization techniques and spatial reasoning to solve fundamental engineering, architectural, and design problems where precise visualization of complex structures is required. 3 cr. Prereq: AENG 241

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 241

Complete ALL of the following Courses:
- AENG241 - Drafting Communications

AENG348 - Green Building and Sustainable Systems

Course Information

Course Title
Green Building and Sustainable Systems

Subject code	Course Number	Academic Level
AENG	348	Undergraduate

Course Description
This course covers fundamentals of green buildings and sustainable energy technologies and their dynamic costs and benefits. Green buildings are designed and constructed to maximize the energy efficiency of the envelope and provide superior quality in the indoor environment. This course allows students to explore the integration of design principles and application of renewable energy, natural building materials, and ecological landscape into building design and community development. Pre-requisite: MATH 130 and AENG 241

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH130 and AENG241

Complete ALL of the following Courses:
- MATH130 - Elements of Statistics 1
- AENG241 - Drafting Communications

AENG351 - Digital Imaging

Course Information

Course Title
Digital Imaging

Subject code	Course Number	Academic Level
AENG	351	Undergraduate

Course Description
Create digital images using cameras and scanners. Set up, calibrate, and characterize a digital workstation, applying effective color management practices to ensure accuracy and consistency. Produce digitally imaged products through hands-on activities that require students to demonstrate proficiency with contemporary hardware and software to compose, capture, convert, color- and tonal-correct, manipulate, and print digital images and products. 3 cr

Gateway Stage Labels
Technological Competency (TC)

AENG355 - Contemporary Printing

Course Information

Course Title
Contemporary Printing

Subject code	Course Number	Academic Level
AENG	355	Undergraduate

Course Description
Advanced study of todays major printing processes, especially offset and screen. Experiences include layout and design, computerized electronic composition, copy preparation, line and halftone photography, special-effects photography, exposure unit calibration, image assembly, platemaking, printing and finishing complex graphic products. 2 hrs. lec., 3 hrs. lab. Prereq: ITEC 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 251

Complete ALL of the following Courses:

- AENG251 - Graphic Communication Systems

AENG356 - Digital Publishing

Course Information

Course Title
Digital Publishing

Subject code	Course Number	Academic Level
AENG	356	Undergraduate

Course Description
An exploration of digital publishing tools and techniques. Students will compare and use various publishing, text composition, and design software to create professional-quality digital materials. Emphasizing both technical proficiency and creative problem-solving, the course covers text and graphic composition, page layout, and the integration of visual elements. (3 cr. Prereq: AENG 110 & ENGL 110.)

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 110 & ENGL 110

Complete ANY of the following Courses:

- AENG110 - Communication and Information Systems
  AND ENGL110 - Introduction to College Writing

AENG357 - Packaging Specialty Printing

Course Information

Course Title
Packaging Specialty Printing

Subject code	Course Number	Academic Level
AENG	357	Undergraduate

Course Description
In-depth study of problems and processes related to printing and converting in package, label and specialty printing. Students study and experience package design structures, materials flexographic printing, screen container printing, converting methods and bar code applications. Current industry practices explored. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 241, 251, and 258; or DESN 348.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG241 and AENG251 and AENG258 or DESN348

Complete ALL of the following Courses:

- AENG241 - Drafting Communications
- AENG251 - Graphic Communication Systems
- AENG258 - Package Engineering Fundamentals
  OR DESN348 - Packaging in Design

AENG357H - Hon: Packaging Specialty Printing

Course Information

Course Title
Hon: Packaging Specialty Printing

Subject code	Course Number	Academic Level
AENG	357H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG241 and AENG251 and AENG258 or DESN348

Complete ALL of the following Courses:

- AENG241 - Drafting Communications
- AENG251 - Graphic Communication Systems
- AENG258 - Package Engineering Fundamentals
  OR DESN348 - Packaging in Design

AENG364 - Digital Electronics

Course Information

Course Title
Digital Electronics

Subject code	Course Number	Academic Level
AENG	364	Undergraduate

Course Description
Practical applications of digital logic for processing electronically encoded information. Covers numbering systems, logic design, basic gates, sequential and combination logic, and digital troubleshooting. 2 hrs. lec., 3 hrs. lab. Prereq: ITEC 262 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 262

Complete ALL of the following Courses:

- AENG262 - Semiconductor Electronics

Or must have permission of instructor.

AENG364H - Digital Electronics

Course Information

Course Title
Digital Electronics

Subject code	Course Number	Academic Level
AENG	364H	Undergraduate

Course Description
Practical applications of digital logic for processing electronically encoded information. Covers numbering systems, logic design, basic gates, sequential and combination logic, and digital troubleshooting. 2 hrs. lec., 3 hrs. lab. Prereq: ITEC 262 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 262

Complete ALL of the following Courses:

- AENG262 - Semiconductor Electronics

Or must have permission of instructor.

AENG365 - Programmable Logic Controllers 1

Course Information

Course Title
Programmable Logic Controllers 1

Subject code	Course Number	Academic Level
AENG	365	Undergraduate

Course Description
This course provides foundational knowledge and hands-on experience in the integration and application of programmable logic controllers (PLCs). Students will explore connectivity, digital open and closed-loop control, I/O wiring, basic relay ladder logic (RLL) programming, troubleshooting and diagnostics. Emphasis is placed on designing, configuration, and troubleshooting industrial control systems using PLCs and basic sensors. Lab activities focus on developing practical skills essential for entry-level applications of PLCs in industrial environments. 4 credits (2 hours lecture, 3 hours lab). Prereq: AENG 325.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 325

Complete ANY of the following Courses:

- AENG325 - Power Conversion and Control

AENG375 - Polymer and Ceramic Technology

Course Information

Course Title
Polymer and Ceramic Technology

Subject code	Course Number	Academic Level
AENG	375	Undergraduate

Course Description
Design, development and production of polymer and ceramic products. Covers contemporary pattern and molding materials along with industrial forming processes. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 271.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 271

Complete ALL of the following Courses:
- AENG271 - Processing Nonmetallic Materials

AENG376 - Woodworking Technology

Course Information

Course Title
Woodworking Technology

Subject code	Course Number	Academic Level
AENG	376	Undergraduate

Course Description
Use of hand tools and machine woodworking techniques to fabricate wood products. Covers technological problems and contributions of using wood in daily living. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 271.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 271

Complete ALL of the following Courses:
- AENG271 - Processing Nonmetallic Materials

AENG379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
AENG	379	Undergraduate

Course Description
Experimental

AENG382 - Automated Manufacturing

Course Information

Course Title
Automated Manufacturing

Subject code	Course Number	Academic Level
AENG	382	Undergraduate

Course Description
A comprehensive experience in the design, programming and implementation of computer-controlled manufacturing processes. Emphasis is placed on understanding machine code, utilizing computer-aided design and manufacturing (CAD/CAM) software and identifying proper process controls to increase productivity and reduce cost. Laboratory experiences develop a combination of software and hardware competencies. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 130; and AENG 241; and AENG 271 OR 281 OR 342; or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 130 and AENG 241

Complete ALL of the following Courses:
- AENG130 - Production Materials & Processes
- AENG241 - Drafting Communications

AENG 271 or AENG 281 or AENG 342

Complete ANY of the following Courses:
- AENG271 - Processing Nonmetallic Materials
- AENG281 - Processing Metallic Materials
- AENG342 - Solid Modeling and 3D Prototyping

Or must have permission of instructor.

AENG392 - Intro to Industrial Training

Course Information

Course Title
Intro to Industrial Training

Subject code	Course Number	Academic Level
AENG	392	Undergraduate

Course Description
Techniques and procedures required to conceptualize, prepare, deliver and evaluate training programs. Includes experiences in preparing instructional media, presenting a unit of instruction and developing appropriate evaluation instruments. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

AENG400 - Co-Op Ed Experience in AENG

Course Information

Course Title
Co-Op Ed Experience in AENG

Subject code	Course Number	Academic Level
AENG	400	Undergraduate

Course Description
Co-Op Ed Experience in AENG

AENG400H - H: Co-Op Ed Experience in AENG

Course Information

Course Title
H: Co-Op Ed Experience in AENG

Subject code	Course Number	Academic Level
AENG	400H	Undergraduate

AENG425 - Industrial Robotic Systems 2

Course Information

Course Title
Industrial Robotic Systems 2

Subject code	Course Number	Academic Level
AENG	425	Undergraduate

Course Description
This course provides advanced coverage of the design, integration, and optimization of industrial robotic systems. Students will gain knowledge, skills, and abilities in evaluating and configuring industrial robotic systems for safety, operation, productivity, quality, and financial impacts; design, development, and simulation of robot and end-of-arm tooling for advanced process automation applications; integration of machine vision technologies for inspection and AI-guided applications; and communication of development and impact of robotic and vision-based systems. Lab sessions emphasize real-world applications, system integration, and a critical analysis of state-of-the-art robotics technologies. 2 hours lecture, 3 hours lab. Prerequisite: AENG 225, AENG 342, and CSCI 161.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 225, AENG 342, & CSCI 161

Complete ALL of the following Courses:
- AENG225 - Industrial Robotic Systems I (Inactive)
- AENG342 - Solid Modeling and 3D Prototyping
- CMSC161 - Introduction to Programming 1

AENG427 - Programmable Logic Controllers 2

Course Information

Course Title
Programmable Logic Controllers 2

Subject code	Course Number	Academic Level
AENG	427	Undergraduate

Course Description
This course focuses on advanced programmable logic control (PLC) strategies and system integration. Topics include number systems, memory and data type structures, analog closed-loop control, instrumentation, advanced relay ladder logic (RLL), function block (FB), and structured text (ST) programming. Students will also gain expertise in human-machine interface (HMI), supervisory control and data acquisition (SCADA) systems, and network connectivity for distributed control systems. Labs emphasize the implementation and troubleshooting of advanced PLC applications in real-world industrial scenarios. 4 credits (2 hours lecture, 3 hours lab). Prereq: AENG 365; CSCI 161; and pre/co-req MATH 151 or 161 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 365, CSCI 161

Complete ALL of the following Courses:
- CMSC161 - Introduction to Programming 1
- AENG365 - Programmable Logic Controllers 1

Course Corequisite

Type
Corequisite

MATH 151 or MATH 161

Complete ANY of the following Courses:
- MATH151 - Calculus for Management **AND** MATH161 - Calculus 1

AENG433 - Construction Project Management

Course Information

Course Title
Construction Project Management

Subject code	Course Number	Academic Level
AENG	433	Undergraduate

Course Description
Methods, processes and information necessary to manage a construction project. Includes cost and risk control; developing and applying policies and procedures; subcontractor management; specifying and purchasing materials; scheduling; and contract development. Experiences include use of project-planning and cost-estimation software for development of a complete project plan. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 232 and Junior or Senior status or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 332

Complete ALL of the following Courses:

- AENG332 - Construction Technology 2

Or must have permission of instructor.

Restricted to Juniors and Seniors (minimum 60 earned credits)

Earn at least 60 credits

AENG435 - Manufacturing Enterprise

Course Information

Course Title
Manufacturing Enterprise

Subject code	Course Number	Academic Level
AENG	435	Undergraduate

Course Description
Exploration of the technological and management processes for conceptualizing and manufacturing a product. Experiences with product engineering, production engineering, manufacturing management and enterprise operations in a student-centered learning environment. 2 hrs. lec., 3 hrs. lab. Prereq: ITEC 110, 120, 130, 140, 241 and 271 or 281, and a major in technology education (TECE).

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 110 and AENG 120 and AENG 130 and AENG 140 and AENG 241 and AENG 271 or AENG 281

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems
- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- AENG140 - Bio-related Technologies
- AENG241 - Drafting Communications
- AENG271 - Processing Nonmetallic Materials **OR** AENG281 - Processing Metallic Materials

Degree/Major/Field of Study Restrictions

Type
Prerequisite

TECE Major

Restricted to majors in technology education (TECE).

AENG446 - Advanced Applications in Design

Course Information

Course Title
Advanced Applications in Design

Subject code	Course Number	Academic Level
AENG	446	Undergraduate

Course Description
Focuses on advanced techniques, applications, and field-related career interactions in drafting, design, modeling, and rendering based on industry standards and advancements. Research, development, and presentation activities, plus completion of projects are required. 2 hrs. lecture, 3 hrs. lab. Prereq: AENG342.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 342

Complete ALL of the following Courses:
- AENG342 - Solid Modeling and 3D Prototyping

AENG448 - Machine Tool Design

Course Information

Course Title
Machine Tool Design

Subject code	Course Number	Academic Level
AENG	448	Undergraduate

Course Description
Analysis, planning, design, construction, and application of tools, methods, and procedures necessary to increase manufacturing productivity. Integrated with machining and fabrication practices. 2 hrs. lec., 3 hrs. lab. Prereq: AENG342.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 342

Complete ALL of the following Courses:
- AENG342 - Solid Modeling and 3D Prototyping

AENG455 - R&D in Graphic Communications and Packaging

Course Information

Course Title
R&D in Graphic Communications and Packaging

Subject code	Course Number	Academic Level
AENG	455	Undergraduate

Course Description
This course involves testing various components of the manufacturing processes involved in creating print and digital/web media. Typical activities will involve testing colorants (e.g., inks, toners, etc.) and substrates used in lithography, flexography, screen-printing and digital printing systems. Optimum conditions for specific printing methods will be determined through controlled testing and examination. Students may also propose to examine specific interrelationships between production procedures used in various digital media processes. The course will also cover color separation and reproduction, which includes the study of process color theory, desktop color separations and color reproduction. 2 hrs. lec., 3 hrs. lab. Prereq: ITEC 355 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 355

Complete ALL of the following Courses:
- AENG355 - Contemporary Printing

Or must have permission of instructor.

AENG457 - Print Production Management & Cost Estimating

Course Information

Course Title
Print Production Management & Cost Estimating

Subject code	Course Number	Academic Level
AENG	457	Undergraduate

Course Description
A study of current topics and systems for setting printing production standards, cost estimating, production scheduling, job planning and the consideration of new equipment and technologies. Students will integrate the technical knowledge learned through previous graphics laboratory classes with other course work in management, marketing, science, business, etc., with a focus on how it all relates specifically to the printing production process. The course is structured to offer an overview in several areas of print production management, with emphasis on cost estimating and current printing industry topics. 2 hours lecture/3 hours lab. Prereq: ITEC 355 and MATH 130, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 355

Complete ALL of the following Courses:
- AENG355 - Contemporary Printing

MATH 130

Complete ALL of the following Courses:
- MATH130 - Elements of Statistics 1

Or must have permission of instructor.

AENG467 - Mobile Robotics

Course Information

Course Title
Mobile Robotics

Subject code	Course Number	Academic Level
AENG	467	Undergraduate

Course Description
Study of the development of mobile robotic solutions. Emphasis is placed on the programming and interfacing of microcontrollers to control autonomous mobile robots in known environments. A research and development activity is required. 4 credits. 2 hrs. lec., 3 hrs. lab. Prereq: AENG 262 and CSCI 161 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 262

Complete ALL of the following Courses:

- AENG262 - Semiconductor Electronics **AND** CMSC161 - Introduction to Programming 1

Or must have permission of instructor.

AENG467H - Hon: Mobile Robotics

Course Information

Course Title
Hon: Mobile Robotics

Subject code	Course Number	Academic Level
AENG	467H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 262

Complete ALL of the following Courses:

- AENG262 - Semiconductor Electronics **AND** CMSC161 - Introduction to Programming 1

Or must have permission of instructor.

AENG468 - Control Network Integration

Course Information

Course Title
Control Network Integration

Subject code	Course Number	Academic Level
AENG	468	Undergraduate

Course Description
This course utilizes both theory and applications related to industrial network architectures for system control and data acquisition integration. Course topics include design methodologies, installation, commissioning, troubleshooting, grounding/bonding, standards, serial, parallel, wired and wireless protocols. A research and development project is required. 2 hours lecture, 3 hours lab. Prerequisite: AENG 427; Prerequisite or Co-requisite: AENG 425.

Capstone Stage Label
Yes

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 427

Complete ALL of the following Courses:
- AENG427 - Programmable Logic Controllers 2

Course Prerequisite or Corequisite

Type
Corequisite

AENG 425

Complete ALL of the following Courses:
- AENG425 - Industrial Robotic Systems 2

AENG470 - Senior Seminar

Course Information

Course Title
Senior Seminar

Subject code	Course Number	Academic Level
AENG	470	Undergraduate

Course Description
This senior course focuses on preparing students in the applied engineering, engineering technology, and technology management programs for careers after graduation. Content includes history of the professions, ethics, résumé writing/review, mock interviews, job fair attendance, and engaging with professional guest speakers. Classroom experiences include developing résumés and professional networking profiles, developing presentations and discussing current issues in the professions. Professional certification exams will be administered as part of this course. Prerequisite: Senior Level course, Final semester of enrollment.

Simple Requirements

Senior Year - Final Semester

Type
Prerequisite

Final Term

Complete ALL of the following :
Senior Standing, Final Semester

AENG479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
AENG	479	Undergraduate

AENG485 - Adv Manufacturing Systems

Course Information

Course Title
Adv Manufacturing Systems

Subject code	Course Number	Academic Level
AENG	485	Undergraduate

Course Description
Computer-integrated manufacturing (CIM) systems, strategies and implementation across the manufacturing enterprise. Focus on the integration of systems such as design of products; computer-aided engineering (CAE); the control of quality, design and construction of production tooling, rapid prototyping, computer-aided process planning (CAPP), finite element analysis (FEA), computer-aided design (CAD), computer-aided manufacturing (CAM) and computer numerical control (CNC). Manufacturing, automation and robotics emphasized. Advanced-level production experiences with an intensive research and development component required. 2 hrs. lec., 3 hrs. lab.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG281

Complete ANY of the following Courses:

- AENG281 - Processing Metallic Materials

AENG489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
AENG	489	Undergraduate

Course Description
Preparation of honors thesis proposal. For the definition of honors course and student eligibility, refer to the departmental honors section of this catalog. EDTE, ARET, MFET, PET, AETM and OSEH majors may enroll in the Department of Applied Engineering, Safety & Technology honors program. Contact the department office for guidelines and an application.

AENG492 - Technical Entrepreneurship

Course Information

Course Title
Technical Entrepreneurship

Subject code	Course Number	Academic Level
AENG	492	Undergraduate

Course Description
A capstone Applied Engineering & Technology Management course in which students study and apply technical, managerial, and entrepreneurial concepts to the development and operation of a student-centered venture. Students organize and operate a model enterprise to develop manufacture and market a consumer product.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG130 or AENG241 and BUAD251 or BUAD251H

Complete ALL of the following Courses:

- AENG130 - Production Materials & Processes **OR** AENG241 - Drafting Communications
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Major Restriction

Reserved for Technology Education, Applied Engineering Technology, and Applied Engineering and Technology Management majors.

AENG494 - Total Quality Management

Course Information

Course Title
Total Quality Management

Subject code	Course Number	Academic Level
AENG	494	Undergraduate

Course Description
The history and development of quality movements; factors influencing the total quality concept; the scope of modern quality systems; management organization and strategies for quality; engineering technology for quality; and statistical tools for measurement and monitoring of quality. 2 hrs. lec., 3 hrs. lab. Prereq: MATH 130 or permission of instructor.

Capstone Stage Label
Yes

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 130

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1

Or must have permission of instructor.

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

AENG498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
AENG	498	Undergraduate

Course Description
See Independent Study section of this catalog. Written permission of faculty sponsor and department chairperson required.

AENG499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
AENG	499	Undergraduate

Course Description
Completion and defense of thesis research. See departmental honors section of this catalog. Contact the Department of Applied Engineering, Safety & Technology office for guidelines.

AENG499H - Hon: Departmental Honors

Course Information

Course Title
Hon: Departmental Honors

Subject code	Course Number	Academic Level
AENG	499H	Undergraduate

AENG500 - Co-Op Ed Experience in AENG

Course Information

Course Title
Co-Op Ed Experience in AENG

Subject code	Course Number	Academic Level
AENG	500	Graduate

Course Description
Co-Op Ed Experience in AENG

AENG515 - Adv Prob:

Course Information

Course Title
Adv Prob:

Subject code	Course Number	Academic Level
AENG	515	Graduate

Course Description
Resources, processes and outcomes of selected technical areas in technology education. Technical area emphasized (e.g., computer-aided drafting and design, computer numerical control, desktop publishing, digital electronics, manufacturing, photography and robotics) varies with the course offering. Laboratory experiences focus on technological problem solving. 2 hrs. lec., 3 hrs. lab.

AENG525 - Adv Prob:

Course Information

Course Title
Adv Prob:

Subject code	Course Number	Academic Level
AENG	525	Graduate

Course Description
Resources, processes and outcomes of selected technical areas in technology education. Technical area emphasized (e.g., computer-aided drafting and design, computer numerical control, desktop publishing, digital electronics, manufacturing, photography and robotics) varies with the course offering. Laboratory experiences focus on technological problem solving. 2 hrs. lec., 3 hrs. lab.

AENG535 - Adv Prob:

Course Information

Course Title
Adv Prob:

Subject code	Course Number	Academic Level
AENG	535	Graduate

Course Description
Resources, processes and outcomes of selected technical areas in technology education. Technical area emphasized (e.g., computer-aided drafting and design, computer numerical control, desktop publishing, digital electronics, manufacturing, photography and robotics) varies with the course offering. Laboratory experiences focus on technological problem solving. 2 hrs. lec., 3 hrs. lab.

AENG579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
AENG	579	Graduate

Course Description
Experimental

AENG586 - Special Topics:

Course Information

Course Title
Special Topics:

Subject code	Course Number	Academic Level
AENG	586	Graduate

Course Description
Investigation of one or more topics of current interest in technology and innovation. Topics vary according to needs and interests of students and faculty involved. Offered periodically.

AENG587 - Special Topics:

Course Information

Course Title
Special Topics:

Subject code	Course Number	Academic Level
AENG	587	Graduate

Course Description
Investigation of one or more topics of current interest in technology and innovation. Topics vary according to needs and interests of students and faculty involved. Offered periodically.

AENG588 - Special Topics:

Course Information

Course Title
Special Topics:

Subject code	Course Number	Academic Level
AENG	588	Graduate

Course Description
Investigation of one or more topics of current interest in technology and innovation. Topics vary according to needs and interests of students and faculty involved. Offered periodically.

AENG589 - Special Topics:

Course Information

Course Title
Special Topics:

Subject code	Course Number	Academic Level
AENG	589	Graduate

Course Description
Investigation of one or more topics of current interest in technology and innovation. Topics vary according to needs and interests of students and faculty involved. Offered periodically.

EDTE179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
EDTE	179	Undergraduate

Course Description
Experimental

EDTE290 - Children's Engineering

Course Information

Course Title
Children's Engineering

Subject code	Course Number	Academic Level
EDTE	290	Undergraduate

Course Description
The intent of this course is to teach students about fundamentals of electricity, mechanisms, fluidics (liquids and gases under pressure), computer-control, and structures. Content will be delivered through a series of hands-on activities that will allow the students to immerse themselves in the content through problem-based learning by doing. Simple knowledge and skill building activities will lead to more complex open-ended problem solving and prototyping activities to build deeper understandings of scientific, technological, engineering, and mathematical (STEM) concepts for teachers of young children. Cross-listed with ERCH 290, students may not receive credit for both courses.

Gateway Stage Labels
Technological Competency (TC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ERCH 110 or SPED 101, and ERCH 190

Complete ALL of the following Courses:

- ECPK110 - Introduction to Early Childhood Education
  OR SPED101 - Orientation to Special Educ
- ERCH190 - Introduction to Integrative STEM Pedagogy

EDTE291 - Foundations of Technology & Engineering Ed

Course Information

Course Title
Foundations of Technology & Engineering Ed

Subject code	Course Number	Academic Level
EDTE	291	Undergraduate

Course Description
An introduction to the social, historical and philosophical foundations of technology & engineering education, leading to contemporary programs. Provision is made for observation of classroom and laboratory practices in selected schools. Prereq: Sophomore standing. Must meet current university requirements for field experiences (e.g., current clearances, negative TB test results on file). Not offered during summer sessions. Must achieve a "C" or higher to register for professional block courses.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Sophomore or Junior or Senior Class Standing)

Earn at least 30 credits

University Requirements for Field Experiences

Must meet current university requirements for field experiences (e.g., current clearances, negative TB test results on file).

EDTE391 - Curr & Inst in Tech & Eng Ed

Course Information

Course Title
Curr & Inst in Tech & Eng Ed

Subject code	Course Number	Academic Level
EDTE	391	Undergraduate

Course Description
An investigation of curriculum design, instructional planning, and lesson delivery in K-12 technology and engineering education. The focus is on engaging teacher candidates in using contemporary strategies and technologies to plan, implement, and assess a standards-based curriculum that promotes students' technological literacy, creativity, engineering problem-solving, and design thinking abilities. Emphasis is placed on meeting the needs of all learners, including English language learners and students with disabilities. Field experiences are required in technology and engineering education classrooms. Prerequisites: Grade of "C" or higher in EDTE 291, EDFN 211, EDFN 241. Grade of "C-" or higher in ENGL 110. Admission to advanced professional studies (APS) required. Co-requisites: SEED 340 and SPED 346. A minimum grade of "C" must be earned in this class in order to progress to student teaching.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Earn a minimum grade of C- in the following:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H and EDTE 291

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological

Foundations of Teaching
- EDTE291 - Foundations of Technology & Engineering Ed

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

SEED 340 and SPED 346

Enroll in the following Courses:
- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings

EDTE461 - Edte Stu Teaching

Course Information

Course Title
Edte Stu Teaching

Subject code	Course Number	Academic Level
EDTE	461	Undergraduate

Course Description
Student teachers are assigned full-time to selected mentors in the Lancaster area. They are supervised by University faculty and gain experience in the responsibilities of the teacher. Prereq: EDTE 391 with a C or higher and EDTE 496. Co-requisites: EDTE 491 and SEED 471.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDTE 391 and SEED 340 and SPED 346

Earn a minimum grade of C in the following:
- EDTE391 - Curr & Inst in Tech & Eng Ed
- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

EDTE 491 and SEED 471

Enroll in the following Courses:
- EDTE491 - Seminar in Techn & Engring Ed
- SEED471 - Student Teaching Seminar

EDTE462 - EDTE Stu Teaching

Course Information

Course Title
EDTE Stu Teaching

Subject code	Course Number	Academic Level
EDTE	462	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDTE391 and SPED346 or SPED546 and SEED340 or SEED540

Complete ALL of the following Courses:

- EDTE391 - Curr & Inst in Tech & Eng Ed
- SEED340 - Content Area Literacy for Diverse Classrooms
  OR SEED540 - Cntnt Area Litrcy Divers Class
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings
  OR SPED546 - Sec Stdnts w Disab Inclu Sttgs

EDTE490 - Integrative Learning Using Experiential Strategies

Course Information

Course Title
Integrative Learning Using Experiential Strategies

Subject code	Course Number	Academic Level
EDTE	490	Undergraduate

Course Description
The purpose of this course is to engage students in curriculum planning, design and assessment that will enable them to identify, use, and evaluate experiential and integrative teaching-learning strategies that facilitate connections between all subjects in grades Pre-K to 6 (e.g., literacy, science, mathematics, social studies, arts, technology, physical education, engineering). Prerequisites: ERCH 110, ERCH 190, EDTE/ERCH 290, and AENG 344.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ERCH 110 or SPED 101 and ERCH 190 and ERCH 290 or EDTE 290 and AENG344 or AENG344H

Complete ALL of the following Courses:

- ECPK110 - Introduction to Early Childhood Education
  OR SPED101 - Orientation to Special Educ
- ERCH190 - Introduction to Integrative STEM Pedagogy
- ERCH290 - Children's Engineering
  OR EDTE290 - Children's Engineering
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design

EDTE491 - Seminar in Techn & Engring Ed

Course Information

Course Title
Seminar in Techn & Engring Ed

Subject code	Course Number	Academic Level
EDTE	491	Undergraduate

Course Description
A seminar dealing with professional education issues and effective teaching and learning during the technology and engineering education student teaching experience. Emphasis on planning, teaching, managing, and assessing technology and engineering education units of instruction. Attention given to legal issues, safety, professional development, and meeting the needs of all learners in the technology and engineering education environment, including English language learners and students with disabilities. Pre-Requisites: EDTE 391 and EDTE 496; Co-Requisities: EDTE 461 and SEED 471

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDTE391 and EDTE496

Complete ALL of the following Courses:
- EDTE391 - Curr & Inst in Tech & Eng Ed
- EDTE496 - Innovatn/Design Methodologies

Course Corequisites

Type
Corequisite

EDTE461 and SEED471

Enroll in the following Courses:
- EDTE461 - Edte Stu Teaching
- SEED471 - Student Teaching Seminar

EDTE495 - Integrative STEM Practicum

Course Information

Course Title
Integrative STEM Practicum

Subject code	Course Number	Academic Level
EDTE	495	Undergraduate

Course Description
This clinical practicum course provides opportunities for teacher candidates to bridge theory and practice. Students will demonstrate and apply knowledge, skills, and dispositions related to the implementation of integrative science, technology, engineering and math (STEM) education at the pre-K to grade 4 level. Emphasis is placed on the planning, development, implementation and assessment of integrative STEM instructional activities and lessons that use problem-based and experiential learning techniques targeted for Pre-K to grade 4 students. Includes field experiences. Prerequisites ERCH 110 or SPED 101, ERCH 190, EDTE/ERCH 290, ITEC 344, EDTE 490 or 690 or Permission of Instructor; Advanced Professional Studies (APS) status required. Cross-listed with ERCH 495, credit may not be received for both courses.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ERCH110 or SPED 101 and ERCH190 and EDTE290 or ERCH290 and AENG344 or AENG344H and EDTE490 or EDTE690 or permission of instructor

Complete ALL of the following Courses:
- ECPK110 - Introduction to Early Childhood Education
  OR SPED101 - Orientation to Special Educ
- ERCH190 - Introduction to Integrative STEM Pedagogy
- EDTE290 - Children's Engineering
  OR ERCH290 - Children's Engineering
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design
- EDTE490 - Integrative Learning Using Experiential Strategies
  OR EDTE690 - Integrtve Lrning Exprntl Strgy

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

EDTE496 - Innovatn/Design Methodologies

Course Information

Course Title
Innovatn/Design Methodologies

Subject code	Course Number	Academic Level
EDTE	496	Undergraduate

Course Description
Technology education methodologies for instruction in advanced design and innovation. Teams of students develop solutions to technological problems. 1 hr. lec., 3 hrs. lab. Prereq: ITEC 110, 120, 130, 140, 344; MATH 130 or higher; and ENGL 312 or 316.

Simple Requirements

Course Prerequisites

Type
Prerequisite

AENG 110 and AENG 120 and AENG 130 and AENG 140 and AENG 344 or AENG 344H and WRIT 312 or WRIT 316

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems
- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- AENG140 - Bio-related Technologies
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design
- WRIT312 - Technical Writing
  OR WRIT316 - Business Writing

MATH 130 or higher

Complete ANY of the following Course Sets:

- Any MATH 130 or Higher

EDTE498 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
EDTE	498	Undergraduate

Course Description
Independent Study in Technology Education

EDTE586 - Topics in Industry & Tech

Course Information

Course Title
Topics in Industry & Tech

Subject code	Course Number	Academic Level
EDTE	586	Graduate

Course Description
Investigation of one or more topics of current interest in industry and technology. Topics vary according to needs and interests of students and faculty involved.

EDTE587 - Topics in Industry & Tech

Course Information

Course Title
Topics in Industry & Tech

Subject code	Course Number	Academic Level
EDTE	587	Graduate

Course Description
Investigation of one or more topics of current interest in industry and technology. Topics vary according to needs and interests of students and faculty involved.

EDTE588 - Sp Topics in Industry & Tech

Course Information

Course Title
Sp Topics in Industry & Tech

Subject code	Course Number	Academic Level
EDTE	588	Graduate

Course Description
Investigation of one or more topics of current interest in industry and technology. Topics vary according to needs and interests of students and faculty involved.

EDTE589 - Sp Topics in Industry & Tech

Course Information

Course Title
Sp Topics in Industry & Tech

Subject code	Course Number	Academic Level
EDTE	589	Graduate

Course Description
Investigation of one or more topics of current interest in industry and technology. Topics vary according to needs and interests of students and faculty involved.

EDTE679 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
EDTE	679	Graduate

EDTE690 - Integrtve Lrning Exprntl Strgy

Course Information

Course Title
Integrtve Lrning Exprntl Strgy

Subject code	Course Number	Academic Level
EDTE	690	Graduate

Course Description
The purpose of this course is to engage students in curriculum planning, design, and assessment that will enable them to identify, use, and evaluate experiential and integrative teaching-learning strategies that facilitate connections between all subjects in grades Pre-K to grade 6 (e.g., literacy, science, mathematics, social studies, arts, technology, physical education, engineering).

EDTE691 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
EDTE	691	Graduate

Course Description
Pursuit of a topic of special interest and of potential application in technology education. Written proposal must be approved by an appropriate faculty sponsor, the graduate program coordinator and the department chairperson prior to the semester of formal registration in this course.
Completion of an approved independent study includes a written research report, which partially determines the grade received.

FYEX100E - Learning by Doing

Course Information

Course Title
Learning by Doing

Subject code	Course Number	Academic Level
FYEX	100E	Undergraduate

Course Description
Engages students in exploring the value of learning through hands-on experiences. Students will use experiential learning to engage with technologies and solve real-life engineering problems. They will also explore some of the challenges of adapting to college and identify campus resources for academic success. Students will be challenged to evaluate learning through active engagement and to reflect on how personal and authentic experiences play a role in their own learning as college students. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

NANO311 - Materials, Safety & Equipment Overview for Nanotechnology

Course Information

Course Title
Materials, Safety & Equipment Overview for Nanotechnology

Subject code	Course Number	Academic Level
NANO	311	Undergraduate

Course Description
Focuses on issues encountered in the practice of top down and bottom up nanofabrication and the safe operation and maintenance of nanofabrication processing equipment and materials-handling procedures. Includes clean-room protocol, safety and environmental and health issues in the nanofabrication facility at Penn State University. 2 hrs. lec., 2 hrs. lab. Coreq: NANO 312. Completed at Penn State University in State College during Capstone Semester.

Simple Requirements

Course Corequisites

Type
Corequisite

NANO 312

Enroll in the following Courses:

- NANO312 - Basic Nanotechnology Processes

NANO312 - Basic Nanotechnology Processes

Course Information

Course Title
Basic Nanotechnology Processes

Subject code	Course Number	Academic Level
NANO	312	Undergraduate

Course Description
Hands-on introduction to the processing sequences involved in top down, bottom up and hybrid nanofabrication. Details a step-by-step description of processes to fabricate devices and structures. Stresses the importance of environmental control (gas, liquid, vacuum) in processing. 2 hrs. lec., 2 hrs. lab. Prereq: Admission to the NANO Capstone Semester. Coreq: NANO 311. Completed at Penn State University in State College during Capstone Semester.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Admission to the NANO “Capstone Semester.

Must be admitted to the NANO “Capstone Semester.

Course Corequisite

Type
Corequisite

NANO 311

Enroll in the following Courses:

- NANO311 - Materials, Safety & Equipment Overview for Nanotechnology

NANO313 - Thin Film Utilization

Course Information

Course Title
Thin Film Utilization

Subject code	Course Number	Academic Level
NANO	313	Undergraduate

Course Description
In-depth, hands-on exposure to depositing and etching a wide variety of materials, including dielectrics, semiconductors organics, polymers, metallic materials and molecular films. Students work in small teams and develop oral and written reports. 2 hrs. lec., 2 hrs. lab. Prereq: NANO 311 and 312. Completed at Penn State University in State College during Capstone Semester.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NANO 311 and NANO 312

Complete ALL of the following Courses:

- NANO311 - Materials, Safety & Equipment Overview for Nanotechnology
- NANO312 - Basic Nanotechnology Processes

Completed at Penn State University in State College during “Capstone Semester.”.

NANO314 - Lithography

Course Information

Course Title
Lithography

Subject code	Course Number	Academic Level
NANO	314	Undergraduate

Course Description
Hands-on treatment of all aspects of advanced pattern transfer and pattern-transfer equipment. Includes pattern-generation processes, photolithography, particle beam lithographic techniques, probe pattern generation and three types of lithography (embossing, stamp, self-assembled). 2 hrs. lec., 2 hrs. lab. Prereq: NANO 311. Completed at Penn State University in State College during Capstone Semester.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NANO 311

Complete ALL of the following Courses:

- NANO311 - Materials, Safety & Equipment Overview for Nanotechnology

Completed at Penn State University in State College during “Capstone Semester”.

NANO315 - Materials Modification in Nanotechnology

Course Information

Course Title
Materials Modification in Nanotechnology

Subject code	Course Number	Academic Level
NANO	315	Undergraduate

Course Description
Detailed coverage of material-processing steps for molecular functionalization, cross-linking, metal silicidation, material oxidation, materials nitradion, barrier materials, alloying, annealing and doping. Includes avoiding unintentional materials modification via the use of diffusion barriers, encapsulation, electromigration, corrosion, stress effects and adhesion. 2 hrs. lec., 2 hrs. lab. Prereq: NANO 311. Completed at Penn State University in State College during Capstone Semester.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NANO 311

Complete ALL of the following Courses:

- NANO311 - Materials, Safety & Equipment Overview for Nanotechnology

Completed at Penn State University in State College during “Capstone Semester.”.

NANO316 - Characterization, Testing Nanotech Structures & Materials

Course Information

Course Title
Characterization, Testing Nanotech Structures & Materials

Subject code	Course Number	Academic Level
NANO	316	Undergraduate

Course Description
Examines a variety of techniques and measurements essential for testing and for controlling final device performance and final packaging. Problems and solutions concerning the interfacing of the macro-world with micro- and nano-scale devices will be analyzed and examined. 2 hrs. lec., 2 hrs. lab. Prereq: NANO 311. Completed at Penn State University in State College during Capstone Semester.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NANO 311

Complete ALL of the following Courses:

- NANO311 - Materials, Safety & Equipment Overview for Nanotechnology

Completed at Penn State University in State College during “Capstone Semester.”.

OSEH120 - Fundamentals of Safety, Health, Environmental Issues

Course Information

Course Title
Fundamentals of Safety, Health, Environmental Issues

Subject code	Course Number	Academic Level
OSEH	120	Undergraduate

Course Description
Introduction to safety, health and environmental issues that impact people and workplaces. Includes the historical development of safety, the impact of accidents on society, a legislative overview and basic principles of personal risk assessment and management.

Gateway Stage Labels
Technological Competency (TC)

OSEH120H - Hon: Fundamentals of Safety, Health, Environmental Issues

Course Information

Course Title
Hon: Fundamentals of Safety, Health, Environmental Issues

Subject code	Course Number	Academic Level
OSEH	120H	Undergraduate

Gateway Stage Labels
Technological Competency (TC)

OSEH179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
OSEH	179	Undergraduate

Course Description
Experimental

OSEH220 - Legal Aspects Environmental Safety

Course Information

Course Title
Legal Aspects Environmental Safety

Subject code	Course Number	Academic Level
OSEH	220	Undergraduate

Course Description
Legal issues relative to occupational safety and environmental health. Includes federal and state legislation, resolution of legal and ethical challenges, product safety and professional liability.

OSEH221 - Industrial Fire Prevention, Protection and Control

Course Information

Course Title
Industrial Fire Prevention, Protection and Control

Subject code	Course Number	Academic Level
OSEH	221	Undergraduate

Course Description
Basic principles, chemistry of fire, fire hazards determination, workforce notification, alarm and sprinkler systems, protective equipment, evacuation procedures and fire fighting methods.

Gateway Stage Labels
Problem Solving (PS)

OSEH221H - Hon: Industrial Fire Prevention, Protection and Control

Course Information

Course Title
Hon: Industrial Fire Prevention, Protection and Control

Subject code	Course Number	Academic Level
OSEH	221H	Undergraduate

Gateway Stage Labels
Problem Solving (PS)

OSEH222 - Construction Safety

Course Information

Course Title
Construction Safety

Subject code	Course Number	Academic Level
OSEH	222	Undergraduate

Course Description
Methodology for the anticipation, recognition, evaluation and control of safety and health hazards associated with construction industries. Topics include engineering principles and risks associated with multiple types of facilities and infrastructures. Prereq: OSEH 120

Simple Requirements

Course Prerequisites

Type
Prerequisite

OSEH 120

Complete ALL of the following Courses:

- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

OSEH279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
OSEH	279	Undergraduate

Course Description
Experimental

OSEH300 - Co-Op Ed Experience in OSEH

Course Information

Course Title
Co-Op Ed Experience in OSEH

Subject code	Course Number	Academic Level
OSEH	300	Undergraduate

Course Description
Co-Op Ed Experience in OSEH

OSEH320 - Safety Engineering Principles

Course Information

Course Title
Safety Engineering Principles

Subject code	Course Number	Academic Level
OSEH	320	Undergraduate

Course Description
Methods for the identification and analysis of industrial hazards. Emphasis on application of basic safety engineering principles for the control of losses in an industrial environment. Prereq: OSEH 120.

Simple Requirements

Course Prerequisites

Type
Prerequisite

OSEH 120

Complete ALL of the following Courses:
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

OSEH321 - Environmental & Industrial Hygiene I - Chemical and Biological Hazards

Course Information

Course Title
Environmental & Industrial Hygiene I - Chemical and Biological Hazards

Subject code	Course Number	Academic Level
OSEH	321	Undergraduate

Course Description
Course covers the anticipation, recognition, evaluation, and control of chemical and biological hazards in the workplace. Topics include: toxicology, gases, vapors, solvents, particulate matters, respiratory protection, fit testing, air sampling protocols and strategies, microbial and biological hazards, and government regulations. The challenging concerns of health hazards related to nano size particles in the workplace is addressed. Prereq: OSEH 120, CHEM 104, MATH 101 or Math 151 or Math 160 or Math 161, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

OSEH 120 and CHEM 104

Complete ALL of the following Courses:
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- CHEM104 - Gen Organic and Biochemistry 2

MATH 101 or MATH 151 or MATH 160 or MATH 161

Complete ANY of the following Courses:
- MATH101 - College Algebra
- MATH151 - Calculus for Management
- MATH160 - Precalculus
- MATH161 - Calculus 1

Or must have permission of instructor.

OSEH323 - Human Factors in OSEH

Course Information

Course Title
Human Factors in OSEH

Subject code	Course Number	Academic Level
OSEH	323	Undergraduate

Course Description
Ergonomic study of interaction between people and their work. Emphasis on the application of biological sciences to engineering principles in an effort to optimize efficiency, productivity and safety. Topics include anthropometrics, biomechanics, design principles, physiological and cognitive capabilities and task-evaluation techniques. Prereq: OSEH 120 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

OSEH 120

Complete ALL of the following Courses:
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

Or must have permission of instructor.

OSEH333 - Introduction to System Safety

Course Information

Course Title
Introduction to System Safety

Subject code	Course Number	Academic Level
OSEH	333	Undergraduate

Course Description
Qualitative and quantitative system safety methods used to analyze and control risk. Includes a variety of analytical engineering techniques that are applied to practical system-analysis problems. Prereq: OSEH 320 and MATH 130.

Simple Requirements

Course Prerequisites

Type
Prerequisite

OSEH 320 and MATH 130

Complete ALL of the following Courses:
- OSEH320 - Safety Engineering Principles
- MATH130 - Elements of Statistics 1

OSEH379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
OSEH	379	Undergraduate

Course Description
Experimental

OSEH400 - Co-Op Ed Experience in OSEH

Course Information

Course Title
Co-Op Ed Experience in OSEH

Subject code	Course Number	Academic Level
OSEH	400	Undergraduate

Course Description
Co-Op Ed Experience in OSEH

OSEH410 - Safety and Hygiene Management

Course Information

Course Title
Safety and Hygiene Management

Subject code	Course Number	Academic Level
OSEH	410	Undergraduate

Course Description
Principles and practices of occupational safety and environmental health management. Includes the development of safety objectives and policy, evaluation and management of risk, and program implementation and evaluation. Offered annually. Prereq: OSEH 220 and 320 or permission of instructor.

Capstone Stage Label
Yes

Simple Requirements

Course Prerequisites

Type
Prerequisite

OSEH 220 and OSEH 320 or instructor permission

Complete ALL of the following Courses:

- OSEH220 - Legal Aspects Environmental Safety
- OSEH320 - Safety Engineering Principles

OSEH422 - Environmental & Industrial Health II - Physical Hazards

Course Information

Course Title
Environmental & Industrial Health II - Physical Hazards

Subject code	Course Number	Academic Level
OSEH	422	Undergraduate

Course Description
Fundamental theory and methods used in the anticipation, recognition, evaluation and control of the physical hazards of noise, ionizing/nonionizing radiation, illumination, thermal stress, local exhaust ventilation, and dilution ventilation. Covers regulatory standards and control methods. Prereq: OSEH 120, MATH 101 or 151 or 160 or 161 and PHYS 103 or 104 or 131, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

OSEH 120 and MATH 101 or MATH 151 or MATH 160 or MATH 161 and PHYS 103 or PHYS 104 or PHYS 131, or instructor permission

Complete ALL of the following Courses:

- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- MATH101 - College Algebra
  OR MATH151 - Calculus for Management
  OR MATH160 - Precalculus
  OR MATH161 - Calculus 1
- PHYS103 - Elements of Physics
  OR PHYS104 - Applied Physics
  OR PHYS131 - Physics 1 with Algebra

OSEH430 - Topics in Occupational Safety & Environmental Health

Course Information

Course Title
Topics in Occupational Safety & Environmental Health

Subject code	Course Number	Academic Level
OSEH	430	Undergraduate

Course Description
A review of industry specific hazards and operations related to Occupational Safety and Environmental Health. Topics vary according to the needs and interest of students involved. The course is intended to build on basic safety management concepts and an understanding of how these concepts are applied in specific sectors. Challenges and specific regulatory requirements, which may be unique to the business sectors covered, will be included. Emphasis is placed on leadership and mentorship of OSEH students. Reserved for Senior OSEH majors or by instructor permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

OSEH435 - Environmental Health

Course Information

Course Title
Environmental Health

Subject code	Course Number	Academic Level
OSEH	435	Undergraduate

Course Description
Environmental health review of scientific and technical foundations, with an examination of problems, regulations and control strategies. Covers identification of pollution sources, evaluation strategies, engineering controls, federal and state regulatory and permitting processes. Emphasis is on practical information needed by environmental health professionals to resolve issues affecting industry. Prereq: OSEH 321 or 333 or ENVI 330 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

OSEH 321 or ENVI 330 or OSEH 333

Complete ANY of the following Courses:

- OSEH321 - Environmental & Industrial Hygiene I - Chemical and Biological Hazards
- EVSC330 - Environmental Statistics & Risk Assessment
- OSEH333 - Introduction to System Safety

Or must have permission of instructor.

OSEH440 - Internship

Course Information

Course Title
Internship

Subject code	Course Number	Academic Level
OSEH	440	Undergraduate

Course Description
Students work full-time for nine weeks or more under the direct supervision of an OSEH professional in industry, insurance, government agencies or other approved location. University supervision, seminars and evaluation are provided. Students experience problems, practices and principles in the management of occupational safety and/or industrial hygiene programs. To be taken twice, concurrently or consecutively, with increased work and research responsibilities. Prereq: senior OSEH majors and permission of OSEH coordinator.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

Degree/Major/Field of Study Restrictions

Type
Prerequisite

OSEH Major Only and Permission

Must be an OSEH major and have permission

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

OSEH479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
OSEH	479	Undergraduate

Course Description
Experimental

OSEH489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
OSEH	489	Undergraduate

Course Description
Preparation of honors thesis proposal. For the definition of honors course and student eligibility, refer to the departmental honors section of this catalog. EDTE, AETM and OSEH majors may enroll in the Department of Applied Engineering, Safety & Technology honors program. Contact the department office for guidelines and an application.

OSEH499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
OSEH	499	Undergraduate

OSEH522 - Advanced Industrial Hygiene - Physical Hazards

Course Information

Course Title
Advanced Industrial Hygiene - Physical Hazards

Subject code	Course Number	Academic Level
OSEH	522	Graduate

Course Description
This graduate-level course focuses on advanced concepts and analytical techniques used in the anticipation, recognition, evaluation, and control of physical hazards in occupational and environmental settings, including noise, ionizing and non-ionizing radiation, illumination, thermal stress, and ventilation. Students enrolled in the graduate section (OSEH 522) will complete advanced data analysis, literature-based research, and professional-level reporting.

OSEH535 - Advanced Environmental Health

Course Information

Course Title
Advanced Environmental Health

Subject code	Course Number	Academic Level
OSEH	535	Graduate

Course Description
This graduate-level course provides an in-depth examination of environmental health hazards that affect communities and workplaces, including air quality, water quality, vector-borne diseases, food safety, solid/liquid waste management, hazardous chemical exposures, and regulatory frameworks. Emphasis is placed on evaluating environmental exposure pathways, conducting environmental health risk assessments, applying regulations, and developing evidence-based mitigation strategies.

OSEH600 - Research Methods in OSEH

Course Information

Course Title
Research Methods in OSEH

Subject code	Course Number	Academic Level
OSEH	600	Graduate

Course Description
This is an introductory graduate-level course in research methods for students pursuing a graduate degrees in safety and health related
sciences. Topics include: scientific method, ethics, research design, interpretation of existing research,
statistical concepts, computer resources, conceptualization of research problems, instrumentation, proposal preparation, and presentation.

OSEH601 - Toxicology

Course Information

Course Title
Toxicology

Subject code	Course Number	Academic Level
OSEH	601	Graduate

Course Description
Introduces the principles of toxicology with a focus on environmental and occupational exposures. Students will learn toxicology fundamentals, industrial chemical classes, target organ toxicity, exposure assessment, risk assessment, regulatory
frameworks, and practical applications for occupational and environmental health professionals.

OSEH602 - Environmental, Health, and Safety Management Systems

Course Information

Course Title
Environmental, Health, and Safety Management Systems

Subject code	Course Number	Academic Level
OSEH	602	Graduate

Course Description
Provides an understanding of environmental, health, and safety (EHS) management systems. It also examines the four primary EHS management system elements: (1.) EHS policy and objectives, (2.) risk management/aspects and impacts, (3.) EHS assurance, and (4.) EHS promotion. The EHS
management system types, history, and technology will be examined.

OSEH630 - Risk Management and Loss Control

Course Information

Course Title
Risk Management and Loss Control

Subject code	Course Number	Academic Level
OSEH	630	Graduate

Course Description
An introductory graduate-level course in risk and loss control for students pursuing graduate degrees in safety-related sciences. Topics include: incident investigations, workers' compensation and insurance topics, loss prevention and control, injury prevention and management, risk management, claims management, and enterprise risk management.

TEIN603 - Fostering Creativity by Design

Course Information

Course Title
Fostering Creativity by Design

Subject code	Course Number	Academic Level
TEIN	603	Graduate

Course Description
Exposes students to the concept of how creativity, within the context of the technological world, is manifested through design. Whether it is during the ideation, development, use, modification and updating, or disposal of the artifact or system of technology, design is the overarching force that is present through each stage. Students will also explore the latest theories on creativity as well as the ways that a designer uses creativity and design thinking toward solving problems in an increasingly technologically complex world. Design-based thinking skills such as problem solving, decision making, researching, designing and creating, will be emphasized. The course is appropriate for all graduate students especially those in education, technological fields, and entrepreneurship.

TEIN604 - Engineering, Ethics, and AI

Course Information

Course Title
Engineering, Ethics, and AI

Subject code	Course Number	Academic Level
TEIN	604	Graduate

Course Description
Engineering design innovations and inventions are vital in enhancing the standards of living for humanity. This course explores the fundamental principles of engineering design and problem-solving, with a critical emphasis on the ethical and societal impact of modern technologies, particularly Artificial Intelligence (AI). Students will learn how engineers think, the structure of the profession, and the methods of modeling systems, while examining the profound ethical dilemmas, biases, and regulatory challenges presented by AI-driven solutions across various engineering disciplines.

TEIN605 - Applying Critical Thinking and Decision Making

Course Information

Course Title
Applying Critical Thinking and Decision Making

Subject code	Course Number	Academic Level
TEIN	605	Graduate

Course Description
An exploration of the nature and application of critical thinking toward acts of decision making. Students will learn how to understand, facilitate, and practice the techniques of disciplined critical thinking and decision-making while avoiding the pitfalls of thinking traps such as biases and irrational tendencies. The course has been been designed to address a variety of audiences including all teachers at all levels as well as entrepreneurs and individuals from business and industry, the sciences and the technological fields.

TEIN606 - Leadership in Practice

Course Information

Course Title
Leadership in Practice

Subject code	Course Number	Academic Level
TEIN	606	Graduate

Course Description
Examines leadership as an ongoing, practice-based process. Students will explore leadership as the exercise of influence, judgment, and learning in complex, real-world contexts. Drawing on established leadership frameworks and systems thinking, the course emphasizes diagnosis, decision-making, and reflective practice across technical, organizational, and human-system challenges. Through applied activities, students will develop the capacity to interpret ambiguous situations, mobilize stakeholders, and adapt their leadership approach across diverse professional settings.

TEIN646 - Writing the Professional Paper

Course Information

Course Title
Writing the Professional Paper

Subject code	Course Number	Academic Level
TEIN	646	Graduate

Course Description
Development of competencies for identifying and developing graduate research topics and for publishing in professional literature. Emphasis on research methods, organization and effective writing. The satisfactory completion of this course is required before pursuit of TEIN 698: Capstone or TEIN 699: Thesis.

TEIN698 - Capstone

Course Information

Course Title
Capstone

Subject code	Course Number	Academic Level
TEIN	698	Graduate

Course Description
A culminating project that integrates a student's academic knowledge and skills from their degree program into a final, real-world-focused project. It can take various forms, such as a research paper, a group project, or a creative work, and serves to demonstrate a broad mastery of learning that has occurred through the program of study. Documentation of the results and applications are presented as a research report.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDTE646

Complete ALL of the following Courses:

- TEIN646 - Writing the Professional Paper

TEIN699 - Thesis

Course Information

Course Title
Thesis

Subject code	Course Number	Academic Level
TEIN	699	Graduate

Course Description
Planning, conducting and recording basic research in areas that are pertinent to technology and innovation in the concentrations of education and enterprise . Includes application of an experimental, descriptive, historical or other accepted research method. Study is guided by research adviser and faculty committee. Research results and interpretation are recorded as a thesis.

Art & Design Department

The Department of Art & Design is an accredited institutional member of the National Association of Schools of Art and Design and offers four baccalaureate-degree programs: the Bachelor of Arts in art (B.A.), the Bachelor of Fine Arts in art (B.F.A.), the Bachelor of Design in interactive and graphic design (B.Des.) and the Bachelor of Science in art education (B.S.Ed.). The recommended course sequence for the B.A., B.F.A. and B.S.E. are similar during the first two years so that any change among these three degree programs in the department will not result in loss of time or credits.

Liberal arts, art education and fine arts degree programs are designed to offer the flexibility needed to meet the unique needs of each student. To lend authenticity to this idea, each student, with the help of an advisor, assumes much of the responsibility for determining their program of study.

B.A., B.Des. and B.F.A. art students must maintain a minimum grade point average of 2.0 in their major, while B.S.Ed. students must maintain a minimum GPA of 3.0 overall.

The B.A. program in art provides a sound, broad-based educational foundation which, to a considerable extent, can be individually tailored to meet the specific educational goals of each student.

The B.S.Ed. in art education program is designed for students who aspire to become art teachers. Upon completing this program, students are certified to teach art at both the elementary and secondary levels in the public and private schools of Pennsylvania.

The B.Des. in interactive and graphic design program provides greater depth and focus in interactive and graphic design. This credential accurately reflects the intensive design educational experiences embedded in this professional study of interactive and graphic design. This degree clearly communicates to employers the concentrated professional skills and attributes of graduates from this program.

The B.F.A. program offers greater depth in art studio and is the professional studies program designed for persons who either intend to become self-employed artists, or graphic designers who wish to further their education in graduate school programs in studio art. Additionally, students may combine the B.F.A. degree with teaching certification.

The Department of Art & Design encourages highly motivated students to participate in internship and cooperative education opportunities that exist in both the public and private sectors. These opportunities are described in the Special Academic Opportunities section of this catalog.

Applicants for the B.F.A. in art, B.A. in art or the B.S.Ed. in art education programs, including transfer applications, must submit an art portfolio that should include a variety of the student’s best artwork. Ten to 15 pieces will be requested in total, with at least two drawings from direct observation. Applicants for the B.Des. in interactive and graphic design are to submit a design review.

For this degree the applicants may either complete three design projects or submit a design portfolio. The design portfolio should include 10-15 pieces that show design thinking. The works can be in any medium, be it computer generated, hand drawn or physically built. No original work will be accepted. There will be no in-person reviews. Portfolio deadlines are the first Friday of the month.

FACULTY LIST
Bruntse, Line; Department Chairperson, Associate Professor College of Arts, Humanities and Social Sciences B.F.A., Indiana University of Pennsylvania, 1995; M.F.A., University of Massachusetts, 1999
Filippone, Christine; Professor College of Arts, Humanities and Social Sciences B.S., The Pennsylvania State University, 1989; M.A., Ibid., 1994; Ph.D., Rutgers University, 2009
Frey, Dorothy; Associate Professor College of Arts, Humanities and Social Sciences B.F.A., Millersville University; M.F.A., American University, 2002
Frischkorn, Shauna; Professor College of Arts, Humanities and Social Sciences B.A., Millersville University, 1983; M.A., Regent University, 1986; M.F.A., SUNY-Buffalo, 1998
Gates, Leslie; Professor College of Arts, Humanities and Social Sciences B.S.Ed., Millersville University, 2003; M.A., Shepherd University, 2006; Ph.D., University of Maryland, 2011
Leitzke, Heidi; Associate Professor College of Arts, Humanities and Social Sciences B.A., American University, 2000; B.A., Chautauqua School of Art, 2002; B.A., Anderson University, 2002; M.F.A., Western Carolina University, 2006
Mata, Nancy; Associate Professor College of Arts, Humanities and Social Sciences B.F.A., West Chester University, 1992; M.A., Syracuse University, 2000; M.F.A., Temple University/ Tyler School of Art, 2002
McDonah, Becky; Professor College of Arts, Humanities and Social Sciences B.A., University of Wisconsin-Lacrosse, 1995; M.F.A., Arizona State University, 2000
Pannafino, James; Professor College of Arts, Humanities and Social Sciences B.F.A., Kutztown University, 1998; M.F.A., Rochester Institute of Technology, 2004
Schuller, Brant; Professor College of Arts, Humanities and Social Sciences B.F.A., Cleveland Institute of Art, 1990; M.F.A., The Pennsylvania State University, 1992
Sigel, Deborah; Professor College of Arts, Humanities and Social Sciences B.A., Carleton College, 1986; M.F.A., Cranbrook Academy of Art, 1991

Programs

Art Education, Post-Baccalaureate Certification

Overview

For post-baccalaureate information please see the "Post-Bacc Teacher Certification" section of the Graduate Course Catalog.

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Course Requirements for APS: Foundations Courses (6 credits)

Complete at least 1 of the following:

Option 1. Foundations Graduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Art Education, Post-Baccalaureate Certification (60 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Art Courses (24 credits)

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- ART133 - Drawing 1
- ART233 - Drawing 2
- ART142 - 2D Design

AND

3D Design or 3D Digital Design (3 credits)

Complete at least 1 of the following courses:

- ART242 - 3D Design
- DESN243 - Creativity, Innovation & Human-Centered Design Thinking

AND

Ceramics: Handbuilding or Ceramics: Wheel Throwing (3 credits)

Complete at least 1 of the following courses:

- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing

AND

Painting I (3 credits)

Complete at least 1 of the following courses:

- ART352 - Painting 1
- ART584 - Intro Studio Art:

To use the course ART584 to meet this

requirement, ART584 must have been taken with the topic "Painting".

AND

Survey Printmaking (3 credits)

Complete at least 1 of the following courses:

- ART361 - Survey Printmaking 1
- ART584 - Intro Studio Art:

To use the course ART584 to meet this requirement, ART584 must have been taken with the topic "Printmaking".

AND

Sculpture I or Fine Art Metals I (3 credits)

Complete at least 1 of the following courses:

- ART282 - Sculpture 1
- ART291 - Intro: Fine Art Metals/Jewelry

AND

Required Art History Courses

Earn at least 12 credits from the following:

- ART202 - Survey of Art History 1: Prehistoric to c 1400
- ART203 - Survey Art History 2: 1400 through 20th Century
- ART301 - The Ancient World
- ART302 - The Italian Renaissance
- ART303 - The 19th Century
- ART304 - The 20th Century
- ART305 - Women in Art
- ART313 - Art in America
- ART403 - Northern Renaissance
  OR ART403H - Hnrs:Northern Renaissance
- ART404 - Contemporary Movements in Art
- ART588 - Art Hist Top:
- ART589 - Topics In Art History
- DESN307 - Visual Communication Design History
  OR DESN307H - Hon: Visual Communication Design History

AND

Additional Studio Courses (15 credits)

Earn at least 15 credits from the following:

- ART333 - Drawing 3
- ART433 - Drawing 4
- ART533 - Drawing
- ART534 - Drawing
- ART345 - Introduction to Computer Art
  OR ART345H - Hon: Introduction to Computer Art
- ART445 - Advanced Computer Art
- DESN240 - Typography I
- DESN244 - Typography 2
- DESN344 - Visual Communication and Graphics Design 1
  OR DESN344H - H: Visual Communication and Graphics Design 1
- DESN346 - Intro to Computers in Design
- DESN375 - Illustration
- DESN444 - Vis Comm and Graphcs Design 2
- DESN446 - Advanced Computers In Design
- ART354 - Painting 2
  OR ART354H - H: Painting 2
- ART452 - Painting 3
- ART454 - Painting 4
- ART552 - Painting
- ART554 - Painting
- ART353 - Watercolor 1
- ART355 - Watercolor 2
- ART363 - Lithography Printmaking 1
- ART364 - Relief Printmaking 1
- ART365 - Intaglio Printmaking 1
- ART367 - Water Based Silkscreen 1
- ART464 - Relief Printmaking 2
- ART465 - Intaglio Printmaking 2
- ART467 - Water Based Silkscreen 2
- ART468 - Mixed Media Printmaking
- ART282 - Sculpture 1
- ART382 - Sculpture 2
- ART482 - Sculpture 3
- ART167 - Experimental Photography
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom
- ART406 - Interm Photography: Darkroom
- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing

- ART297 - Ceramics 2
  OR ART297H - Hon: Ceramics 2
- ART396 - Ceramics 3
- ART497 - Ceramics 4
  OR ART497H - H: Ceramics 4
- ART596 - Ceramics
  OR ART596H - Hon: Ceramics
- ART597 - Ceramics
- ART291 - Intro: Fine Art Metals/Jewelry
- ART391 - Fine Art Metals: Casting
- ART491 - Fine Art Metals: Form Emphasis
- ART492 - Advancd Fine Art Metal/Jewelry
- ART591 - Fine Art Metals
- ART592 - Fine Art Metals
- ART486 - Sp Topics:

Select an additional 15 credits of studio courses from any of the studio areas: Drawing; Graphic & Interactive Design; Painting & Watercolor; Printmaking; Sculpture; Photography; Ceramics; Fine Art Metals or Topics in Art Studio Courses in excess of the 15 credit minimum will apply as additional studio courses and will count toward major credits and major GPA. Speak to your advisor about options and view the web schedule of courses in the ART department.

AND

Required Art Education Courses (9 credits)

Fulfill ALL of the following requirements:

Introduction to Art Education or Art Education Theory and Practice (3 credits)

Complete at least 1 of the following courses:

- ART221 - Introduction to Art Education
- ART522 - Art Education Theory and Practice

AND

Meaningful Art Education or Art Education Curriculum and Assessment (3 credits)

Complete at least 1 of the following courses:

- ART324 - Designing Meaningful Art Education Experiences
- ART524 - Art Education Curriculum and Assessment

AND

Methodology and Pedagogy of Art (3 credits)

Complete at least 1 of the following courses:

- ART325 - Methodology and Pedagogy of Art
- ART525 - Art Education Methods III

Professional Education - Certification (33 credits)

Type
Completion Requirement

Foundations Bloc

Fulfill ALL of the following requirements:

Introduction to Art Education or Art Education Theory and Practice (3 credits)

Complete at least 1 of the following courses:

- ART221 - Introduction to Art Education
- ART522 - Art Education Theory and Practice

AND

Meaningful Art Education or Art Education Curriculum and Assessment (3 credits)

Complete at least 1 of the following courses:

- ART324 - Designing Meaningful Art Education Experiences
- ART524 - Art Education Curriculum and Assessment

AND

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/241 and please register for both courses in the same block.

APS - Professional Bloc

Fulfill ALL of the following requirements:

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/ Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Methodology and Pedagogy for Art (3 credits)

Complete at least 1 of the following courses:

- ART325 - Methodology and Pedagogy of Art
- ART525 - Art Education Methods III

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc and but prior to Student Teaching.

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Access the Student teaching Website

Student Teaching Semester (9 credits)

Complete ALL of the following Courses:

- EDAR461 - Elem Stu Tch: Art
- EDAR462 - Secon Stu Tch: Art

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

Art History Minor

Overview

The Art History minor is designed for the student who wishes to pursue courses in art history in addition to those in his/her major field. Students learn the significance and influence of art history in historical works and in contemporary works. Classes range from pre-historic, medieval, and Renaissance art to the 19th and 20th centuries as well as contemporary movements in art. Students will be encouraged to participate in study abroad, internships, and extracurricular activities. These experiences will allow students to gain valuable real-world knowledge that lasts long after graduation.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Art History (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Art History Survey Course (3 credits)

Complete at least 1 of the following courses:

- ART202 - Survey of Art History 1: Prehistoric to c 1400
- ART203 - Survey Art History 2: 1400 through 20th Century

AND

Art History Minor Electives (15 credits)

Complete at least 5 of the following:

Option 1. History & Aesthetics Photo (3 credits)

Complete ALL of the following Courses:

- ART201 - History and Aesthetics of Photography
  OR ART201H - H:History and Aesthetics of Photography

OR

Option 2. Ancient World (3 credits)

Complete ALL of the following Courses:

- ART301 - The Ancient World

OR

Option 3. Italian Renaissance (3 credits)

Complete ALL of the following Courses:

- ART302 - The Italian Renaissance

OR

Option 4. 19th Century Art (3 credits)

Complete ALL of the following Courses:

- ART303 - The 19th Century

OR

Option 5. 20th Century Art (3 credits)

Complete ALL of the following Courses:

- ART304 - The 20th Century

OR

Option 6. Women in Art (3 credits)

Complete ALL of the following Courses:

- ART305 - Women in Art

OR

Option 7. Visual Communication History (3 credits)

Complete ALL of the following Courses:

- DESN307 - Visual Communication Design History
  OR DESN307H - Hon: Visual Communication Design History

OR

Option 8. Art in America (3 credits)

Complete ALL of the following Courses:

- ART313 - Art in America

OR

Option 9. Northern Renaissance (3 credits)

Complete ALL of the following Courses:

- ART403 - Northern Renaissance
  OR ART403H - Hnrs:Northern Renaissance

OR

Option 10. Contemporary Movements (3 credits)

Complete ALL of the following Courses:

- ART404 - Contemporary Movements in Art

OR

Option 11. Topics in Art History (3 credits)

Complete at least 1 of the following courses:

- ART588 - Art Hist Top:
- ART589 - Topics In Art History

OR

Option 12. Topics in Art History (3 credits)

Complete at least 1 of the following courses:

- ART589 - Topics In Art History
- ART588 - Art Hist Top:

Fine Art Metals Minor

Overview

The Fine Art Metals minor gives students an opportunity to develop traditional and contemporary metals and jewelry design skills, conceptual strategies, and problem solving skills in a creative environment. Students will develop a personal design aesthetic and vocabulary through investigation of traditional metal techniques and material processes while creating small sculpture and jewelry.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Fine Art Metals (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ART242 - 3D Design

AND

Electives in Fine Art Metals (15 credits)

Earn at least 15 credits from the following:

- ART291 - Intro: Fine Art Metals/Jewelry
- ART391 - Fine Art Metals: Casting
- ART491 - Fine Art Metals: Form Emphasis
- ART492 - Advancd Fine Art Metal/Jewelry
- ART591 - Fine Art Metals
- ART592 - Fine Art Metals

Undergraduates will need permission to enroll in 500-level courses.

Photography Minor

Overview

The Photography minor is designed for the student who wishes to pursue courses in photography in addition to those in his/ her major field. Photo minors will gain a skill set that will not only complement their major but will also add photographic proficiency to their post-academic careers. Since almost every business uses photography in some way, the possibilities for employment are extremely diverse. The Photography minor offers a flexible curriculum that will introduce students to a range of practical experiences in the digital lab, darkroom, studio, and working with people. It will also encourage students to think critically and understand the complexity of photographic images. Students will be encouraged to participate in study abroad, internships, and extracurricular activities. These experiences will allow students to gain valuable real-world knowledge that lasts long after graduation.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Photography

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Drawing I or 2D Design (3 credits)

Complete at least 1 of the following courses:

- ART133 - Drawing 1
- ART142 - 2D Design

AND

Required Courses (3 credits)

Complete at least 1 of the following courses:

- ART201 - History and Aesthetics of Photography
  OR ART201H - H:History and Aesthetics of Photography

AND

Photography Electives (12 credits)

Earn at least 12 credits from the following:

- ART167 - Experimental Photography
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom
- ART376 - Intro to Photo: Digital
- ART406 - Interm Photography: Darkroom
- ART409 - Advanced Photography
- ART410 - Interm Photography:Digital
- ART476 - Picturing the Body
- ART477 - Photography as Narrative
- ART567 - Advanced Photography 2

Studio Art Minor

Overview

The Studio minor is designed for the student who wishes to pursue courses in studio art in addition to those in his/ her major field. The Studio Art Minor is also a perfect fit for the Psychology major who is interested in Art Therapy. Students will be encouraged to participate in study abroad, internships, and extracurricular activities. These experiences will allow students to gain valuable real-world knowledge that lasts long after graduation.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Studio Art (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

- Credits Required for Minor
- Minimum Residency 50% of minor credits
- 2 Courses Must be Upper-Division

AND

Minimum GPA

Earn a minimum GPA of 2.0

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- ART133 - Drawing 1

AND

2D, 3D, or 3D Digital Design (3 credits)

Complete at least 1 of the following courses:

- ART142 - 2D Design
- ART242 - 3D Design
- DESN243 - Creativity, Innovation & Human-Centered Design Thinking

AND

Art History Elective (3 credits)

Complete at least 1 of the following courses:

- ART201 - History and Aesthetics of Photography
  OR ART201H - H:History and Aesthetics of Photography
- ART202 - Survey of Art History 1: Prehistoric to c 1400
- ART203 - Survey Art History 2: 1400 through 20th Century

AND

Studio Art Elective (3 credits)

Complete at least 1 of the following courses:

- DESN144 - Digital Theory and Skills
  OR DESN144H - H: Digital Theory and Skills
- ART167 - Experimental Photography
- ART233 - Drawing 2
- DESN240 - Typography I
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom

- ART282 - Sculpture 1
- ART291 - Intro: Fine Art Metals/Jewelry
- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing
- ART352 - Painting 1
- ART353 - Watercolor 1
- ART361 - Survey Printmaking 1
- ART345 - Introduction to Computer Art **OR** ART345H - Hon: Introduction to Computer Art

AND

Art Elective (6 credits)

Complete at least 2 courses in the following course sets:

- Any ART course(s)
- Any DESN course(s)

Art, B.A.

Overview

This BA in Art is a traditional liberal arts degree, which allows students to develop intellectual and creative strengths and plan for future careers within the visual arts and creative fields. Individuals in this degree program develop their skills and knowledge through selected courses in general education, studio art, and art history. Students can explore a wide range of minors including Business (Marketing), Industry and Technology (Printing Industry), and Psychology.

Curriculum

Simple Requirements

Major in Art, BA (48 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Art & Design Courses (9 credits)

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ART133 - Drawing 1
- ART142 - 2D Design

AND

3D Design or 3D Digital Design (3 credits)

Complete at least 1 of the following courses:

- ART242 - 3D Design
- DESN243 - Creativity, Innovation & Human-Centered Design Thinking

AND

Required Art History

Fulfill ALL of the following requirements:

Survey of Art History I or II (3 credits)

Complete at least 1 of the following courses:

- ART202 - Survey of Art History 1: Prehistoric to c 1400
- ART203 - Survey Art History 2: 1400 through 20th Century

AND

Art History Course (3 credits)

Complete at least 1 of the following courses:

- ART201 - History and Aesthetics of Photography
  OR ART201H - H:History and Aesthetics of Photography
- ART301 - The Ancient World
- ART302 - The Italian Renaissance
- ART303 - The 19th Century
- ART304 - The 20th Century
- ART305 - Women in Art
- ART313 - Art in America
- ART403 - Northern Renaissance
  OR ART403H - Hnrs:Northern Renaissance
- ART404 - Contemporary Movements in Art
- ART587 - Topics In Art Education
- ART588 - Art Hist Top:
- DESN307 - Visual Communication Design History
  OR DESN307H - Hon: Visual Communication Design History

AND

Studio Courses (9 credits)

Complete at least 3 of the following:

Option 1. Painting & Watercolor (3 credits)

Complete at least 1 of the following courses:

- ART352 - Painting 1
- ART353 - Watercolor 1
- ART354 - Painting 2
  OR ART354H - H: Painting 2
- ART355 - Watercolor 2
- ART452 - Painting 3
- ART454 - Painting 4

OR

Option 2. Photography (3 credits)

Complete at least 1 of the following courses:

- ART167 - Experimental Photography
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom
- ART376 - Intro to Photo: Digital
- ART406 - Interm Photography: Darkroom
- ART409 - Advanced Photography
- ART410 - Interm Photography:Digital
- ART567 - Advanced Photography 2

OR

Option 3. Printmaking (3 credits)

Complete at least 1 of the following courses:

- ART361 - Survey Printmaking 1
- ART363 - Lithography Printmaking 1
- ART364 - Relief Printmaking 1
- ART365 - Intaglio Printmaking 1
- ART367 - Water Based Silkscreen 1
- ART463 - Lithography Printmaking 2
- ART464 - Relief Printmaking 2
- ART467 - Water Based Silkscreen 2
- ART468 - Mixed Media Printmaking
- ART469 - Contemp Issues in Printmaking

OR

Option 4. Ceramics (3 credits)

Complete at least 1 of the following courses:

- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing
- ART297 - Ceramics 2
  OR ART297H - Hon: Ceramics 2
- ART396 - Ceramics 3
- ART497 - Ceramics 4
  OR ART497H - H: Ceramics 4

OR

Option 5. Fine Art Metals (3 credits)

Complete at least 1 of the following courses:

- ART291 - Intro: Fine Art Metals/Jewelry
- ART391 - Fine Art Metals: Casting
- ART491 - Fine Art Metals: Form Emphasis
- ART492 - Advancd Fine Art Metal/ Jewelry

OR

Option 6. Sculpture (3 credits)

Complete at least 1 of the following courses:

- ART282 - Sculpture 1
- ART382 - Sculpture 2
- ART482 - Sculpture 3
- ART483 - Sculpture 4

OR

Option 7. Interactive & Graphic Design (3 credits)

Complete at least 1 of the following courses:

- DESN144 - Digital Theory and Skills **OR** DESN144H - H: Digital Theory and Skills
- DESN225 - Visual Storytelling and Comics
- DESN240 - Typography I
- DESN244 - Typography 2
- DESN246 - Intro Sequence/Motion/Vis Comm
- DESN247 - Intro to Web, Experience and Interaction Design
- DESN332 - Material Design
- DESN340 - Interaction Design
- DESN341 - Motion Design
- DESN342 - Kinetic Design and Animation
- DESN343 - Experience Design
- DESN347 - Design for Social Equity
- DESN348 - Packaging in Design
- DESN349 - Information Design
- DESN375 - Illustration
- DESN444 - Vis Comm and Graphcs Design 2
- DESN446 - Advanced Computers In Design
- DESN447 - Advanced Web Design

OR

Option 8. Convergent Art (3 credits)

Complete at least 1 of the following courses:

- ART140 - Digital Foundations of Art
- ART345 - Introduction to Computer Art **OR** ART345H - Hon: Introduction to Computer Art
- ART331 - Book Arts
- ART445 - Advanced Computer Art
- ART368 - Collage

OR

Option 9. Drawing (3 credits)

Complete at least 1 of the following courses:

- ART233 - Drawing 2
- ART333 - Drawing 3
- ART433 - Drawing 4

Choose 1 course from 3 of the sets.

AND

Upper Level Course (3 credits)

Complete at least 1 of the following courses:

- ART297 - Ceramics 2 **OR** ART297H - Hon: Ceramics 2
- ART333 - Drawing 3
- ART354 - Painting 2 **OR** ART354H - H: Painting 2
- ART382 - Sculpture 2
- ART391 - Fine Art Metals: Casting
- ART476 - Picturing the Body
- ART477 - Photography as Narrative
- ART478 - Documentary Photography
- ART463 - Lithography Printmaking 2
- ART464 - Relief Printmaking 2
- ART465 - Intaglio Printmaking 2
- ART467 - Water Based Silkscreen 2
- DESN343 - Experience Design
- DESN344 - Visual Communication and Graphics Design 1 **OR** DESN344H - H: Visual Communication

and Graphics Design 1
- DESN346 - Intro to Computers in Design
- DESN347 - Design for Social Equity
- DESN348 - Packaging in Design
- DESN349 - Information Design
- DESN375 - Illustration

Take one course at the second level of a studio discipline

AND

Capstone Course (3 credits)

Complete at least 1 of the following courses:
- ART490 - Beyond Makng Strat for Success
- ART494 - Studio Capstone:
- DESN493 - Capstone: Portfolio

AND

Other Art Electives (18 credits)

Earn at least 18 credits from the following:
- Any ART course(s)
- Any DESN course(s)

Note: This requirement may not be satisfied with ART100 Art in Culture or ART141.

ART electives needed to total 48 in the major. Any ART courses taken in excess of 48 will count toward major GPA.

Interactive and Graphic Design, B.Des.

Overview

The department of Art & Design's newest degree, a Bachelor of Design (B.Des.) in Interactive and Graphic Design, was created to keep students on the cusp of this constantly changing and exciting discipline. This program ensures that students are able to keep up with current trends and technological demands in the design industry. Your study will be grounded in courses about design theory, skills, application, and analysis. From there, you can pursue your interests in experience design, kinetic design, web design, basic coding, interactive design, graphic design, and more. The B.Des. in Interactive & Graphic Design gives our students the skills that most employers are now seeking within the design industry.

Curriculum

Simple Requirements

Major in Interactive & Graphic Design, BDES (75 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Foundation Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:
- ART133 - Drawing 1
- ART142 - 2D Design

AND

3D Design or 3D Digital Design (3 credits)

Complete at least 1 of the following courses:
- ART242 - 3D Design
- DESN243 - Creativity, Innovation & Human-Centered Design Thinking

AND

Interactive & Graphic Design Foundation Courses (18 credits)

Complete ALL of the following Courses:

- DESN144 - Digital Theory and Skills
  OR DESN144H - H: Digital Theory and Skills
- DESN240 - Typography I
- DESN244 - Typography 2
- DESN246 - Intro Sequence/Motion/Vis Comm
- DESN247 - Intro to Web, Experience and Interaction Design
- DESN344 - Visual Communication and Graphics Design 1
  OR DESN344H - H: Visual Communication and Graphics Design 1

AND

Art & Design History Courses (12 credits)

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ART203 - Survey Art History 2: 1400 through 20th Century
- DESN307 - Visual Communication Design History
  OR DESN307H - Hon: Visual Communication Design History

AND

Art History Electives (6 hours)

Complete at least 2 of the following courses:

- ART201 - History and Aesthetics of Photography
  OR ART201H - H:History and Aesthetics of Photography
- ART202 - Survey of Art History 1: Prehistoric to c 1400
- ART301 - The Ancient World
- ART302 - The Italian Renaissance
- ART303 - The 19th Century
- ART304 - The 20th Century
- ART305 - Women in Art
- ART313 - Art in America
- ART403 - Northern Renaissance
  OR ART403H - Hnrs:Northern Renaissance
- ART404 - Contemporary Movements in Art
- ART587 - Topics In Art Education
- ART588 - Art Hist Top:

AND

Required Interactive & Graphic Design

Fulfill ALL of the following requirements:

Graphic Design (9 credits)

Complete at least 3 of the following courses:

- DESN347 - Design for Social Equity
- DESN348 - Packaging in Design
- DESN349 - Information Design
- DESN375 - Illustration
- DESN444 - Vis Comm and Graphcs Design 2
- DESN480 - Sp Topics in Design

AND

Interactive Design (9 credits)

Complete at least 3 of the following courses:

- DESN340 - Interaction Design
- DESN341 - Motion Design
- DESN342 - Kinetic Design and Animation
- DESN343 - Experience Design
- DESN447 - Advanced Web Design
- DESN480 - Sp Topics in Design

AND

BDES Intermediate Design Review Needed

During the semester in which 60-75 credits will be complete, a BDES student must submit a Portfolio Review Application for continuance in the BDES Degree Program. Failure to do so may result in suspension from the program.

AND

Interactive & Graphic Design Concentration Electives (15 credits)

Earn at least 15 credits from the following:

- DESN225 - Visual Storytelling and Comics
- DESN300 - Internship/Co-op in Design
- DESN332 - Material Design
- DESN340 - Interaction Design
- DESN341 - Motion Design
- DESN342 - Kinetic Design and Animation
- DESN343 - Experience Design
- DESN347 - Design for Social Equity
- DESN348 - Packaging in Design
- DESN349 - Information Design
- DESN375 - Illustration
- DESN444 - Vis Comm and Graphcs Design 2
- DESN446 - Advanced Computers In Design
- DESN447 - Advanced Web Design
- DESN480 - Sp Topics in Design
- ART345 - Introduction to Computer Art
  OR ART345H - Hon: Introduction to Computer Art
- ART445 - Advanced Computer Art
- ART300 - Co-Op Ed Experience in Art

ART486 Sp Topics: Topics can be included as a Design & Interactive Elective if the topic is applicable. Please have your advisor notify Degree.Audit@millersville.edu if a topics course is approved.

AND

Capstone: Portfolio (3 credits)

Complete ALL of the following Courses:

- DESN493 - Capstone: Portfolio

Req Related for Interactive and Graphic Design (3 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related Elective (3 credits)

Complete at least 1 of the following courses:

- COMM201 - Theory of Communication
- COMM227 - Movements & Digital Activism
- THEA312 - Hist/Princpls of Stage Design
- THEA340 - History of Theatre 1
- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- WRIT342 - Reading/Writing for Civic Chng
- ENGL482 - Film and American Society
- ENGL483 - Politics, Film & Electronic Media
  OR ENGL483H - H:Politics, Film & Electronic Media
- ENGL484 - Sci Fiction, Technology & Film
- MUSI100 - Music and Culture
- PHIL327 - Philosophy in Film
- PHIL383 - Philosophy of Art
- SOSC203H - H:Exploratns in Hist of Ideas
- SOCI307 - African-Americn Social Thought
- ANTH222 - American Indian
- ANTH227 - Culture Through Film

Art, B.F.A.

Overview

Due to the extensive preparation, this degree is considered the "professional" art degree and prepares students to pursue a career or establish their own businesses in art. Graduates may sell their work through various art and craft show circuits, open their own galleries, accept freelance work for clients, or start their own graphic design agencies. Additionally, this program prepares students who wish to continue their education and acquire M.A. (Master of Art) or M.F.A (Master of Fine Art).

Curriculum

Simple Requirements

Major in Art, BFA

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Art & Design Courses (21 credits)

Fulfill ALL of the following requirements:

Required Courses (18 credits)

Complete ALL of the following Courses:

- ART133 - Drawing 1
- ART233 - Drawing 2
- ART333 - Drawing 3
- ART142 - 2D Design
- ART202 - Survey of Art History 1: Prehistoric to c 1400
- ART203 - Survey Art History 2: 1400 through 20th Century

AND

3D Design or 3D Digital Design (3 credits)

Complete at least 1 of the following courses:

- ART242 - 3D Design
- DESN243 - Creativity, Innovation & Human-Centered Design Thinking

AND

Art History (6 credits)

Complete at least 2 of the following courses:

- ART201 - History and Aesthetics of Photography
  OR ART201H - H:History and Aesthetics of Photography
- ART301 - The Ancient World
- ART302 - The Italian Renaissance
- ART303 - The 19th Century
- ART304 - The 20th Century
- ART305 - Women in Art
- ART313 - Art in America
- ART403 - Northern Renaissance
  OR ART403H - Hnrs:Northern Renaissance
- ART404 - Contemporary Movements in Art
- ART588 - Art Hist Top:
- ART589 - Topics In Art History
- DESN307 - Visual Communication Design History
  OR DESN307H - Hon: Visual Communication Design History

AND

Studio Courses

Complete at least 5 of the following:

Option 1. Painting & Watercolor (3 credits)

Complete at least 1 of the following courses:

- ART352 - Painting 1
- ART353 - Watercolor 1
- ART354 - Painting 2
  OR ART354H - H: Painting 2
- ART355 - Watercolor 2
- ART452 - Painting 3
- ART454 - Painting 4
- ART552 - Painting
- ART554 - Painting
- ART553 - Watercolor
- ART555 - Water Color and Related Media

OR

Option 2. Photography (3 credits)

Complete at least 1 of the following courses:

- ART167 - Experimental Photography
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom
- ART376 - Intro to Photo: Digital
- ART406 - Interm Photography: Darkroom
- ART409 - Advanced Photography
- ART410 - Interm Photography:Digital
- ART476 - Picturing the Body
- ART477 - Photography as Narrative
- ART478 - Documentary Photography
- ART567 - Advanced Photography 2

OR

Option 3. Printmaking (3 credits)

Complete at least 1 of the following courses:

- ART361 - Survey Printmaking 1
- ART363 - Lithography Printmaking 1
- ART364 - Relief Printmaking 1
- ART365 - Intaglio Printmaking 1
- ART367 - Water Based Silkscreen 1
- ART368 - Collage
- ART463 - Lithography Printmaking 2
- ART464 - Relief Printmaking 2
- ART465 - Intaglio Printmaking 2
- ART467 - Water Based Silkscreen 2
- ART468 - Mixed Media Printmaking
- ART469 - Contemp Issues in Printmaking
- ART563 - Printmaking
- ART564 - Printmaking

OR

Option 4. Sculpture (3 credits)

Complete at least 1 of the following courses:

- ART282 - Sculpture 1
- ART382 - Sculpture 2
- ART482 - Sculpture 3
- ART483 - Sculpture 4
- ART582 - Sculpture
- ART583 - Sculpture

OR

Option 5. Graphic/Interactive Design (3 credits)

Complete at least 1 of the following courses:

- ART140 - Digital Foundations of Art
- DESN144 - Digital Theory and Skills
  OR DESN144H - H: Digital Theory and Skills
- DESN225 - Visual Storytelling and Comics
- DESN240 - Typography I
- DESN244 - Typography 2
- DESN246 - Intro Sequence/Motion/Vis Comm
- DESN247 - Intro to Web, Experience and Interaction Design
- DESN332 - Material Design
- DESN340 - Interaction Design
- DESN341 - Motion Design
- DESN342 - Kinetic Design and Animation
- DESN343 - Experience Design
- DESN344 - Visual Communication and Graphics Design 1
  OR DESN344H - H: Visual Communication and Graphics Design 1
- DESN347 - Design for Social Equity
- DESN348 - Packaging in Design
- DESN349 - Information Design
- DESN375 - Illustration
- DESN444 - Vis Comm and Graphcs Design 2
- DESN446 - Advanced Computers In Design
- DESN447 - Advanced Web Design

OR

Option 6. Ceramics (3 credits)

Complete at least 1 of the following courses:

- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing
- ART297 - Ceramics 2
  OR ART297H - Hon: Ceramics 2
- ART396 - Ceramics 3
- ART497 - Ceramics 4
  OR ART497H - H: Ceramics 4
- ART596 - Ceramics

OR ART596H - Hon: Ceramics
- ART597 - Ceramics

OR

Option 7. Fine Art Metals (3 credits)

Complete at least 1 of the following courses:
- ART291 - Intro: Fine Art Metals/Jewelry
- ART391 - Fine Art Metals: Casting
- ART491 - Fine Art Metals: Form Emphasis
- ART492 - Advancd Fine Art Metal/ Jewelry
- ART591 - Fine Art Metals
- ART592 - Fine Art Metals

OR

Option 8. Convergent Art (3 credits)

Complete at least 1 of the following courses:
- ART140 - Digital Foundations of Art
- ART331 - Book Arts
- ART345 - Introduction to Computer Art **OR** ART345H - Hon: Introduction to Computer Art
- ART368 - Collage
- ART445 - Advanced Computer Art
- ART494 - Studio Capstone:

OR

Option 9. Drawing (3 credits)

Complete at least 1 of the following courses:
- ART433 - Drawing 4
- ART533 - Drawing
- ART534 - Drawing

ART486 Sp Topics: Topics can be included in an area if applicable.

AND

Studio Concentration

See separate block

AND

Required Seminar or Capstone Course (3 credits)

Complete at least 1 of the following courses:
- ART490 - Beyond Makng Strat for Success
- ART494 - Studio Capstone:
- DESN493 - Capstone: Portfolio

AND

60-75 Credit BFA Portfolio Review Needed

During the semester following the completion of 60 credits, a BFA student must participate in a Portfolio Review for continuance in the BFA Degree Program. Failure to do so may result in suspension from the program.

AND

BFA Professional Portfolio & Senior Exhibition Needed

For completion of the major, BFA students must successfully complete the BFA Professional Portfolio & Slides and a BFA Senior Exhibition.

AND

Art Electives

Complete at least 5 courses in the following course sets:
- Any ART course(s)
- Any DESN course(s)

Note: This requirement may not be satisfied with ART100 Art in Culture or ART141.

ART electives needed to total 75 in the major. Any ART courses taken in excess of 75 will count toward major GPA.

BFA Studio Concentration

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Studio Art Concentration

Complete at least 1 of the following:

Option 1. Painting & Watercolor (15 credits)

Earn at least 15 credits from the following:

- ART352 - Painting 1
- ART353 - Watercolor 1
- ART354 - Painting 2
  OR ART354H - H: Painting 2
- ART355 - Watercolor 2
- ART452 - Painting 3
- ART552 - Painting
- ART554 - Painting
- ART553 - Watercolor
- ART555 - Water Color and Related Media
- ART486 - Sp Topics:

OR

Option 2. Photography (15 credits)

Earn at least 15 credits from the following:

- ART167 - Experimental Photography
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom
- ART376 - Intro to Photo: Digital
- ART406 - Interm Photography: Darkroom
- ART409 - Advanced Photography
- ART410 - Interm Photography:Digital
- ART476 - Picturing the Body
- ART477 - Photography as Narrative
- ART478 - Documentary Photography
- ART567 - Advanced Photography 2

OR

Option 3. Printmaking (15 credits)

Earn at least 15 credits from the following:

- ART361 - Survey Printmaking 1
- ART363 - Lithography Printmaking 1
- ART364 - Relief Printmaking 1
- ART365 - Intaglio Printmaking 1
- ART367 - Water Based Silkscreen 1
- ART368 - Collage
- ART463 - Lithography Printmaking 2
- ART464 - Relief Printmaking 2
- ART465 - Intaglio Printmaking 2
- ART467 - Water Based Silkscreen 2
- ART468 - Mixed Media Printmaking
- ART469 - Contemp Issues in Printmaking
- ART563 - Printmaking
- ART564 - Printmaking

OR

Option 4. Sculpture (15 credits)

Earn at least 15 credits from the following:

- ART282 - Sculpture 1
- ART382 - Sculpture 2
- ART482 - Sculpture 3
- ART483 - Sculpture 4
- ART582 - Sculpture
- ART583 - Sculpture

OR

Option 5. Graphic/Interactive Design (15 credits)

Earn at least 15 credits from the following:

- DESN144 - Digital Theory and Skills
  OR DESN144H - H: Digital Theory and Skills
- DESN240 - Typography I
- DESN244 - Typography 2
- DESN246 - Intro Sequence/Motion/Vis Comm
- DESN247 - Intro to Web, Experience and Interaction Design
- DESN340 - Interaction Design
- DESN341 - Motion Design
- DESN342 - Kinetic Design and Animation
- DESN343 - Experience Design
- DESN344 - Visual Communication and Graphics Design 1
  OR DESN344H - H: Visual Communication and Graphics Design 1
- ART345 - Introduction to Computer Art
  OR ART345H - Hon: Introduction to Computer Art

- DESN347 - Design for Social Equity
- DESN348 - Packaging in Design
- DESN349 - Information Design
- DESN375 - Illustration
- DESN444 - Vis Comm and Graphcs Design 2
- DESN446 - Advanced Computers In Design
- DESN447 - Advanced Web Design
- DESN332 - Material Design

OR

Option 6. Ceramics (15 credits)

Earn at least 15 credits from the following:

- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing
- ART297 - Ceramics 2
  OR ART297H - Hon: Ceramics 2
- ART396 - Ceramics 3
- ART497 - Ceramics 4
  OR ART497H - H: Ceramics 4
- ART596 - Ceramics
  OR ART596H - Hon: Ceramics
- ART597 - Ceramics

OR

Option 7. Fine Art Metals (15 credits)

Earn at least 15 credits from the following:

- ART291 - Intro: Fine Art Metals/Jewelry
- ART391 - Fine Art Metals: Casting
- ART491 - Fine Art Metals: Form Emphasis
- ART492 - Advancd Fine Art Metal/ Jewelry
- ART591 - Fine Art Metals
- ART592 - Fine Art Metals

OR

Option 8. Convergent Art (15 credits)

Earn at least 15 credits from the following:

- ART140 - Digital Foundations of Art
- ART331 - Book Arts
- ART345 - Introduction to Computer Art
  OR ART345H - Hon: Introduction to Computer Art
- ART368 - Collage
- ART445 - Advanced Computer Art
- ART486 - Sp Topics:
- ART494 - Studio Capstone:

OR

Option 9. Drawing (15 credits)

Earn at least 15 credits from the following:

- ART433 - Drawing 4
- ART533 - Drawing
- ART534 - Drawing

ART486 Sp Topics: Topics can be included in an area if applicable.

Req Related for Bachelor of Fine Arts (3 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related Course Elective (3 credits)

Complete at least 1 of the following courses:

- COMM201 - Theory of Communication
- COMM227 - Movements & Digital Activism
- THEA312 - Hist/Princpls of Stage Design
- THEA340 - History of Theatre 1
- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- WRIT342 - Reading/Writing for Civic Chng
- ENGL482 - Film and American Society
- ENGL483 - Politics, Film & Electronic Media
  OR ENGL483H - H:Politics, Film & Electronic Media
- ENGL484 - Sci Fiction, Technology & Film
- MUSI100 - Music and Culture

- PHIL327 - Philosophy in Film
- PHIL383 - Philosophy of Art
- SOSC203H - H:Exploratns in Hist of Ideas
- SOCI307 - African-Americn Social Thought
- ANTH222 - American Indian
- ANTH227 - Culture Through Film

Art Education, B.S.Ed.

Overview

Millersville University's Art Education program will cultivate your passion for art and prepare you to share that passion with others. The program, which culminates in a Bachelor of Science in Education degree, is designed for students who aspire to become art teachers. Upon completion, you will be eligible for certification to teach students grades K-12 in the state of Pennsylvania. With Pennsylvania's high standards for teacher preparation, graduates from MU's Art Education program are recruited both regionally and nationally.

Curriculum

Simple Requirements

Major in Art Education, BSE (60 credits)

Type
Completion Requirement

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

Minimum GPA

Earn a minimum GPA of 2.0

Requirements

Fulfill ALL of the following requirements:

Required Art & Design Courses

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- ART133 - Drawing 1
- ART233 - Drawing 2
- ART142 - 2D Design

AND

3D Design or 3D Digital Design (3 credits)

Complete at least 1 of the following courses:

- ART242 - 3D Design
- DESN243 - Creativity, Innovation & Human-Centered Design Thinking

AND

Required Art Education Courses (9 credits)

Complete ALL of the following Courses:

- ART221 - Introduction to Art Education
- ART324 - Designing Meaningful Art Education Experiences
- ART325 - Methodology and Pedagogy of Art

AND

Art History Required Courses (6 credits)

Complete ALL of the following Courses:

- ART202 - Survey of Art History 1: Prehistoric to c 1400
- ART203 - Survey Art History 2: 1400 through 20th Century

AND

Additional Art History (6 credits)

Complete at least 2 of the following courses:

- ART201 - History and Aesthetics of Photography
  OR ART201H - H:History and Aesthetics of Photography
- ART301 - The Ancient World
- ART302 - The Italian Renaissance
- ART303 - The 19th Century
- ART304 - The 20th Century
- ART305 - Women in Art
- ART313 - Art in America
- ART403 - Northern Renaissance
  OR ART403H - Hnrs:Northern Renaissance
- ART404 - Contemporary Movements in Art
- ART588 - Art Hist Top:
- ART589 - Topics In Art History
- DESN307 - Visual Communication Design History
  OR DESN307H - Hon: Visual Communication Design History

AND

Required Studio Art Courses

Fulfill ALL of the following requirements:

Ceramics: Handbuilding or Ceramics: Wheel Throwing (3 credits)

Complete at least 1 of the following courses:

- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- ART352 - Painting 1
- ART361 - Survey Printmaking 1

AND

Sculpture I or Fine Art Metals I (3 credits)

Complete at least 1 of the following courses:

- ART282 - Sculpture 1
- ART291 - Intro: Fine Art Metals/Jewelry

AND

Photography or Typography (3 credits)

Complete at least 1 of the following courses:

- ART167 - Experimental Photography
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom
- ART376 - Intro to Photo: Digital
- DESN240 - Typography I

AND

Art Studio Electives (12 credits)

Earn at least 12 credits from the following:

- ART333 - Drawing 3
- ART352 - Painting 1
- ART353 - Watercolor 1
- ART354 - Painting 2
  OR ART354H - H: Painting 2

- ART355 - Watercolor 2
- ART433 - Drawing 4
- ART452 - Painting 3
- ART454 - Painting 4
- ART533 - Drawing
- ART534 - Drawing
- ART552 - Painting
- ART554 - Painting
- ART553 - Watercolor
- ART555 - Water Color and Related Media
- ART167 - Experimental Photography
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom
- ART376 - Intro to Photo: Digital
- ART406 - Interm Photography: Darkroom
- ART409 - Advanced Photography
- ART410 - Interm Photography:Digital
- ART567 - Advanced Photography 2
- ART361 - Survey Printmaking 1
- ART363 - Lithography Printmaking 1
- ART364 - Relief Printmaking 1
- ART365 - Intaglio Printmaking 1
- ART367 - Water Based Silkscreen 1
- ART368 - Collage
- ART463 - Lithography Printmaking 2
- ART464 - Relief Printmaking 2
- ART465 - Intaglio Printmaking 2
- ART467 - Water Based Silkscreen 2
- ART468 - Mixed Media Printmaking
- ART469 - Contemp Issues in Printmaking
- ART563 - Printmaking
- ART564 - Printmaking
- ART282 - Sculpture 1
- ART291 - Intro: Fine Art Metals/Jewelry
- ART382 - Sculpture 2
- ART482 - Sculpture 3
- ART483 - Sculpture 4
- ART582 - Sculpture
- ART583 - Sculpture
- ART140 - Digital Foundations of Art
- DESN144 - Digital Theory and Skills
  OR DESN144H - H: Digital Theory and Skills
- DESN240 - Typography I
- DESN244 - Typography 2
- DESN246 - Intro Sequence/Motion/Vis Comm
- DESN247 - Intro to Web, Experience and Interaction Design
- DESN340 - Interaction Design
- DESN341 - Motion Design
- DESN342 - Kinetic Design and Animation
- DESN343 - Experience Design
- DESN344 - Visual Communication and Graphics Design 1
  OR DESN344H - H: Visual Communication and Graphics Design 1
- ART345 - Introduction to Computer Art
  OR ART345H - Hon: Introduction to Computer Art
- DESN347 - Design for Social Equity
- DESN348 - Packaging in Design
- DESN349 - Information Design
- DESN375 - Illustration
- DESN444 - Vis Comm and Graphcs Design 2
- ART445 - Advanced Computer Art
- DESN446 - Advanced Computers In Design
- DESN447 - Advanced Web Design
- DESN225 - Visual Storytelling and Comics
- DESN332 - Material Design
- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing
- ART297 - Ceramics 2
  OR ART297H - Hon: Ceramics 2
- ART396 - Ceramics 3
- ART497 - Ceramics 4
  OR ART497H - H: Ceramics 4
- ART596 - Ceramics
  OR ART596H - Hon: Ceramics
- ART597 - Ceramics
- ART291 - Intro: Fine Art Metals/Jewelry
- ART391 - Fine Art Metals: Casting
- ART491 - Fine Art Metals: Form Emphasis
- ART492 - Advancd Fine Art Metal/Jewelry
- ART591 - Fine Art Metals
- ART592 - Fine Art Metals
- ART486 - Sp Topics:
- DESN493 - Capstone: Portfolio

Professional Education (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- EDAR461 - Elem Stu Tch: Art

Req Related for Art Education (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related Courses

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent

Advanced Professional Studies, BSE

Type
Completion Requirement

APS Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Courses

ART100 - Art in Culture

Course Information

Course Title
Art in Culture

Subject code	Course Number	Academic Level
ART	100	Undergraduate

Course Description
A general study of the role of historical and contemporary art in society. Critical analysis of art that addresses the following: What is art? Why is it made? How is it made? What is the context in which it was created? An understanding of the importance of art and of the creative process. Does not count towards any art major. Offered fall, spring, periodically summer.

Gateway Stage Labels
Creative Exploration (CE)

ART100H - Hon: Art in Culture

Course Information

Course Title
Hon: Art in Culture

Subject code	Course Number	Academic Level
ART	100H	Undergraduate

Gateway Stage Labels
Creative Exploration (CE)

ART128 - Art Integration

Course Information

Course Title
Art Integration

Subject code	Course Number	Academic Level
ART	128	Undergraduate

Course Description
This course provides education majors with a theoretical and practical knowledge base about art and its role in learning. Topics to be explored include: art vocabulary; children's artistic development; art resources, media, materials, tools and techniques; and how these elements are appropriately and authentically incorporated into other content areas. This will provide the prospective educator with the fundamentals for developing an interdisciplinary approach to teaching art across the curriculum.

Gateway Stage Labels
Creative Exploration (CE), Problem Solving (PS)

Simple Requirements

Restricted to Education Majors Only

Type
Prerequisite

Restricted to Education Majors Only

Restricted to Education Majors Only

ART133 - Drawing 1

Course Information

Course Title
Drawing 1

Subject code	Course Number	Academic Level
ART	133	Undergraduate

Course Description
Introduces drawing as artistic expression as well as a form of nonverbal communication. Traditional and contemporary perspectives. Emphasis on original creative solutions to visual problems. Students explore artistic composition employing various drawing media and techniques. Includes criticism, analysis and evaluation. For both the non-art major and the art major. Offered in fall, spring and periodically in summer.

Gateway Stage Labels
Creative Exploration (CE)

ART140 - Digital Foundations of Art

Course Information

Course Title
Digital Foundations of Art

Subject code	Course Number	Academic Level
ART	140	Undergraduate

Course Description
An introductory studio course that allows for investigation of contemporary digital media methods used by artists and designers. Image making will utilize raster, vector, and interactive techniques. Primary course emphasis is on creative problem solving followed by technical skill building while using the computer as a tool.

ART142 - 2D Design

Course Information

Course Title
2D Design

Subject code	Course Number	Academic Level
ART	142	Undergraduate

Course Description
Introduces two-dimensional design and composition, applicable to all art forms, in which students seek original, creative solutions to problems. Design principles and methods are employed as students learn language and visual communications techniques. Artistic production, criticism, analysis and evaluation are central to this course. For both non-art and art majors. Offered in fall, spring.

ART167 - Experimental Photography

Course Information

Course Title
Experimental Photography

Subject code	Course Number	Academic Level
ART	167	Undergraduate

Course Description
Nontraditional, historical and hybrid photographic processes are explored, including pin-hole cameras, photograms and antique processes. Covers criticism, history, analysis and mounting prints for display. Students do not need a camera. Offered fall.

Gateway Stage Labels
Creative Exploration (CE)

ART179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ART	179	Undergraduate

Course Description
Experimental

ART201 - History and Aesthetics of Photography

Course Information

Course Title
History and Aesthetics of Photography

Subject code	Course Number	Academic Level
ART	201	Undergraduate

Course Description
A survey of the history, principles and theory of photography in the 19th and 20th centuries as it is used as an aesthetic medium and for visual communication. Differentiation between photographs made as art vs. snapshots, photojournalism, scientific record and commercial art is emphasized. Offered periodically.

ART201H - H:History and Aesthetics of Photography

Course Information

Course Title
H:History and Aesthetics of Photography

Subject code	Course Number	Academic Level
ART	201H	Undergraduate

Course Description
H:Hist and Aesthtcs of Photog

ART202 - Survey of Art History 1: Prehistoric to c 1400

Course Information

Course Title
Survey of Art History 1: Prehistoric to c 1400

Subject code	Course Number	Academic Level
ART	202	Undergraduate

Course Description
This course is an introduction to art and to the discipline of art history, beginning with Prehistory through the early Italian Renaissance. The course focuses on the functions and meanings of individual works of art, visual culture, and art history as a discipline. It is designed as an introduction to art history for both non-art and art majors. Offered fall, spring.

ART203 - Survey Art History 2: 1400 through 20th Century

Course Information

Course Title
Survey Art History 2: 1400 through 20th Century

Subject code	Course Number	Academic Level
ART	203	Undergraduate

Course Description
This course is an introduction to art and to the discipline of art history, beginning with the early Italian Renaissance period through the 20th century. The course focuses on the functions and meanings of individual works of art, visual culture, and art history as a discipline. It is designed as an introduction to art history for both non-art and art majors. Offered fall, spring.

Gateway Stage Labels
Information Literacies (IL)

ART221 - Introduction to Art Education

Course Information

Course Title
Introduction to Art Education

Subject code	Course Number	Academic Level
ART	221	Undergraduate

Course Description
An overview of art education with particular emphasis on historical and contemporary rationales for teaching art, the identification of authentic assessment practices, and the observation of art instruction and alternative career options through a variety of field experiences. Offered fall, spring. Art majors only.

ART233 - Drawing 2

Course Information

Course Title
Drawing 2

Subject code	Course Number	Academic Level
ART	233	Undergraduate

Course Description
Fundamental drawing skills are stressed and personal expression is emphasized. A variety of techniques and observational exercises will be used. Working from the figure, short and extended studies will be developed. Offered in fall, spring and periodically in summer. Prereq: ART 133.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133

Complete ALL of the following Courses:
- ART133 - Drawing 1

ART242 - 3D Design

Course Information

Course Title
3D Design

Subject code	Course Number	Academic Level
ART	242	Undergraduate

Course Description
Introduces visual composition as related to organizing and working with three-dimensional space. The student seeks original, creative solutions to visual problems by exploring methods and techniques. Covers fundamental visual grammar and principles. Offered in fall, spring. Prereq: ART 142.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 142

Complete ALL of the following Courses:
- ART142 - 2D Design

ART243 - 3D Digital Design

Course Information

Course Title
3D Digital Design

Subject code	Course Number	Academic Level
ART	243	Undergraduate

Course Description
Introduces visual composition related to organizing and working with digital three-dimensional space and digital fabrication. The student seeks original, creative solutions to visual problems by exploring methods and techniques. Covers fundamental visual grammar and principles. Offered in summer.

ART279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ART	279	Undergraduate

Course Description
Experimental

ART282 - Sculpture 1

Course Information

Course Title
Sculpture 1

Subject code	Course Number	Academic Level
ART	282	Undergraduate

Course Description
An introduction to sculpture as a three-dimensional form of artistic expression, through a variety of sculptural approaches. Covers the critical, the productive, and the evaluative aspects of sculpture as art. Offered fall, spring.

ART291 - Intro: Fine Art Metals/Jewelry

Course Information

Course Title
Intro: Fine Art Metals/Jewelry

Subject code	Course Number	Academic Level
ART	291	Undergraduate

Course Description
Introduces jewelry and metals as a form of artistic expression. The student seeks creative solutions to visual problems while employing various metal working techniques and media. Emphasizes basic techniques of cutting, piercing, soldering, forging, forming and finishes of non-ferrous metals. Critical analysis and evaluation of jewelry and metal art are central to the course. For both art majors and non-art majors. Offered in fall and spring.

Gateway Stage Labels
Creative Exploration (CE), Technological Competency (TC)

ART295 - Ceramics:Hand Building

Course Information

Course Title
Ceramics:Hand Building

Subject code	Course Number	Academic Level
ART	295	Undergraduate

Course Description
Introduces ceramic materials and the processes utilizing handbuilding and sculpting methods. Emphasis on the productive, critical, cultural and historical aspects of ceramics as a form of artistic expression. Students seek creative solutions to visual problems. Offered fall, spring.

ART296 - Ceramics:Wheel Throwing

Course Information

Course Title
Ceramics:Wheel Throwing

Subject code	Course Number	Academic Level
ART	296	Undergraduate

Course Description
Introduces ceramic materials and processes utilizing the potters wheel. Emphasis on the productive, critical, cultural and historical aspects of ceramics as a form of artistic expression. Wheel throwing and glazing techniques are employed as students seek original creative solutions relating to function and aesthetics. For both non-art and art majors.

ART297 - Ceramics 2

Course Information

Course Title
Ceramics 2

Subject code	Course Number	Academic Level
ART	297	Undergraduate

Course Description
Development of ceramic materials and processes as a means of self expression. Introduces glaze preparation, experimentation and basic glaze chemistry and firing techniques. Prereq: ART 295 or 296.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 295 or ART 296

Complete ANY of the following Courses:

- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing

ART297H - Hon: Ceramics 2

Course Information

Course Title
Hon: Ceramics 2

Subject code	Course Number	Academic Level
ART	297H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 295 or ART 296

Complete ANY of the following Courses:

- ART295 - Ceramics:Hand Building
- ART296 - Ceramics:Wheel Throwing

ART300 - Co-Op Ed Experience in Art

Course Information

Course Title
Co-Op Ed Experience in Art

Subject code	Course Number	Academic Level
ART	300	Undergraduate

Course Description
Co-Op Ed Experience in Art

ART301 - The Ancient World

Course Information

Course Title
The Ancient World

Subject code	Course Number	Academic Level
ART	301	Undergraduate

Course Description
A survey of Western painting and sculpture from the Paleolithic through the Hellenistic periods. Prereq: ART 202

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 202

Complete ALL of the following Courses:

- ART202 - Survey of Art History 1: Prehistoric to c 1400

ART302 - The Italian Renaissance

Course Information

Course Title
The Italian Renaissance

Subject code	Course Number	Academic Level
ART	302	Undergraduate

Course Description
A comprehensive analysis of painting and sculpture produced in Florence and Siena from the 13th through the 15th centuries. Prereq: ART 202 or by permission of instructor. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 202

Complete ALL of the following Courses:
- ART202 - Survey of Art History 1: Prehistoric to c 1400

Or must have permission of instructor.

ART303 - The 19th Century

Course Information

Course Title
The 19th Century

Subject code	Course Number	Academic Level
ART	303	Undergraduate

Course Description
A survey of European art of the 19th century. Offered periodically. Prereq: ART 203 or by permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 203

Complete ALL of the following Courses:
- ART203 - Survey Art History 2: 1400 through 20th Century

Or must have permission of instructor.

ART304 - The 20th Century

Course Information

Course Title
The 20th Century

Subject code	Course Number	Academic Level
ART	304	Undergraduate

Course Description
The varied schools and styles of painting and sculpture in the 20th century. Prereq: ENGL 110 and ART 203 or by permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 203

Complete ALL of the following Courses:
- ART203 - Survey Art History 2: 1400 through 20th Century

Or must have permission of instructor.

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ART305 - Women in Art

Course Information

Course Title
Women in Art

Subject code	Course Number	Academic Level
ART	305	Undergraduate

Course Description
This course will address ways in which gender issues have affected the visual arts, with an emphasis on art and culture since World War II. This class explores the role of the visual in constructing ideas of "woman" and the ways in which women artists have addressed these constructions in their works and in their lives. Students will critically examine the ways Western culture has defined art and artists in gendered terms, and will extend this study to contemporary art practice globally with attention to intersectionality and difference. Through weekly readings, class discussions, written assignments, oral presentations, and an exam, students will consider how gender is relevant to the creation and study of art and culture. This course is designed to be cross-listed within the Women and Gender Studies Program. No prior knowledge of art or art history is necessary.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ART306 - Intro Photography: Darkroom

Course Information

Course Title
Intro Photography: Darkroom

Subject code	Course Number	Academic Level
ART	306	Undergraduate

Course Description
Beginning black and white darkroom course with an emphasis on fine art, including operation of camera, developing film, making enlargements and mounting prints for display. Covers criticism, history and analysis. Students must have a 35mm single-lens reflex film camera with fully manual focusing/exposure capabilities. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

ART306H - H: Intro Photography: Darkroom

Course Information

Course Title
H: Intro Photography: Darkroom

Subject code	Course Number	Academic Level
ART	306H	Undergraduate

Gateway Stage Labels
Creative Exploration (CE)

ART313 - Art in America

Course Information

Course Title
Art in America

Subject code	Course Number	Academic Level
ART	313	Undergraduate

Course Description
A comprehensive survey of 18th and 19th century American painting, concentrating on those influences and traditions that were significant in the development of the art of the new world. Offered periodically. Prereq: ART 203 or by permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 203

Complete ALL of the following Courses:

- ART203 - Survey Art History 2: 1400 through 20th Century

Or must have permission of instructor.

ART324 - Designing Meaningful Art Education Experiences

Course Information

Course Title
Designing Meaningful Art Education Experiences

Subject code	Course Number	Academic Level
ART	324	Undergraduate

Course Description
Build on the rationales for art education addressed in ART 221 with an investigation into designing meaningful art education experiences for PK-12 students. Students will design art education experiences and will consider how policies at the state and local level influence how teachers enact curriculum in their classrooms. Offered annually. Prereq: ENGL 110, ART 221, EDFN 211, 241.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ART 221 and EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- ART221 - Introduction to Art Education
- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching

Other Requirement

Act 34/151 & FBI clearances & TB test results.

ART325 - Methodology and Pedagogy of Art

Course Information

Course Title
Methodology and Pedagogy of Art

Subject code	Course Number	Academic Level
ART	325	Undergraduate

Course Description
An examination of classroom strategies, materials and technologies used in teaching art to develop creative and critical thinking in all students. An emphasis on self-reflection and professionalism though team teaching and service learning in a variety of field experiences. Offered fall, spring. Prereq: Admission to Advanced Professional Studies, ENGL 110, ART 324.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ART 324

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- ART324 - Designing Meaningful Art Education Experiences

ART331 - Book Arts

Course Information

Course Title
Book Arts

Subject code	Course Number	Academic Level
ART	331	Undergraduate

Course Description
Explores the concept of the book as an art form. Emphasis will be on the use of sequencing to express artistic storytelling, narrative, multiples and one-of-a-kind books. Both traditional and contemporary bookbinding techniques will also be reviewed and utilized. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 142 or ART 133

Complete ANY of the following Courses:
- ART142 - 2D Design
- ART133 - Drawing 1

ART333 - Drawing 3

Course Information

Course Title
Drawing 3

Subject code	Course Number	Academic Level
ART	333	Undergraduate

Course Description
Continued drawing skill development using a variety of subjects including the figure. Traditional and nontraditional approaches to methods and materials are encouraged. Individual development of a personal idiom of expression will be required. Offered periodically. Prereq: ART 233. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 233

Complete ALL of the following Courses:
- ART233 - Drawing 2

ART345 - Introduction to Computer Art

Course Information

Course Title
Introduction to Computer Art

Subject code	Course Number	Academic Level
ART	345	Undergraduate

Course Description
Explores and develops design capabilities for aesthetic expression through the use of contemporary digital media. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133 and ART 142

Complete ALL of the following Courses:
- ART133 - Drawing 1
- ART142 - 2D Design

ART345H - Hon: Introduction to Computer Art

Course Information

Course Title
Hon: Introduction to Computer Art

Subject code	Course Number	Academic Level
ART	345H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133 and ART 142

Complete ALL of the following Courses:
- ART133 - Drawing 1
- ART142 - 2D Design

ART352 - Painting 1

Course Information

Course Title
Painting 1

Subject code	Course Number	Academic Level
ART	352	Undergraduate

Course Description
An introduction to painting in oil, acrylic and related media in which the student explores basic techniques and approaches to painting through the use of drawing, design and color. Offered in fall and spring. Prereq: ART 133, 142 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133

Complete ALL of the following Courses:
- ART133 - Drawing 1

ART 142

Complete ALL of the following Courses:
- ART142 - 2D Design

Or must have permission of instructor.

ART353 - Watercolor 1

Course Information

Course Title
Watercolor 1

Subject code	Course Number	Academic Level
ART	353	Undergraduate

Course Description
Introduces watercolor techniques through a series of problems related to the development of skill in handling the medium. Prereq: ART 133 and ART 142 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133

Complete ALL of the following Courses:
- ART133 - Drawing 1

ART 142

Complete ALL of the following Courses:
- ART142 - 2D Design

Or must have permission of instructor.

ART354 - Painting 2

Course Information

Course Title
Painting 2

Subject code	Course Number	Academic Level
ART	354	Undergraduate

Course Description
Continued development of painting skill with the emphasis on sustained individual development and technical expression. Offered in fall and spring. Prereq: ART 352 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 352

Complete ALL of the following Courses:
- ART352 - Painting 1

Or must have permission of instructor.

ART354H - H: Painting 2

Course Information

Course Title
H: Painting 2

Subject code	Course Number	Academic Level
ART	354H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 352

Complete ALL of the following Courses:
- ART352 - Painting 1

Or must have permission of instructor.

ART355 - Watercolor 2

Course Information

Course Title
Watercolor 2

Subject code	Course Number	Academic Level
ART	355	Undergraduate

Course Description
Continued development of painting in watercolor with the emphasis on sustained individual development and technical expression. Prereq: ART 353 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 353

Complete ALL of the following Courses:
- ART353 - Watercolor 1

Or must have permission of instructor.

ART361 - Survey Printmaking 1

Course Information

Course Title
Survey Printmaking 1

Subject code	Course Number	Academic Level
ART	361	Undergraduate

Course Description
Introduction to the four areas of printmaking: relief, intaglio, lithography, and silkscreen. Projects in each of these areas will develop technical skills and understanding of the physical nature of creating original prints. Issues of subject matter, content, and intent will be discussed and explored. Creative and original solutions to visual problems will be emphasized. Offered fall, spring. Prereq: ART 133, 142.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 142 and ART 133

Complete ALL of the following Courses:
- ART133 - Drawing 1
- ART142 - 2D Design

ART363 - Lithography Printmaking 1

Course Information

Course Title
Lithography Printmaking 1

Subject code	Course Number	Academic Level
ART	363	Undergraduate

Course Description
Explores multiple approaches to creating lithographic prints. Starts at an introductory level technically and builds with each new process into an intermediate understanding and working knowledge of the process. Covers stone lithography, aluminum plate lithography, and waterless lithography. Offered periodically. Prereq: ART 133, 142.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 142 and ART 133

Complete ALL of the following Courses:
- ART142 - 2D Design
- ART133 - Drawing 1

ART364 - Relief Printmaking 1

Course Information

Course Title
Relief Printmaking 1

Subject code	Course Number	Academic Level
ART	364	Undergraduate

Course Description
Explores multiple approaches to creating relief prints. Starts at an introductory level technically and builds into an intermediate understanding and working knowledge of the process. Covers linocut, alternative relief matrices, color reduction and multiple block relief printing. Offered periodically. Prereq: ART 133, 142

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 142 and ART 133

Complete ALL of the following Courses:
- ART142 - 2D Design
- ART133 - Drawing 1

ART365 - Intaglio Printmaking 1

Course Information

Course Title
Intaglio Printmaking 1

Subject code	Course Number	Academic Level
ART	365	Undergraduate

Course Description
Explores multiple approaches to creating intaglio prints. Starts at an introductory level technically and builds with each new process into an intermediate understanding and working knowledge of the process. The course will cover drypoint etching (hardground/ softground), aquatint and sugar lift, white ground, toner transfers, spitbite, and will introduce color printing (ala poupee/monoprinting). Offered periodically. Prereq: ART 133, 142.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 142 and ART 133

Complete ALL of the following Courses:
- ART142 - 2D Design
- ART133 - Drawing 1

ART367 - Water Based Silkscreen 1

Course Information

Course Title
Water Based Silkscreen 1

Subject code	Course Number	Academic Level
ART	367	Undergraduate

Course Description
Explores multiple approaches to creating water-based silkscreen prints. Starts at an introductory level technically and builds with each new process into an intermediate understanding and working knowledge of the process. Covers basic to intermediate stencil preparation including photographic processes. Offered periodically. Prereq: ART 133, 142.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 142 and ART 133

Complete ALL of the following Courses:
- ART142 - 2D Design
- ART133 - Drawing 1

ART368 - Collage

Course Information

Course Title
Collage

Subject code	Course Number	Academic Level
ART	368	Undergraduate

Course Description
Offers a historical look at the last 100 years of collage as a media for fine art. Highlights of its history will be discussed and followed by a hands-on application of the ideas and imagery that it encompasses. Offered infrequently. Prereq: ART 133, 142.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133 and ART 142

Complete ALL of the following Courses:

- ART133 - Drawing 1
- ART142 - 2D Design

ART376 - Intro to Photo: Digital

Course Information

Course Title
Intro to Photo: Digital

Subject code	Course Number	Academic Level
ART	376	Undergraduate

Course Description
Beginning digital course that introduces the basic skills and concepts associated with digital photography as used by contemporary visual artists and communicators. Covers cameras, computer hardware, photo-editing software, printing, file management, criticism, history and analysis. Students must have a digital single-lens reflex camera.

Gateway Stage Labels
Creative Exploration (CE), Technological Competency (TC)

ART379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ART	379	Undergraduate

Course Description
Experimental

ART382 - Sculpture 2

Course Information

Course Title
Sculpture 2

Subject code	Course Number	Academic Level
ART	382	Undergraduate

Course Description
Emphasis on continued development of individual artistic expression, with emphasis on contemporary sculptural approaches. Offered fall, spring. Prereq: ART 282.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 282

Complete ALL of the following Courses:

- ART282 - Sculpture 1

ART391 - Fine Art Metals: Casting

Course Information

Course Title
Fine Art Metals: Casting

Subject code	Course Number	Academic Level
ART	391	Undergraduate

Course Description
Continued development of individual artistic expression in jewelry and metals with the emphasis on artistic inventiveness and personal style. Covers lost wax casting for jewelry scale work, alternative casting methods, mold making, chain making and marriage of metals. Critical analysis and evaluation of jewelry and metal art are central to the course. Offered in fall and spring. Prereq: ART 291.

Gateway Stage Labels
Creative Exploration (CE), Technological Competency (TC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 291

Complete ALL of the following Courses:
- ART291 - Intro: Fine Art Metals/Jewelry

ART396 - Ceramics 3

Course Information

Course Title
Ceramics 3

Subject code	Course Number	Academic Level
ART	396	Undergraduate

Course Description
Development of the student's own investigation of material and means of self expression using ceramic materials and processes. An in-depth study related to the work being produced. Prereq: ART 297.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 297 or ART 297H

Complete ANY of the following Courses:
- ART297 - Ceramics 2
- ART297H - Hon: Ceramics 2

ART400 - Co-Op Ed Experience in Art

Course Information

Course Title
Co-Op Ed Experience in Art

Subject code	Course Number	Academic Level
ART	400	Undergraduate

Course Description
Co-Op Ed Experience in Art

ART403 - Northern Renaissance

Course Information

Course Title
Northern Renaissance

Subject code	Course Number	Academic Level
ART	403	Undergraduate

Course Description
An in-depth study of Flemish, Dutch, Bohemian and German painting from the 14th through 16th centuries. Offered periodically. Prereq: ART 202 or by permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 202

Complete ALL of the following Courses:
- ART202 - Survey of Art History 1: Prehistoric to c 1400

Or must have permission of instructor.

ART403H - Hnrs:Northern Renaissance

Course Information

Course Title
Hnrs:Northern Renaissance

Subject code	Course Number	Academic Level
ART	403H	Undergraduate

Course Description
Hnrs:The Northern Renaissance

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 202

Complete ALL of the following Courses:
- ART202 - Survey of Art History 1: Prehistoric to c 1400

Or must have permission of instructor.

ART404 - Contemporary Movements in Art

Course Information

Course Title
Contemporary Movements in Art

Subject code	Course Number	Academic Level
ART	404	Undergraduate

Course Description
An in-depth study of the contemporary art scene, including an exploration of its cultural and historical roots. Prereq: ENGL 110 and ART 203 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 203

Complete ALL of the following Courses:
- ART203 - Survey Art History 2: 1400 through 20th Century

Or must have permission of instructor.

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ART406 - Interm Photography: Darkroom

Course Information

Course Title
Interm Photography: Darkroom

Subject code	Course Number	Academic Level
ART	406	Undergraduate

Course Description
Intermediate photography course with an emphasis on fine art, self-expression and creating a body of work, including color techniques, black and white techniques, studio lighting techniques, making enlargements, presenting prints for display. Covers criticism, history and analysis. Students must have a 35mm single-lens reflex film camera with fully manual focusing/exposure capabilities. Offered fall, spring. Prereq: ART 306 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 306 or ART 306H

Complete ANY of the following Courses:
- ART306 - Intro Photography: Darkroom
- ART306H - H: Intro Photography: Darkroom

Or must have permission of instructor.

ART409 - Advanced Photography

Course Information

Course Title
Advanced Photography

Subject code	Course Number	Academic Level
ART	409	Undergraduate

Course Description
Advanced photography course with an emphasis on fine art, self-expression and creating a long-term body of work, including color techniques, black and white techniques, studio lighting techniques, digital techniques, making enlargements and presenting prints for display. Covers criticism, history and analysis. Students must have a 35mm single-lens reflex film or digital camera. Offered fall, spring. Prereq: ART 406 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 406

Complete ALL of the following Courses:

- ART406 - Interm Photography: Darkroom

Or must have permission of instructor.

ART410 - Interm Photography:Digital

Course Information

Course Title
Interm Photography:Digital

Subject code	Course Number	Academic Level
ART	410	Undergraduate

Course Description
Digital course with a focus on fine art, including operation of camera, using Adobe Photoshop software, editing images, outputting images, making prints and matting prints for display. Covers criticism, history and analysis. Students should have a digital single-lens reflex camera. Loan cameras are also available. Offered spring. Prereq: ART 142, 306.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 142 and ART 306 or ART 306H

Complete ALL of the following Courses:

- ART142 - 2D Design
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom

ART433 - Drawing 4

Course Information

Course Title
Drawing 4

Subject code	Course Number	Academic Level
ART	433	Undergraduate

Course Description
Advanced drawing in which individual style and technique are emphasized. An intensive course of independent research including creation of a portfolio. Prereq: ART 333. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 333

Complete ALL of the following Courses:
- ART333 - Drawing 3

ART445 - Advanced Computer Art

Course Information

Course Title
Advanced Computer Art

Subject code	Course Number	Academic Level
ART	445	Undergraduate

Course Description
Offered in fall and/or spring. Prereq: ART 345.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 345 or ART 345H

Complete ANY of the following Courses:
- ART345 - Introduction to Computer Art
- ART345H - Hon: Introduction to Computer Art

ART452 - Painting 3

Course Information

Course Title
Painting 3

Subject code	Course Number	Academic Level
ART	452	Undergraduate

Course Description
Further study in painting as the individual student works toward developing a personal idiom of expression. Offered in fall and spring. Prereq: ART 354 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 354 or ART 354H

Complete ANY of the following Courses:
- ART354 - Painting 2
- ART354H - H: Painting 2

Or must have permission of instructor.

ART454 - Painting 4

Course Information

Course Title
Painting 4

Subject code	Course Number	Academic Level
ART	454	Undergraduate

Course Description
An advanced course in which students continue to develop style and technique as they seek their own direction in painting. Offered in fall and spring. Prereq: ART 452 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 452

Complete ALL of the following Courses:
- ART452 - Painting 3

Or must have permission of instructor.

ART463 - Lithography Printmaking 2

Course Information

Course Title
Lithography Printmaking 2

Subject code	Course Number	Academic Level
ART	463	Undergraduate

Course Description
Explores multiple approaches to creating color lithography prints. A continuation of Lithography Printmaking I, this course technically builds with each new process into an advanced understanding and working knowledge of the process. Uses stone lithography, plate lithography, and waterless lithography to explore printed color and individual investigations into artmaking. Offered periodically. Prereq: ART 363.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 363

Complete ALL of the following Courses:
- ART363 - Lithography Printmaking 1

ART464 - Relief Printmaking 2

Course Information

Course Title
Relief Printmaking 2

Subject code	Course Number	Academic Level
ART	464	Undergraduate

Course Description
Builds on the information presented in Relief Print-making I. Starts at an intermediate level technically and builds with each process into an advanced understanding and working knowledge of the process. Covers linocut, woodcut, alternative relief matrices, color reduction, large format, mixed media, relief monoprinting, and multiple block relief printing. Students will be expected to develop a cohesive body of works from the projects and a personal investigation into artmaking. Offered periodically. Prereq: ART 364.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 364

Complete ALL of the following Courses:
- ART364 - Relief Printmaking 1

ART465 - Intaglio Printmaking 2

Course Information

Course Title
Intaglio Printmaking 2

Subject code	Course Number	Academic Level
ART	465	Undergraduate

Course Description
Explores multiple approaches to creating intaglio prints. Builds on the techniques in Intaglio Printmaking I and builds into an advanced understanding and working knowledge of the process. Covers sugar lift, white ground, toner transfers, spitbite, versacel, collograph solar plates, chine colle, ala poupee inking, monoprinting, and multiple plate color printing. Offered periodically. Prereq: ART 365.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 365

Complete ALL of the following Courses:
- ART365 - Intaglio Printmaking 1

ART467 - Water Based Silkscreen 2

Course Information

Course Title
Water Based Silkscreen 2

Subject code	Course Number	Academic Level
ART	467	Undergraduate

Course Description
Explores multiple approaches to creating water-based silkscreen prints. Starts technically with the information presented in Water-based Silkscreen I and builds into an advanced understanding and working knowledge of the process. Covers variations on previous stencil preparations and printing including large format, mixed media, and monoprinting. A strong focus will be on the application of the process to develop a body of work based on a personal investigation into artmaking. Offered periodically. Prereq: ART 367.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 367

Complete ALL of the following Courses:
- ART367 - Water Based Silkscreen 1

ART468 - Mixed Media Printmaking

Course Information

Course Title
Mixed Media Printmaking

Subject code	Course Number	Academic Level
ART	468	Undergraduate

Course Description
Explores the strengths of multiple printmaking techniques to create editions of color prints. Utilizes information previously covered in any of the 300-level printmaking courses. Starts at an intermediate technical level and builds into an advanced understanding and working knowledge of the printmaking process. Covers monoprinting, chine colle, collage, relief samples, electrostatic printmaking, solar plate etching, waterless lithography, hand coloring, and color printing. Offered periodically. Prereq: 300-level printmaking course.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 361 or ART 363 or ART 364 or ART 365 or ART 367

Complete ANY of the following Courses:
- ART361 - Survey Printmaking 1
- ART363 - Lithography Printmaking 1
- ART364 - Relief Printmaking 1
- ART365 - Intaglio Printmaking 1
- ART367 - Water Based Silkscreen 1

ART469 - Contemp Issues in Printmaking

Course Information

Course Title
Contemp Issues in Printmaking

Subject code	Course Number	Academic Level
ART	469	Undergraduate

Course Description
Explores current trends, conceptual applications and contemporary formats surrounding printmaking. Utilizes information previously covered in any of the 300-level printmaking courses as the base for additional techniques and to build a working knowledge of printmaking. Starts at an intermediate technical level and builds into an advanced understanding and working knowledge of the processes. Covers artists books, mail art, nontraditional surfaces, computer applications for traditional prints, mixed media prints, and discusses commercial processes and their application in fine art. Offered infrequently. Prereq: 300-level printmaking course.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 361 or ART 363 or ART 364 or ART 365 or ART 367

Complete ANY of the following Courses:

- ART361 - Survey Printmaking 1
- ART363 - Lithography Printmaking 1
- ART364 - Relief Printmaking 1
- ART365 - Intaglio Printmaking 1
- ART367 - Water Based Silkscreen 1

ART476 - Picturing the Body

Course Information

Course Title
Picturing the Body

Subject code	Course Number	Academic Level
ART	476	Undergraduate

Course Description
Explore the role photography plays in constructing and representing the human form, with an emphasis on visual thinking, self-expression and creating a body of work. Includes studio-lighting techniques, working with Adobe Photoshop software, making prints, image sequencing, criticism, and presenting images for display. Topics include: beauty, self portraiture, street photography, studio portraiture, environmental portraiture, body image, and the nude. Intermediate level. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 306 or ART 306H or ART 376

Complete ANY of the following Courses:

- ART306 - Intro Photography: Darkroom
- ART306H - H: Intro Photography: Darkroom
- ART376 - Intro to Photo: Digital

ART477 - Photography as Narrative

Course Information

Course Title
Photography as Narrative

Subject code	Course Number	Academic Level
ART	477	Undergraduate

Course Description
Explore the way photographs have been used to construct narratives that shape our understanding of ourselves and the world around us, with an emphasis on visual thinking, self-expression and creating a body of work. Includes image editing, image sequencing, criticism, studio-lighting techniques, working with Adobe Photoshop software, making prints, and presenting images for display. Topics include: selecting a subject, the photo essay, staged photography, incorporating text, and the single image narrative. Intermediate level. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 306 or ART 306H or ART 376

Complete ANY of the following Courses:
- ART306 - Intro Photography: Darkroom
- ART306H - H: Intro Photography: Darkroom
- ART376 - Intro to Photo: Digital

ART478 - Documentary Photography

Course Information

Course Title
Documentary Photography

Subject code	Course Number	Academic Level
ART	478	Undergraduate

Course Description
Explores documentary photography with an emphasis on people and place, visual storytelling, self-expression, and developing a long-term documentary project. Includes studio-lighting techniques, working with photo-editing software, image sequencing, criticism, and presenting images for display. Topics include: Portraiture, Street Photography, Community Building, and the Photo Series. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 306 or ART 306H or ART 376

Complete ANY of the following Courses:
- ART306 - Intro Photography: Darkroom
- ART306H - H: Intro Photography: Darkroom
- ART376 - Intro to Photo: Digital

ART479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ART	479	Undergraduate

Course Description
Experimental

ART482 - Sculpture 3

Course Information

Course Title
Sculpture 3

Subject code	Course Number	Academic Level
ART	482	Undergraduate

Course Description
Covers further study in sculpture. Students work toward developing a personal idiom of expression. Offered fall, spring. Prereq: ART 382.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 382

Complete ALL of the following Courses:
- ART382 - Sculpture 2

ART483 - Sculpture 4

Course Information

Course Title
Sculpture 4

Subject code	Course Number	Academic Level
ART	483	Undergraduate

Course Description
Advanced study in sculpture. Student continues to develop style and technique while discovering personal artistic direction. Offered in fall and spring. Prereq: ART 482.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 482

Complete ALL of the following Courses:
- ART482 - Sculpture 3

ART486 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
ART	486	Undergraduate

Course Description
Repeatable to 6 credits if topics vary. Prereq: ART 242, junior or senior standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 242

Complete ALL of the following Courses:
- ART242 - 3D Design

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ART488 - Topics in Art History

Course Information

Course Title
Topics in Art History

Subject code	Course Number	Academic Level
ART	488	Undergraduate

Course Description
Offered periodically. This course examines special topics in art history. Prereq: ART 202 or 203 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 202 or ART 203 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ART202 - Survey of Art History 1: Prehistoric to c 1400
  OR ART203 - Survey Art History 2: 1400 through 20th Century
- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

ART489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ART	489	Undergraduate

Course Description
Honors Course

ART490 - Beyond Makng Strat for Success

Course Information

Course Title
Beyond Makng Strat for Success

Subject code	Course Number	Academic Level
ART	490	Undergraduate

Course Description
This course explores strategies for success in the fine art world beyond the college classroom and prepares students to tackle the business aspects of a fine art career. Students will build their formal portfolio, conduct an exhibition of their work, and learn standard arts business practices such as exhibiting work, networking, advertising, branding, marketing, and self-promotion. Entrepreneurial practice is utilized while students learn to write professional materials while building an online presence.

Capstone Stage Label
Yes

ART491 - Fine Art Metals: Form Emphasis

Course Information

Course Title
Fine Art Metals: Form Emphasis

Subject code	Course Number	Academic Level
ART	491	Undergraduate

Course Description
Further study of jewelry and metals as an art form in which the student is encouraged to develop an original aesthetic style while exploring and employing advanced technical processes. Covers forming non-ferrous metals using techniques such as anticlastic and sinclastic forming, raising, fold forming, chasing and repousse and tool making. Projects will focus on creating volume using these various techniques. Problem solving and critical analysis are emphasized in this course along with professional practices and portfolio development. Offered in fall. Prereq: ART 391.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 391

Complete ALL of the following Courses:
- ART391 - Fine Art Metals: Casting

ART492 - Advancd Fine Art Metal/ Jewelry

Course Information

Course Title
Advancd Fine Art Metal/Jewelry

Subject code	Course Number	Academic Level
ART	492	Undergraduate

Course Description
Advanced study in jewelry and metals in which the student continues to develop style and techniques while discovering personal artistic direction. Covers techniques including surface embellishment, filigree, stonesetting, and mechanisms to be used as tools for aesthetic expresssion. Expands student awareness of historical and contemporary jewelry/metal work while incorporating concept with craft. Problem solving and critical analysis are emphasized in this course, along with professional practices and portfolio development. Offered in spring. Prereq: ART 391.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 391

Complete ALL of the following Courses:
- ART391 - Fine Art Metals: Casting

ART494 - Studio Capstone:

Course Information

Course Title
Studio Capstone:

Subject code	Course Number	Academic Level
ART	494	Undergraduate

Course Description
A capstone studio seminar that focuses on a rotating theme. Studio assignments are used to encourage creative problem solving and intellectual risk taking to create a range of solutions using different artistic media. Students will be presented with challenging ideas, historical precedents, theory and contemporary artistic approaches related to the selected theme.

ART497 - Ceramics 4

Course Information

Course Title
Ceramics 4

Subject code	Course Number	Academic Level
ART	497	Undergraduate

Course Description
Advanced study in ceramics in which students continue to develop ideas, techniques and style as they pursue their own artistic direction. Prereq: ART 396.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 396

Complete ALL of the following Courses:
- ART396 - Ceramics 3

ART497H - H: Ceramics 4

Course Information

Course Title
H: Ceramics 4

Subject code	Course Number	Academic Level
ART	497H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 396

Complete ALL of the following Courses:
- ART396 - Ceramics 3

ART498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
ART	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section.

ART499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
ART	499	Undergraduate

Course Description
Departmental Honors

ART500 - Co-Op Ed Experience in Art

Course Information

Course Title
Co-Op Ed Experience in Art

Subject code	Course Number	Academic Level
ART	500	Graduate

Course Description
Co-Op Ed Experience in Art

ART522 - Art Education Theory and Practice

Course Information

Course Title
Art Education Theory and Practice

Subject code	Course Number	Academic Level
ART	522	Graduate

Course Description
Designed for post-baccalaureate certification students. An overview of art education, with particular emphasis on historical and contemporary rationales for teaching art, the observation of art instruction, and alternative career options through a variety of field experiences.

ART523 - Art Curriculum Seminar/ Wkshp

Course Information

Course Title
Art Curriculum Seminar/Wkshp

Subject code	Course Number	Academic Level
ART	523	Graduate

Course Description
Survey of theories, problems and methods in developing curriculum in art education. Offered every other year.

ART524 - Art Education Curriculum and Assessment

Course Information

Course Title
Art Education Curriculum and Assessment

Subject code	Course Number	Academic Level
ART	524	Graduate

Course Description
Designed for post-baccalaureate certification students. Build on the rationales for art education addressed in Art Education Theory and Practice with an investigation into designing meaningful art education experiences for PreK- 12 students. Design art education experiences and consider how policies at the state and local levels influence how teachers enact curriculum in their classrooms.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 221 or ART 522 and EDFN 590 and EDFN 545

Complete ALL of the following Courses:

- ART221 - Introduction to Art Education **OR** ART522 - Art Education Theory and Practice
- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

ART525 - Art Education Methods III

Course Information

Course Title
Art Education Methods III

Subject code	Course Number	Academic Level
ART	525	Graduate

Course Description
Designed for post-baccalaureate certification students. An examination of classroom strategies, materials and technologies used in teaching art to develop creative and critical thinking in all students. An emphasis on self-reflection and professionalism through team teaching and service learning in an intensive field experience.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 221 or ART 522 and ART 324 or ART 524 and EDFN 545 and EDFN 590

Complete ALL of the following Courses:

- ART221 - Introduction to Art Education
  OR ART522 - Art Education Theory and Practice
- ART324 - Designing Meaningful Art Education Experiences
  OR ART524 - Art Education Curriculum and Assessment
- EDFN545 - Advanced Educational Psychology
- EDFN590 - Social Foundation of Educ

ART526 - Trends Art Ed:

Course Information

Course Title
Trends Art Ed:

Subject code	Course Number	Academic Level
ART	526	Graduate

Course Description
Seminar course designed to address current trends, theories, concepts and strategies in art education. Offered every other year.

ART533 - Drawing

Course Information

Course Title
Drawing

Subject code	Course Number	Academic Level
ART	533	Graduate

Course Description
Independent investigation of advanced drawing techniques. Prereq: 9 s.h. of drawing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Drawing

Earn at least 9 credits

ART534 - Drawing

Course Information

Course Title
Drawing

Subject code	Course Number	Academic Level
ART	534	Graduate

Course Description
Independent investigation of advanced drawing techniques. Prereq: 9 s.h. of drawing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 533

Complete ALL of the following Courses:
- ART533 - Drawing

Drawing

Earn at least 9 credits

ART552 - Painting

Course Information

Course Title
Painting

Subject code	Course Number	Academic Level
ART	552	Graduate

Course Description
Exploration of experimental painting techniques, development of individual style, and critique skills. 9 s.h. of painting.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Painting

Earn at least 9 credits

ART553 - Watercolor

Course Information

Course Title
Watercolor

Subject code	Course Number	Academic Level
ART	553	Graduate

Course Description
Exploration of experimental painting techniques, development of individual style, and critique skills. 9 s.h. of painting.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Painting

Earn at least 9 credits

ART554 - Painting

Course Information

Course Title
Painting

Subject code	Course Number	Academic Level
ART	554	Graduate

Course Description
Exploration of experimental painting techniques, development of individual style, and critique skills. 9 s.h. of painting.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 552

Complete ALL of the following Courses:
- ART552 - Painting

Painting

Earn at least 9 credits

ART555 - Water Color and Related Media

Course Information

Course Title
Water Color and Related Media

Subject code	Course Number	Academic Level
ART	555	Graduate

Course Description
Exploration of experimental painting techniques, development of individual style, and critique skills. 9 s.h. of painting.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 553

Complete ALL of the following Courses:
- ART553 - Watercolor

ART563 - Printmaking

Course Information

Course Title
Printmaking

Subject code	Course Number	Academic Level
ART	563	Graduate

Course Description
Exploration of experimental printmaking techniques, development of individual style and critique skills. 9 s.h. of printmaking.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Printmaking

Earn at least 9 credits

ART564 - Printmaking

Course Information

Course Title
Printmaking

Subject code	Course Number	Academic Level
ART	564	Graduate

Course Description
Exploration of experimental printmaking techniques, development of individual style and critique skills. 9 s.h. of printmaking.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 563

Complete ALL of the following Courses:
- ART563 - Printmaking

Printmaking

Earn at least 9 credits

ART566 - Collage

Course Information

Course Title
Collage

Subject code	Course Number	Academic Level
ART	566	Graduate

Course Description
This course offers an advanced historical look at the last 100 years of collage as a media for fine art. Highlights of collage history will be discussed and followed by a progressive hands-on application of the ideas and methods.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133 and ART 142

Complete ALL of the following Courses:
- ART133 - Drawing 1
- ART142 - 2D Design

ART567 - Advanced Photography 2

Course Information

Course Title
Advanced Photography 2

Subject code	Course Number	Academic Level
ART	567	Graduate

Course Description
Advanced photography course with an emphasis on fine art, self-expression and creating a professional portfolio of work, including color techniques, black and white techniques, studio lighting techniques, digital techniques, making enlargements and presenting prints for display. Covers criticism, history and analysis. Students must have a 35mm single-lens reflex film or digital camera. Offered fall, spring. Permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 566

Complete ALL of the following Courses:

- ART566 - Collage

Instructor Permission

Must have permission of instructor.

ART579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ART	579	Graduate

Course Description
Experimental

ART581 - Sp Topics in Art Education

Course Information

Course Title
Sp Topics in Art Education

Subject code	Course Number	Academic Level
ART	581	Graduate

Course Description
Graduate Art Education Special Topics Course that focuses on one or more topics of current interest not addressed in current curriculum. Topics will vary according to the needs of students and the faculty involved.

ART582 - Sculpture

Course Information

Course Title
Sculpture

Subject code	Course Number	Academic Level
ART	582	Graduate

Course Description
Exploration of experimental techniques in sculpture, development of individual style, and critique skills.

ART583 - Sculpture

Course Information

Course Title
Sculpture

Subject code	Course Number	Academic Level
ART	583	Graduate

Course Description
Exploration of experimental techniques in sculpture, development of individual style, and critique skills.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 582

Complete ALL of the following Courses:

- ART582 - Sculpture

ART584 - Intro Studio Art:

Course Information

Course Title
Intro Studio Art:

Subject code	Course Number	Academic Level
ART	584	Graduate

Course Description
Fine Art intro level studio topics course designed for the Post Baccalaureate or Graduate Student. Topics will vary each semester.

ART585 - Intro Studio Art:

Course Information

Course Title
Intro Studio Art:

Subject code	Course Number	Academic Level
ART	585	Graduate

Course Description
Fine Art intro level studio topics course designed for the Post Baccalaureate or Graduate Student. Topics will vary each semester.

ART586 - Topics In Art Education

Course Information

Course Title
Topics In Art Education

Subject code	Course Number	Academic Level
ART	586	Graduate

Course Description
Independent investigation of topic(s) in art education. Prereq: Graduate standing or permission of the instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Graduate Standing or Instructor Permission'

Must have graduate standing or permission of the instructor.

ART587 - Topics In Art Education

Course Information

Course Title
Topics In Art Education

Subject code	Course Number	Academic Level
ART	587	Graduate

Course Description
Independent investigation of topic(s) in art education. Prereq: Graduate standing or permission of the instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Graduate Standing or Instructor Permission'

Must have graduate standing or permission of the instructor.

ART588 - Art Hist Top:

Course Information

Course Title
Art Hist Top:

Subject code	Course Number	Academic Level
ART	588	Graduate

Course Description
Independent investigation of topic(s) in art history. Prereq: Graduate standing or permission of the instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Graduate Standing or Instructor Permission'

Must have graduate standing or permission of the instructor.

ART589 - Topics In Art History

Course Information

Course Title
Topics In Art History

Subject code	Course Number	Academic Level
ART	589	Graduate

Course Description
Independent investigation of topic(s) in art history. Prereq: Graduate standing or permission of the instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Graduate Standing or Instructor Permission'

Must have graduate standing or permission of the instructor.

ART591 - Fine Art Metals

Course Information

Course Title
Fine Art Metals

Subject code	Course Number	Academic Level
ART	591	Graduate

Course Description
Independent investigation of metalsmith development of individual style, and critique skill. Prereq: 9 s.h. of metalsmithing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Metalsmithing

Earn at least 9 credits

ART592 - Fine Art Metals

Course Information

Course Title
Fine Art Metals

Subject code	Course Number	Academic Level
ART	592	Graduate

Course Description
Independent investigation of metalsmith development of individual style, and critique skill. Prereq: 9 s.h. of metalsmithing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 591

Complete ALL of the following Courses:
- ART591 - Fine Art Metals

Metalsmithing

Earn at least 9 credits

ART596 - Ceramics

Course Information

Course Title
Ceramics

Subject code	Course Number	Academic Level
ART	596	Graduate

Course Description
Independent investigation of ceramics, development of individual style, and critique skills. Prereq: 9 s.h. of ceramics.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Ceramics

Earn at least 9 credits

ART596H - Hon: Ceramics

Course Information

Course Title
Hon: Ceramics

Subject code	Course Number	Academic Level
ART	596H	Graduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

Ceramics

Earn at least 9 credits

ART597 - Ceramics

Course Information

Course Title
Ceramics

Subject code	Course Number	Academic Level
ART	597	Graduate

Course Description
Independent investigation of ceramics, development of individual style, and critique skills. Prereq: 9 s.h. of ceramics.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 596 or ART 596H

Complete ANY of the following Courses:
- ART596 - Ceramics
- ART596H - Hon: Ceramics

Ceramics

Earn at least 9 credits

ART602 - Qualtve & Arts-Based Rsrch Mth

Course Information

Course Title
Qualtve & Arts-Based Rsrch Mth

Subject code	Course Number	Academic Level
ART	602	Graduate

Course Description
For graduate students from across the university community whose research questions may best be answered through qualitative research and/or arts-based research methods. This course provides students an opportunity to investigate and consider the applications of a number of qualitative and arts-based research methods to their emerging ideas and designs for conducting research in their respective fields. The emphasis will be on identifying and evaluating prospective research problems and questions, examination of related research literature, and development of a research project proposal. This course is an intermediate level methods class with a prerequisite of EDFN 601 or enrollment in the Expressive Arts certificate program.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN601

Complete ALL of the following Courses:
- EDFN601 - Research Methods

Or must be enrolled in the Expressive Arts certificate program.

ART603 - Assessment in Art Education

Course Information

Course Title
Assessment in Art Education

Subject code	Course Number	Academic Level
ART	603	Graduate

Course Description
Examine various theories and methods of assessment of why, what, and how to assess art. Students will work together to identify assessment dilemmas present in their classrooms and using texts, each other, and their own experiences, work together to create potential solutions. The aims of this course are to help students build relevant and immediately applicable tools to use in K-12 classrooms and to build a learning community for art educators in which they can explore assessment issues particularly relevant for their subject matter.

ART633 - Drawing

Course Information

Course Title
Drawing

Subject code	Course Number	Academic Level
ART	633	Graduate

Course Description
Independent investigation of advanced drawing techniques. Prereq: 9 s.h. of drawing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 534

Complete ALL of the following Courses:
- ART534 - Drawing

Drawing

Earn at least 9 credits

ART634 - Drawing

Course Information

Course Title
Drawing

Subject code	Course Number	Academic Level
ART	634	Graduate

Course Description
Independent investigation of advanced drawing techniques. Prereq: 9 s.h. of drawing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 633

Complete ALL of the following Courses:
- ART633 - Drawing

Drawing

Earn at least 9 credits

ART635 - Drawing

Course Information

Course Title
Drawing

Subject code	Course Number	Academic Level
ART	635	Graduate

Course Description
Independent investigation of advanced drawing techniques. Prereq: 9 s.h. of drawing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 634

Complete ALL of the following Courses:
- ART634 - Drawing

Drawing

Earn at least 9 credits

ART641 - Design

Course Information

Course Title
Design

Subject code	Course Number	Academic Level
ART	641	Graduate

Course Description
Independent investigation of design. Prereq: 9 s.h. of design.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Design

Earn at least 9 credits

ART642 - Design

Course Information

Course Title
Design

Subject code	Course Number	Academic Level
ART	642	Graduate

Course Description
Independent investigation of design. Prereq: 9 s.h. of design.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Design

Earn at least 9 credits

ART643 - Design

Course Information

Course Title
Design

Subject code	Course Number	Academic Level
ART	643	Graduate

Course Description
Independent investigation of design. Prereq: 9 s.h. of design.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Design

Earn at least 9 credits

ART652 - Painting

Course Information

Course Title
Painting

Subject code	Course Number	Academic Level
ART	652	Graduate

Course Description
Exploration of experimental painting techniques, development of individual style, and critique skills. 9 s.h. of painting.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 554

Complete ALL of the following Courses:
- ART554 - Painting

Painting

Earn at least 9 credits

ART654 - Painting

Course Information

Course Title
Painting

Subject code	Course Number	Academic Level
ART	654	Graduate

Course Description
Exploration of experimental painting techniques, development of individual style, and critique skills. 9 s.h. of painting.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 652

Complete ALL of the following Courses:
- ART652 - Painting

Painting

Earn at least 9 credits

ART656 - Painting

Course Information

Course Title
Painting

Subject code	Course Number	Academic Level
ART	656	Graduate

Course Description
Exploration of experimental painting techniques, development of individual style, and critique skills. 9 s.h. of painting.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 654

Complete ALL of the following Courses:
- ART654 - Painting

Painting

Earn at least 9 credits

ART663 - Printmaking

Course Information

Course Title
Printmaking

Subject code	Course Number	Academic Level
ART	663	Graduate

Course Description
Exploration of experimental printmaking techniques, development of individual style and critique skills. 9 s.h. of printmaking.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 564

Complete ALL of the following Courses:
- ART564 - Printmaking

Printmaking

Earn at least 9 credits

ART664 - Printmaking

Course Information

Course Title
Printmaking

Subject code	Course Number	Academic Level
ART	664	Graduate

Course Description
Exploration of experimental printmaking techniques, development of individual style and critique skills. 9 s.h. of printmaking.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 663

Complete ALL of the following Courses:
- ART663 - Printmaking

Printmaking

Earn at least 9 credits

ART665 - Printmaking

Course Information

Course Title
Printmaking

Subject code	Course Number	Academic Level
ART	665	Graduate

Course Description
Exploration of experimental printmaking techniques, development of individual style and critique skills. 9 s.h. of printmaking.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 664

Complete ALL of the following Courses:
- ART664 - Printmaking

Printmaking

Earn at least 9 credits

ART666 - Fine Art Photography

Course Information

Course Title
Fine Art Photography

Subject code	Course Number	Academic Level
ART	666	Graduate

Course Description
Exploration of experimental fine art photography techniques, development of individual style and critique skills. Prereq: 9 s.h. of photography

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 567

Complete ALL of the following Courses:
- ART567 - Advanced Photography 2

Photography

Earn at least 9 credits

ART667 - Fine Art Photography

Course Information

Course Title
Fine Art Photography

Subject code	Course Number	Academic Level
ART	667	Graduate

Course Description
Fine Art Photography

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 666

Complete ALL of the following Courses:
- ART666 - Fine Art Photography

ART668 - Fine Art Photography

Course Information

Course Title
Fine Art Photography

Subject code	Course Number	Academic Level
ART	668	Graduate

Course Description
Exploration of experimental fine art photography techniques, development of individual style and critique skills. Prereq: 9 s.h. of photography

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 667

Complete ALL of the following Courses:
- ART667 - Fine Art Photography

Photography

Earn at least 9 credits

ART678 - Documented Study

Course Information

Course Title
Documented Study

Subject code	Course Number	Academic Level
ART	678	Graduate

Course Description
In-depth investigation of an issue in art education under the direction of appropriate faculty.

ART682 - Sculpture

Course Information

Course Title
Sculpture

Subject code	Course Number	Academic Level
ART	682	Graduate

Course Description
Exploration of experimental techniques in sculpture, development of individual style, and critique skills.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 583

Complete ALL of the following Courses:
- ART583 - Sculpture

ART683 - Sculpture

Course Information

Course Title
Sculpture

Subject code	Course Number	Academic Level
ART	683	Graduate

Course Description
Exploration of experimental techniques in sculpture, development of individual style, and critique skills.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 682

Complete ALL of the following Courses:
- ART682 - Sculpture

ART684 - Sculpture

Course Information

Course Title
Sculpture

Subject code	Course Number	Academic Level
ART	684	Graduate

Course Description
Exploration of experimental techniques in sculpture, development of individual style, and critique skills.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 683

Complete ALL of the following Courses:

- ART683 - Sculpture

ART688 - Topics in Art Hist

Course Information

Course Title
Topics in Art Hist

Subject code	Course Number	Academic Level
ART	688	Graduate

Course Description
Independent investigation of topic(s) in art history. Prereq: Graduate standing or permission of the instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Graduate Standing or Instructor Permission'

Must have graduate standing or permission of the instructor.

ART686 - Topics in Studio Art

Course Information

Course Title
Topics in Studio Art

Subject code	Course Number	Academic Level
ART	686	Graduate

Course Description
Independent investigation of topic(s) in an art studio.

ART687 - Topics in Studio Art

Course Information

Course Title
Topics in Studio Art

Subject code	Course Number	Academic Level
ART	687	Graduate

Course Description
Independent investigation of topic(s) in an art studio.

ART691 - Fine Art Metals

Course Information

Course Title
Fine Art Metals

Subject code	Course Number	Academic Level
ART	691	Graduate

Course Description
Independent investigation of metalsmith development of individual style, and critique skill. Prereq: 9 s.h. of metalsmithing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 592

Complete ALL of the following Courses:
- ART592 - Fine Art Metals

Metalsmithing

Earn at least 9 credits

ART692 - Fine Art Metals

Course Information

Course Title
Fine Art Metals

Subject code	Course Number	Academic Level
ART	692	Graduate

Course Description
Independent investigation of metalsmith development of individual style, and critique skill. Prereq: 9 s.h. of metalsmithing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 691

Complete ALL of the following Courses:
- ART691 - Fine Art Metals

Metalsmithing

Earn at least 9 credits

ART693 - Fine Art Metals

Course Information

Course Title
Fine Art Metals

Subject code	Course Number	Academic Level
ART	693	Graduate

Course Description
Independent investigation of metalsmith development of individual style, and critique skill. Prereq: 9 s.h. of metalsmithing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 692

Complete ALL of the following Courses:
- ART692 - Fine Art Metals

Metalsmithing

Earn at least 9 credits

ART695 - Ceramics

Course Information

Course Title
Ceramics

Subject code	Course Number	Academic Level
ART	695	Graduate

Course Description
Independent investigation of ceramics, development of individual style, and critique skills. Prereq: 9 s.h. of ceramics.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 597

Complete ALL of the following Courses:
- ART597 - Ceramics

Ceramics

Earn at least 9 credits

ART696 - Ceramics

Course Information

Course Title
Ceramics

Subject code	Course Number	Academic Level
ART	696	Graduate

Course Description
Independent investigation of ceramics, development of individual style, and critique skills. Prereq: 9 s.h. of ceramics.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 695

Complete ALL of the following Courses:
- ART695 - Ceramics

Ceramics

Earn at least 9 credits

ART697 - Ceramics

Course Information

Course Title
Ceramics

Subject code	Course Number	Academic Level
ART	697	Graduate

Course Description
Independent investigation of ceramics, development of individual style, and critique skills. Prereq: 9 s.h. of ceramics.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 696

Complete ALL of the following Courses:
- ART696 - Ceramics

Ceramics

Earn at least 9 credits

ART699 - Thesis

Course Information

Course Title
Thesis

Subject code	Course Number	Academic Level
ART	699	Graduate

Course Description
In-depth investigation of a topic relevant to art education within a recognized research format under the direction of appropriate faculty.

ART799 - Applied Supv: Art Education

Course Information

Course Title
Applied Supv: Art Education

Subject code	Course Number	Academic Level
ART	799	Graduate

Course Description
Field-based experience to develop candidates leadership abilities, articulation of philosophy of art education, and supervisory competencies. Activities may include curriculum and staff development, budgeting and the public relations function, among others. Prereq: ART 524 and EDSU 700, 701 and 703. A student may petition the Department of Art for a waiver of the 9 s.h. prerequisite.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 524 and EDSU 700 and EDSU 701 and EDSU 703

Complete ALL of the following Courses:

- ART524 - Art Education Curriculum and Assessment
- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision

A student may petition the Department of Art for a waiver of the 9 s.h. prerequisite.

DESN144 - Digital Theory and Skills

Course Information

Course Title
Digital Theory and Skills

Subject code	Course Number	Academic Level
DESN	144	Undergraduate

Course Description
An introduction to the basic vocabulary and principles of visual communication and media theory, including the various roles and digital tools, skills and techniques of graphic and interactive design industry. Offered annually.

DESN144H - H: Digital Theory and Skills

Course Information

Course Title
H: Digital Theory and Skills

Subject code	Course Number	Academic Level
DESN	144H	Undergraduate

DESN201 - Understanding Web Design

Course Information

Course Title
Understanding Web Design

Subject code	Course Number	Academic Level
DESN	201	Undergraduate

Course Description
This course provides an overview of the Web design process, and is intended to familiarize students with the meaning, methods, and concepts necessary to understand Web design. The course is designed to give students the opportunity to learn and explore the resources, skills, and hands-on experience needed to design and understand the development of Web design from a user-centered design perspective.

DESN225 - Visual Storytelling and Comics

Course Information

Course Title
Visual Storytelling and Comics

Subject code	Course Number	Academic Level
DESN	225	Undergraduate

Course Description
An introduction to the vocabulary and principles of visual storytelling. Comic book history, conventions, aesthetics, and techniques will be covered in the sequential design medium. The fundamentals of the genre, including amplification through simplification, use of transitions, the passage of space and time and storytelling interpretation will be examined.

DESN240 - Typography I

Course Information

Course Title
Typography I

Subject code	Course Number	Academic Level
DESN	240	Undergraduate

Course Description
History and development of communications systems. Traces history of Western culture through study and studio practice. Includes creative design project in layout and composition. Includes criticism, analysis and evaluation. For both non-art and art majors. Offered in fall, spring.

DESN243 - Creativity, Innovation & Human-Centered Design Thinking

Course Information

Course Title
Creativity, Innovation & Human-Centered Design Thinking

Subject code	Course Number	Academic Level
DESN	243	Undergraduate

Course Description
Provides an overview of creativity and human-centered design approaches to identify opportunities and challenges of the 21st century. Creativity and human-centered design begins with a deep understanding of people, technology, entrepreneurship and society. Students will apply creativity and human-centered design approaches used for developing practical and innovative products, services, strategies, spaces, technology, social media, entrepreneurial endeavors, and human interactions & experiences.

DESN244 - Typography 2

Course Information

Course Title
Typography 2

Subject code	Course Number	Academic Level
DESN	244	Undergraduate

Course Description
A study of the fundamental characteristics of type and communication for the electronic screen and its contrast with type for print media. The course explores typographic terminology, creation of a typeface, structure and the historical context of letterforms and their application in motion, visual and information hierarchies within the electronic screen environment. Prereq: DESN 240 or permission of the instructor. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 240

Complete ALL of the following Courses:
- DESN240 - Typography I

Or must have permission of instructor.

DESN246 - Intro Sequence/Motion/Vis Comm

Course Information

Course Title
Intro Sequence/Motion/Vis Comm

Subject code	Course Number	Academic Level
DESN	246	Undergraduate

Course Description
A study of narrative structures and spatial compositions as they relate to time and sequence. Students will be introduced to the principles of time- based design, with an emphasis on research, critical analysis and concept development. Various production methods such as storyboarding and scoring will be introduced. Offered periodically. Prereq: DESN 144 (or ART 144) or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 144 or DESN 144H

Complete ANY of the following Courses:
- DESN144 - Digital Theory and Skills
- DESN144H - H: Digital Theory and Skills

Or must have permission of instructor.

DESN247 - Intro to Web, Experience and Interaction Design

Course Information

Course Title
Intro to Web, Experience and Interaction Design

Subject code	Course Number	Academic Level
DESN	247	Undergraduate

Course Description
Focuses on the fundamentals of user-centered design and usability issues surrounding Web-based interfaces (Internet, PDA, cell, etc.). Examines information architecture models, content/design relationships, user behaviors, and user testing scenarios. The goal is ultimately to develop awareness of the pitfalls of poor design and usability while honing good design habits. Offered periodically. Prereq: DESN 144, ART 144 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 144 or DESN 144H

Complete ANY of the following Courses:

- DESN144 - Digital Theory and Skills
- DESN144H - H: Digital Theory and Skills

Or must have permission of instructor.

DESN300 - Internship/Co-op in Design

Course Information

Course Title
Internship/Co-op in Design

Subject code	Course Number	Academic Level
DESN	300	Undergraduate

Course Description
Internship/Co-Op experience in Design

DESN307 - Visual Communication Design History

Course Information

Course Title
Visual Communication Design History

Subject code	Course Number	Academic Level
DESN	307	Undergraduate

Course Description
A history of the visual elements and technological processes involved in an informed view of design from the beginning of pictographic language to the present. The course attempts to cover four main areas of investigation: an analysis of the evolution of formal or visual attributes; the relationship between design and its audience; the study of the social and economic activity of design as it is circulated in communities and across continents; and the effect of technology on the aesthetics of design.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM100 or COMM100H or ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

DESN307H - Hon: Visual Communication Design History

Course Information

Course Title
Hon: Visual Communication Design History

Subject code	Course Number	Academic Level
DESN	307H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM100 or COMM100H or ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

DESN332 - Material Design

Course Information

Course Title
Material Design

Subject code	Course Number	Academic Level
DESN	332	Undergraduate

Course Description
This course explores material and surface pattern design as a creative endeavor while developing and reinforcing technical and conceptual skills. Emphasis will be on the use of graphic and traditional drawing methods to create unique patterns for a variety of applications including wallpaper, fabrics, furnishings, floor coverings, giftware, home and business products, wrapping paper, and more.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN144 or DESN144H

Complete ANY of the following Courses:

- DESN144 - Digital Theory and Skills
- DESN144H - H: Digital Theory and Skills

DESN340 - Interaction Design

Course Information

Course Title
Interaction Design

Subject code	Course Number	Academic Level
DESN	340	Undergraduate

Course Description
Further exploration of the principles and methodologies associated with digital media and interaction design, including complex multimedia presentations and applications for the Worldwide Web. Students will study human-factor variables of design utilizing time-based and interactive design processes, explore design as a social, cultural and political activity. Methods for analysis and production will continue to be emphasized. Offered periodically. Prereq: DESN 247, ART 247 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 247

Complete ALL of the following Courses:
- DESN247 - Intro to Web, Experience and Interaction Design

Instructor Permission

Must have permission of instructor.

DESN341 - Motion Design

Course Information

Course Title
Motion Design

Subject code	Course Number	Academic Level
DESN	341	Undergraduate

Course Description
Explore time-based visual communication environments. Unique conditions influencing the roles of typography, image, symbolic systems, narrative, and sound and time systems are assessed in the resolution of assigned projects. Students are exposed to the tools, theories, aesthetics and techniques used in time-based message building. Offered periodically. Prereq: DESN 246, ART 246 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 246

Complete ALL of the following Courses:
- DESN246 - Intro Sequence/Motion/Vis Comm

DESN342 - Kinetic Design and Animation

Course Information

Course Title
Kinetic Design and Animation

Subject code	Course Number	Academic Level
DESN	342	Undergraduate

Course Description
An examination of design animation, emphasizing 2D animation techniques such as keyframing, transition and metamorphosis, timing and expression using both hand drawn and digital techniques. Prereq: DESN 144 (formerly ART 144) or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 144 or DESN 144H

Complete ANY of the following Courses:
- DESN144 - Digital Theory and Skills
- DESN144H - H: Digital Theory and Skills

Or must have permission of instructor.

DESN343 - Experience Design

Course Information

Course Title
Experience Design

Subject code	Course Number	Academic Level
DESN	343	Undergraduate

Course Description
Synthesis and analysis of relevant aspects of meaningful human interactions in a networked and mediated environment, including physical, cognitive/ emotional, social, political, economic, and cultural dimensions of these interactions, and the relationships of such interactions to commerce, learning, work, play, community and gaining access to the privileges of user experience. In an exploration of language structures (storytelling) that enhance understanding and support users objectives in a variety of contexts, students will explore the construction of verbal messages and the roles they play in defining experience. Offered periodically. Prereq: DESN 247, ART 247 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 247

Complete ALL of the following Courses:
- DESN247 - Intro to Web, Experience and Interaction Design

Or must have permission of instructor.

DESN344 - Visual Communication and Graphics Design 1

Course Information

Course Title
Visual Communication and Graphics Design 1

Subject code	Course Number	Academic Level
DESN	344	Undergraduate

Course Description
An exploration of contemporary design practice and theory.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133 or ART 142

Complete ANY of the following Courses:

- ART133 - Drawing 1
- ART142 - 2D Design

DESN344H - H: Visual Communication and Graphics Design 1

Course Information

Course Title
H: Visual Communication and Graphics Design 1

Subject code	Course Number	Academic Level
DESN	344H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133 or ART 142

Complete ANY of the following Courses:

- ART133 - Drawing 1
- ART142 - 2D Design

DESN346 - Intro to Computers in Design

Course Information

Course Title
Intro to Computers in Design

Subject code	Course Number	Academic Level
DESN	346	Undergraduate

Course Description
Explores and develops design capabilities for graphic expression through the use of contemporary digital media. Offered periodically. Prereq: ART 133 or ART 242.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133 or ART 242

Complete ANY of the following Courses:

- ART133 - Drawing 1
- ART242 - 3D Design

DESN347 - Design for Social Equity

Course Information

Course Title
Design for Social Equity

Subject code	Course Number	Academic Level
DESN	347	Undergraduate

Course Description
Exposes students to a wide range of materials that causes them to take a more analytical and critical approach to the field of graphic and interactive design and gain a better understanding of the cultural impact they can have as designers. This will be applied to the creation of written practical design projects. Offered periodically. Prereq: DESN 144, ART 144, DESN 240, ART 240 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 144 or DESN 144H or DESN 240

Complete ANY of the following Courses:

- DESN144 - Digital Theory and Skills
- DESN144H - H: Digital Theory and Skills
- DESN240 - Typography I

Or must have permission of instructor.

DESN348 - Packaging in Design

Course Information

Course Title
Packaging in Design

Subject code	Course Number	Academic Level
DESN	348	Undergraduate

Course Description
Development of three-dimensional design solutions related to the presentation of objects and products, linked with conceptual, idea-driven design. The analysis of two-dimensional graphic applications of three-dimensional form is stressed. Offered periodically. Prereq: ART 144, DESN 144, ART 240, DESN 240 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 144 or DESN 144H or DESN 240

Complete ANY of the following Courses:

- DESN144 - Digital Theory and Skills
- DESN144H - H: Digital Theory and Skills
- DESN240 - Typography I

Or must have permission of instructor.

DESN349 - Information Design

Course Information

Course Title
Information Design

Subject code	Course Number	Academic Level
DESN	349	Undergraduate

Course Description
Introduction to the principles of information design, wayfinding design, and environmental graphics. These principles are applied to the design of environmental signage and other graphic communication used in both public and private environments. Issues of function, legibility, and fabrication will also be introduced.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

DESN144 or DESN144H

Complete ANY of the following Courses:
- DESN144 - Digital Theory and Skills
- DESN144H - H: Digital Theory and Skills

Or must have permission of instructor.

DESN375 - Illustration

Course Information

Course Title
Illustration

Subject code	Course Number	Academic Level
DESN	375	Undergraduate

Course Description
Studio exploration of various techniques and digital media appropriate for contemporary illustration. Offered periodically. Prereq: ART 133 or 142 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 133 or ART 142

Complete ANY of the following Courses:
- ART133 - Drawing 1
- ART142 - 2D Design

Or must have permission of instructor.

DESN379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
DESN	379	Undergraduate

Course Description
Experimental course in Design.

DESN444 - Vis Comm and Graphcs Design 2

Course Information

Course Title
Vis Comm and Graphcs Design 2

Subject code	Course Number	Academic Level
DESN	444	Undergraduate

Course Description
Continued study of visual communications with emphasis on print and digital publication design. Offered in fall and/or spring. Prereq: ART 344, DESN 344 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 344 or DESN 344H

Complete ANY of the following Courses:

- DESN344 - Visual Communication and Graphics Design 1
- DESN344H - H: Visual Communication and Graphics Design 1

Or must have permission of instructor.

DESN446 - Advanced Computers In Design

Course Information

Course Title
Advanced Computers In Design

Subject code	Course Number	Academic Level
DESN	446	Undergraduate

Course Description
Offered in fall and/or spring. Prereq: ART 346.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN 346

Complete ALL of the following Courses:

- DESN346 - Intro to Computers in Design

DESN447 - Advanced Web Design

Course Information

Course Title
Advanced Web Design

Subject code	Course Number	Academic Level
DESN	447	Undergraduate

Course Description
Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN247

Complete ALL of the following Courses:

- DESN247 - Intro to Web, Experience and Interaction Design

DESN480 - Sp Topics in Design

Course Information

Course Title
Sp Topics in Design

Subject code	Course Number	Academic Level
DESN	480	Undergraduate

Course Description
Exploration of special topics in the field of Interactive and Graphic Design.

Simple Requirements

Course Prerequisites

Type
Prerequisite

DESN144 or DESN144H and DESN240

Complete ANY of the following Courses:

- DESN144 - Digital Theory and Skills
  OR DESN144H - H: Digital Theory and Skills
- DESN240 - Typography I

DESN493 - Capstone: Portfolio

Course Information

Course Title
Capstone: Portfolio

Subject code	Course Number	Academic Level
DESN	493	Undergraduate

Course Description
Capstone class for B.Des or B.A. or B.F.A. student, with a concentration in graphic and interactive design. The course is designed to prepare the student for entry into the interactive and graphic design fields or graduate school. The student will create a professional-quality digital portfolio of work for entry into the interactive and graphic design fields or graduate school.

Capstone Stage Label
Yes

Simple Requirements

Course Prerequisites

Type
Prerequisite

Requirement

Senior status required or permission of faculty.

DESN498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
DESN	498	Undergraduate

DESN499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
DESN	499	Undergraduate

Course Description
Departmental Honors

EDAR461 - Elem Stu Tch: Art

Course Information

Course Title
Elem Stu Tch: Art

Subject code	Course Number	Academic Level
EDAR	461	Undergraduate

Course Description
Elementary and secondary student teaching placements in art education. Offered fall, spring. Should be combined with SEED 471. Prereq: Art 221, 322, 325.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 221 and ART 325

Complete ALL of the following Courses:

- ART221 - Introduction to Art Education
- ART325 - Methodology and Pedagogy of Art

EDAR462 - Secon Stu Tch: Art

Course Information

Course Title
Secon Stu Tch: Art

Subject code	Course Number	Academic Level
EDAR	462	Undergraduate

Course Description
Elementary and secondary student teaching placements in art education. Offered fall, spring. Should be combined with SEED 471. Prereq: Art 221, 322, 325.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ART 221 and ART 325

Complete ALL of the following Courses:

- ART221 - Introduction to Art Education
- ART325 - Methodology and Pedagogy of Art

Biology Department

The Department of Biology offers baccalaureate degrees in biology (BIOL) and allied health (ALTH), with 11 options in the BIOL program and 5 options in the ALHT program. The requirements are very similar for the BS BIOL programs during the first two years, so any change in career emphasis need not involve any major loss of time or credits. The department also offers minors in biology and molecular biology/biotechnology.

The program leading to the Bachelor of Science degree provides students with an opportunity to elect a substantial number of courses in a specific area of biology. This program provides a strong background for admission to graduate or professional school and prepares the student for employment in the field of biology upon graduation.

Options available within the B.S. Biology program include animal behavior, environmental biology, marine biology, molecular biology/biotechnology, medical technology, nuclear medicine technology, plant sciences, premedical professions, pre-optometry, pre-podiatry and respiratory therapy.

The **animal behavior** option provides training in both the biological mechanisms and the evolutionary functions of behavior. Students completing this option are prepared for a career in applied animal behavior or for graduate study.

The **environmental biology** option permits students to concentrate in ecology and enables them to gain expertise that will make them competitive in industry, governmental agencies and graduate school.

The **marine biology** option encourages students to choose electives in the marine biology area. Many marine science courses are offered at our field station at Wallops Island, Virginia, since they usually involve significant field work. For more information on the field station, see “Chincoteague Bay Field Station at the Marine Science Consortium”: http://www.cbfieldstation.org/

The **molecular biology/biotechnology** option allows students to concentrate in genetics, cell and molecular biology. The courses required for this option complement each other, training students in a variety of laboratory and methods and enabling students to gain the theoretical understanding and technical expertise currently needed to be competitive in industry and graduate school.

Students in the **plant sciences** option concentrate on the study of plants while obtaining a broad background in biology. This option effectively prepares those interested in professions in general botany, environmental studies, molecular/biotech, and horticulture as well as advanced graduate study in a variety of plant-related fields.

The **pre-medical professions** option allows the students to focus on courses in anatomy, physiology, cell biology and genetics. It includes one track for students planning on continuing their education in medical, dental or physician assistant school and another for students preparing for veterinary school. The program provides a strong background in courses that prepare the students for taking the appropriate entrance exams and encourages them to take advanced courses that will help them succeed in those professional programs.

Millersville University has an Early Acceptance Program (EAP) agreement with the Lake Erie College of Osteopathic Medicine (LECOM) for programs in osteopathic medicine, dentistry and pharmacy. The current agreement is a “4+4 year program” and is designed for incoming first year students and second-year students. Students who are interested in the EAP must be accepted by LECOM, either as an incoming first year student, or before completing their sophomore year, and complete their degree at Millersville University. (EAP students will need to take the MCAT and complete an online application before they can enroll at LECOM.) Accepted students must do well during each academic semester at Millersville but will have a guaranteed seat in the classroom at LECOM.

After completing three years of undergraduate study, students in the **medical technology (clinical/medical laboratory science)** program are eligible to apply to an accredited hospital-based medical technology program for one year of clinical laboratory experience, after which they will be awarded the Bachelor of Science degree and will be eligible to sit for the national certification examination. Currently, Millersville has full affiliations with three hospital-based programs (PA College of Health Sciences, York Hospital, Reading Hospital) and a renewable affiliation with Penn State Hershey.

After completing three years of undergraduate study, students in the **nuclear medicine technology** program are eligible to apply for admission to either the Pennsylvania College of Health Sciences of Nuclear Medicine Technology program (12-month clinical phase) or the Johns Hopkins School of Imaging program (18-month clinical phase), after which they will be awarded the Bachelor of Science degree and will be eligible to sit for the national certification examination.

An agreement between Millersville University and Salus University (formerly the Pennsylvania College of Optometry) in Philadelphia allows students in the **pre-optometry** option to complete three years of undergraduate study at Millersville and then transfer to Philadelphia for the first year of study in the doctoral program. Students who complete the year with good grades receive a B.S. in Biology from Millersville University, and after three additional years earn the Doctor of Optometry degree.

A cooperative option exists between Millersville University and the Temple University School of Podiatric Medicine. This 3/4 **pre-podiatry** program allows students to transfer to the professional school after satisfactorily completing 99 semester hours at Millersville University. After successful completion of the basic science courses at the Temple University School of Podiatric Medicine, students are awarded a B.S. in biology from Millersville University. Three recommended Millersville students a year have reserved spaces for admission to the podiatric college, where graduation after four years earns a D.P.M. degree.

Millersville University is the sponsoring institution for the **respiratory therapy** program. After successfully completing three years of study at Millersville, students enter the 16-month clinical phase at Millersville University and UPMC Lititz. Admission into the clinical phase is competitive and not guaranteed. At the end of the clinical phase, they are awarded the Bachelor of Science degree and a certificate in respiratory therapy, and will be eligible to sit for the national credentialing examination.

The education curriculum leads to the **Bachelor of Science in Education**, with secondary education certification in biology.

Bachelor of Science in Allied Health Technology

The Department of Biology offers one degree and five options leading to the baccalaureate degree in allied health technology. The requirements are initially very similar for each of the options so that any change in career emphasis need not involve any major loss of time or credits.

A dual-degree program in **pre-athletic training** is available for well-prepared students. During three years of study at Millersville, students complete the requirements for admission to an affiliated graduate program. Upon completion of one year of graduate study, credits transfer back to Millersville to satisfy the requirements for the B.S. degree in allied health technology, pre-athletic training. Students then earn a M.S. in athletic training from the affiliated university after a second year of graduate study.

A four-year program prepares students for graduate or professional studies to become specialists in **sports medicine**, such as athletic trainers, physical therapists, physicians and physician assistants. The curriculum includes courses in nutrition, sports psychology, and the prevention and care of injuries.

After completing three years of undergraduate study, students in the **allied health technology/medical technology (clinical/medical laboratory science)** program are eligible to apply to an accredited hospital-based medical technology program for one year of clinical laboratory experience, after which they will be awarded the Bachelor of Science degree and will be eligible to sit for the national certification examination. Currently, Millersville University has full affiliations with three hospital-based programs (PA College of Health Sciences, York Hospital, Reading Hospital) and a renewable affiliation with Penn State Hershey.

After completing three years of undergraduate study, students in the allied health technology/**nuclear medicine technology** program are eligible to apply for admission to either the Pennsylvania College of Health Sciences (12-month clinical phase) program or the Johns Hopkins School of Imaging (18-month clinical phase) program, after which they will be awarded the Bachelor of Science degree and will be eligible to sit for the national certification examination.

Millersville University is the sponsoring institution for the **respiratory therapy** program. After successfully completing two years of study at Millersville University, students enter the approximately two-year clinical phase at UPMC Lititz. Admission into the clinical phase is competitive and not guaranteed. At the end of the clinical phase, students are awarded the Bachelor of Science degree and a certificate in respiratory therapy, and will be eligible to sit for the national credentialing examination. This degree option differs from the other B.S. allied health technology and B.S. degree programs offered by the biology department in its format and is termed a “2+2 year program” that begins the clinical year in the summer following the sophomore year, not the end of the junior year, as is the case for the other degree options.

Retention In The Major Policy

University requirements for retention must be met. In addition, all biology majors must earn grades of C- or higher in all core courses (BIOL 101 Foundations of Biology, BIOL 211 Concepts of Zoology, BIOL 221 Concepts of Botany, BIOL 343 Principles of Ecology & Evolution, BIOL 362 Cell and Developmental Biology, BIOL 364 Foundations of Genetics & Molecular Biology) required for their option. These requirements must be satisfied before completion of 90 Millersville University credit hours. Those who change their major or option, and transfer students with more than 60 credits, must satisfy these requirements before completing 45 additional credits. Those transferring into the major may substitute BIOL 100 General Biology for BIOL 101 Foundations of Biology if they earn a grade of B- or higher in this course.

For most biology majors, the core would include all six courses. Those in allied health options (medical technology, nuclear medicine technology, pre-athletic training, respiratory therapy, and sports medicine), who are not required to complete six core courses, would be required to earn a C- or higher in all of the core courses required for that particular option.

FACULTY LIST
Cebra-Thomas, Judith; Associate Professor College of Science and Technology B.A., Johns Hopkins University, 1979; Ph.D., Washington University, 1986
Didier, Dominique; Professor College of Science and Technology B.A., Illinois Wesleyan University, 1987; Ph.D., University of Massachusetts, 1992
Fellmeth, Jessica; Assistant Professor College of Science and Technology B.A., The College of New Jersey, 2006; Ph.D., Rutgers the State University of New Jersey, 2015
Haines, Aaron; Professor College of Science and Technology B.S., Virginia Tech, 1998; M.S., Texas A&M University, 2003; Ph.D., Ibid., 2006
Hardy, Christopher; Professor College of Science and Technology A.A., Catonsville Community College, 1991; B.S., University of Maryland, 1995; Ph.D., Cornell University and New York Botanical Garden, 2001
Hoover, John; Professor College of Science and Technology B.S., Indiana University of Pennsylvania, 1985; Ph.D., SUNY at Syracuse, 1990
Horton, Brent; Department Chairperson, Associate Professor College of Science and Technology B.S., Warner College of Natural Resources, 1999; Ph.D., University of Maine, 2007
Klosinska, Maja; Associate Professor College of Science and Technology M.S., University of Lodz (Poland), 2003; M.S., Ibid., 2004; Ph.D., Princeton University, 2011
Lehman, Heather; Associate Professor College of Science and Technology B.S., Shippensburg University, 2004; Ph.D., University of Delaware, 2012
Ligocki, Isaac; Associate Professor College of Science and Technology B.A., Wittenberg University, 2006; Ph.D., The Ohio State University, 2015
Ramos-Sepulveda, Laura; Assistant Professor College of Science and Technology B.A., University of Puerto Rico at Mayaguez, 2010; Ph.D., The Pennsylvania State University, 2014
Ryndock, Eric; Assistant Professor College of Science and Technology B.S., Millersville University, 2007; Ph.D., The Pennsylvania State University, College of Medicine, 2016
Stieha, Christopher; Associate Professor College of Science and Technology B.S., University of Kentucky, 2003; B.A., Ibid., 2003; M.S., Ibid., 2008; Ph.D, Ibid., 2012
Wagner, Ryan; Professor College of Science and Technology B.S., South Dakota State University, 1996; Ph.D., Washington State University, 2001
Weaver, Carolyn; Associate Professor College of Science and Technology B.S., Texas A&M University at Galveston, 2003; Ph.D., Ibid., 2016

FACULTY LIST

Weise Cross, Laura; Assistant Professor
College of Science and Technology
B.A., University of Texas, 2009; B.S., Ibid., 2009; Ph.D., University of North Carolina, 2015

Programs

Biology Post Baccalaureate Certification

Overview

Millersville University's Post-Baccalaureate Certification Program in Biology is designed for those applicants who already have a bachelor's degree and would like to be certified to teach Biology in grades 7 - 12 in the State of Pennsylvania. It is not necessary to complete a second degree in order to be certified.

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Course Requirements for APS: Foundations Courses (6 credits)

Complete at least 1 of the following:

Option 1. Foundations Graduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Major in Biology, Post-Baccalaureate Certification

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Biology Foundations: Foundations of Biology

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Biology Courses

Fulfill ALL of the following requirements:

C- Minimum Courses

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Additional Courses

Complete ALL of the following Courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- BIOL473 - Methods/Teaching Biological Issues in the Secondary School

AND

Electives (4 credits)

Earn at least 4 credits from the following:

- Any BIOL course(s)

Note: This requirement may not be satisfied with BIOL100 General Biology, BIOL204 Human Biology, BIOL205 Heredity and Human Affairs, BIOL307 Human Sexuality, BIOL208 Plants and People, BIOL247, BIOL281 Behavioral Biology, or BIOL340 Prspctv in Environm Awareness.

Req Related for Biology, Post-Baccalaureate Cert

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry

Fulfill ALL of the following requirements:

Required Courses

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

AND

Short Course in Organic Chemistry

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

AND

Biochemistry Chemistry I

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1

AND

Earth Science: 200-level and above

Complete at least 1 course in the following course sets:

- Any 2-level ESSC course(s)
- Any 3-level ESSC course(s)
- Any 4-level ESSC course(s)

AND

Mathematics: Precalculus, Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH160 - Precalculus
- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Physics

Complete at least 1 of the following:

Option 1. Physics with Algebra

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Professional Education - Certification (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/EDFN241 Psyc Foundation of Teaching and please register for both courses in the same block.

AND

APS - Professional Bloc

Fulfill ALL of the following requirements:

Instructional Technology, Design & Assessment (3 credits)

Complete at least 1 of the following courses:

- EDFN530 - Instructional Technology, Design and Assessment
- EDFN330 - Instructional Technology, Design & Assessment

AND

Issues in Secondary Education (3 credits)

Complete at least 1 of the following courses:

- SEED521 - Issues in Second Education
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education

AND

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- SEED435 - Teaching of Science in Secondary Schools

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc and but prior to Student Teaching.

AND

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Access the Student teaching Website

AND

Student Teaching Semester (9 credits)

Complete ALL of the following Courses:

- SCED461 - Student Teaching in Science
- SCED462 - Student Teaching in Science

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

Biology Minor

Overview

Students pursuing other degrees at Millersville University looking to expand their understanding and interest in living organisms can opt to minor in Biology. This minor will benefit students by strengthening fundamental concepts, expanding breadth of knowledge, and enhancing depth of understanding through unique, advanced biology electives. Completing a minor in biology can enhance a graduate's employment opportunities in many areas, including but not limited to, Occupational Safety and Health, Disaster Response, Environmental Policy, Education, Science Writing, Scientific Illustration, Data Science, and others.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Biology (20 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Biology Foundations (3-4 credits)

Complete at least 1 of the following:

Option 1 (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

OR

Option 2 (3 credits)

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

AND

Directed Biology Electives (8 credits)

Complete at least 2 of the following courses:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Biology Electives 300/400 Level (6 credits)

Earn at least 6 credits from the following:

- Any 3-level BIOL course(s)
- Any 4-level BIOL course(s)

Note: This requirement may not be satisfied with BIOL340 Prspctv in Environm Awareness.

One 200-level elective may be used upon advisor approval.

Molecular Biology/Biotechnology Minor

Overview

The Molecular Biology/Biotechnology minor focuses on the cellular level of biology and genetics. It is designed to prepare students both for careers in the fast-growing industry associated with molecular biology. This program allows students to study molecular and cellular biology while obtaining a broad background in biology and in the liberal arts.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Molecular Biology/Biotechnology (18-19 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Biology Course (3-4 credits)

Complete at least 1 of the following:

BIOL100 (3 credits)

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

OR

BIOL101 (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (15 credits)

Complete ALL of the following Courses:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology
- BIOL462 - Molecular Biology
- BIOL466 - Molecular and Cell Techniques

Biology, B.S.Ed.

Overview

Traditionally one of the strengths at Millersville, this program prepares students to be teaching biologists. Our goal is graduates who are highly competent biologist who are also highly effective in teaching biology at the secondary school level. The four-year program includes broad training in the physical and biological sciences and extensive coursework in professional education. Students who already hold baccalaureate pedigrees may also apply to be Biology certification students.

Curriculum

Simple Requirements

Major in Biology, BSE (32 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Biology Foundations

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology
- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Required Courses (4 credits)

Complete ALL of the following Courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- BIOL473 - Methods/Teaching Biological Issues in the Secondary School

AND

Electives (4 credits)

Complete ALL of the following Course Sets:

- Any BIOL course(s)

Note: This requirement may not be satisfied with BIOL 100, BIOL 204, BIOL 205, BIOL 207, BIOL 208, BIOL 247, BIOL 281, or BIOL 340.

Professional Education (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (9 credits)

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education **OR** SEED321H - H: Issues in Secondary Education
- EDFN330 - Instructional Technology, Design & Assessment
- SEED435 - Teaching of Science in Secondary Schools

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- SCED461 - Student Teaching in Science

Req Related for Biology, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry

Fulfill ALL of the following requirements:

Required Courses (8 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Organic Chemistry I and II

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

A C- or higher in CHEM231 Organic Chemistry 1 is a pre-requisite for CHEM232 Organic Chemistry 2.

OR

Option 2. Short Course in Organic Chemistry

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235

Organic Chemistry.

Students considering going to graduate school for an advanced degree in Biology should take CHEM231 Organic Chemistry 1 + CHEM232 Organic Chemistry 2.

AND

Biochemistry Chemistry I (4 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1

AND

Earth Science

Complete at least 1 course in the following course sets:

- Any 2-level ESSC course(s)
- Any 3-level ESSC course(s)
- Any 4-level ESSC course(s)

AND

Mathematics

Complete at least 1 of the following courses:

- MATH160 - Precalculus
- MATH161 - Calculus 1
  OR MATH161H - Hon: Calculus 1
- MATH163H - Honors Calculus 1

Students considering graduate or professional school should take MATH161 Calculus 1.

AND

Physics (8-10 credits)

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Additional Comments:
For Biology Majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

Advanced Professional Studies, BSE (12 credits)

Type
Completion Requirement

APS Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American

Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Biology, B.S.

Overview

The B.S. in Biology provides students with a degree path without an “option” or specialization in a particular area of biology. Our goal in this flexible programs is to prepare students broadly in biology so that they can gain immediate employment, or enter graduate school, or start professional study in a school of medicine, veterinary science, dentistry, optometry or podiatry.

Curriculum

Simple Requirements

Major in Biology, BS (43 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (24 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

AND

Required Courses (20 credits)

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Requirements for Bs Biology - No Option Selected

Fulfill ALL of the following requirements:

Biology Colloquium or Seminar in Biology (1 credit)

Complete at least 1 of the following courses:

- BIOL470 - Biology Colloquium
- BIOL472 - Seminar In Biology **OR** BIOL472H - HNRS:Seminar In Biology

AND

Electives (12 credits)

Earn at least 12 credits from the following:

- Any 3-level BIOL course(s)
- Any 4-level BIOL course(s)
- Any 5-level BIOL course(s)

Note: This requirement may not be satisfied with BIOL340 Prspctv in Environm Awareness, BIOL362 Cell and Developmental Biology, BIOL343 Prin of Ecology and Evolution, BIOL364 Genetics and Molecular Biology or BIOL 390.

AND

Electives (3 credits)

Earn at least 3 credits from the following:

- Any 2-level BIOL course(s)
- Any 3-level BIOL course(s)
- Any 4-level BIOL course(s)
- Any 5-level BIOL course(s)

Note: This requirement may not be satisfied with BIOL204 Human Biology, BIOL205 Heredity and Human Affairs, BIOL307 Human Sexuality, BIOL208 Plants and People, BIOL 247 and BIOL281 Behavioral Biology, BIOL256 Nutrition, BIOL340 Prspctv in Environm Awareness or BIOL 390.

In consultation with your advisor, choose additional Biology courses to bring your total Biology courses to 43 credits. 12 credits must be at the 300-level or higher. No more than 3 credits of internship/co-op can count for credits in the major.

Req Related for Biology, BS

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (20 credits)

Fulfill ALL of the following requirements:

Required Courses

Earn a minimum grade of C- in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM231 - Organic Chemistry 1
- CHEM231 - Organic Chemistry 1

AND

Required Courses

Complete ALL of the following Courses:

- CHEM232 - Organic Chemistry 2
- CHEM326 - Biochemistry 1

AND

Mathematics and Computer Science

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Additional Mathematics or Computer Science Electives

Complete at least 1 course in the following course sets:

- Any CMSC 140-599 course(s)
- Any MATH 160-599 course(s)

Note: This requirement may not be satisfied with CMSC101 Problem Solving with Computers and CMSC 111 or CSCI121 Intro to Web Development.

AND

Physics

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Additional Comments:
For Biology Majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

Biology, B.S. - Animal Behavior Option

Overview

The Animal Behavior option in Biology is designed for students who wish to specialize in the study of animal behavior, the scientific study of the causes, functions, development, and evolutionary history of behavior. Students will be prepared for careers in education, whether in a classroom or at an aquarium or zoological garden; research, whether sponsored by companies, universities or the government; animal-human interactions, including both pet and livestock management; and animal conservation biology.

Curriculum

Simple Requirements

Major in Biology, BS (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (24 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (20 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Option in Animal Behavior

See separate block

Concentration in Animal Behavior (20-24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Foundations (10 credits)

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- BIOL385 - Principles of Animal Behavior
  OR BIOL385H - H: Principles of Animal Behavior

AND

Mechanisms of Animal Behavior or Animal Physiology (3 credits)

Complete at least 1 of the following courses:

- BIOL484 - Mech of Animal Behavior
- BIOL435 - Animal Physiology

AND

Behavioral Ecology or Applied Ethology (3 credits)

Complete at least 1 of the following courses:

- BIOL486 - Behavioral Ecology
- BIOL483 - Applied Ethology

AND

Seminar in Animal Behavior (1 credit)

Complete at least 1 of the following courses:

- BIOL470 - Biology Colloquium
- BIOL472 - Seminar In Biology
  OR BIOL472H - HNRS:Seminar In Biology

AND

Practical Experience: Coop, Internship, Research Project in Animal Behavior (1-3 credits)

Earn at least 1 credits from the following:

- BIOL300 - Co-Op Ed Experience in Biol
- BIOL489 - Honors Course
- BIOL498 - Independent Study
- BIOL499 - Departmental Honors

AND

Required Electives (9-11 credits)

Earn at least 9 credits from the following:

- BIOL484 - Mech of Animal Behavior
- BIOL435 - Animal Physiology
- BIOL486 - Behavioral Ecology
- BIOL483 - Applied Ethology
- BIOL470 - Biology Colloquium
- BIOL472 - Seminar In Biology
  OR BIOL472H - HNRS:Seminar In Biology
- BIOL295 - Marine Invertebrates
- BIOL346 - Ornithology
- BIOL396 - Ichthyology
- BIOL415 - Mammalogy
  OR BIOL415H - Hon: Mammalogy
- BIOL416 - Entomology
- BIOL418 - Aquatic Entomology
- BIOL318 - Comparative Vertebrate Anatomy
- BIOL352 - Nutritional Science
  OR BIOL352H - Hon: Nutritional Science
- BIOL437 - Endocrinology
  OR BIOL437H - Hon: Endocrinology
- BIOL438 - Neurobiology
- BIOL442 - Wildlife Ecology & Management
- BIOL443 - Conservation Biology
- BIOL329 - Plant-Insect Interactions

In consultation with your advisor and select additional courses listed that will best prepare you for your area of interest in animal behavior. Students interested in pursuing post-graduate work in medicine (Veterinary Medicine) should take BIOL361 Microbiology (Microbiology).

Req Related for Biology, BS (34-42 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (16-20 credits)

Fulfill ALL of the following requirements:

Required Courses (8 credits)

Complete ALL of the following Courses:
- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Organic Chemistry I and II (8 credits)

Complete ALL of the following Courses:
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

OR

Option 2. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:
- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

Students interested in graduate or professional school should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2.

AND

Biochemistry or Environmental Chemistry (4 credits)

Complete at least 1 of the following courses:
- CHEM326 - Biochemistry 1
- CHEM375 - Environmental Chemistry

AND

Mathematics for Animal Behavior (7-9 credits)

Fulfill ALL of the following requirements:

Biometry (recommended), Survey of Statistics, or Stats & Exp Design I (3-4 credits)

Complete at least 1 of the following courses:
- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- MATH235 - Survey of Statistics
- PSYC211 - Principles of Statistics and Experimental Design 1

AND

Calc for Mgmt, Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:
- MATH151 - Calculus for Management
- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Physics (8-10 credits)

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:
- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:
- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

General Psychology (3 credits)

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

Biology, B.S. - Environmental Biology Option

Overview

Designed to prepare students either to work as environmental managers or to pursue graduate study, this program gives students a strong background in basic biology and ecology. Public service or private employment in conservation, environmental management, planning and consulting, pollution abatement, public health, natural resource management, aquatic biology, and wildlife managers are some of the career areas available to students in this program. Many students in this program complete co-ops and/or independent research projects as part of their education.

Curriculum

Simple Requirements

Major in Biology, BS (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (24 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (20 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and

Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Option in Environmental Biology

See separate block

Concentration in Environmental Biology (18-19 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Environmental Biology Courses (18-19 credits)

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:
- BIOL344 - Population Community Ecology
- BIOL446 - Ecosystems

AND

Seminar in Environmental Biology (1 credit)

Complete ALL of the following Courses:
- BIOL472 - Seminar In Biology
  OR BIOL472H - HNRS:Seminar In Biology

AND

Directed Electives in Advanced Ecology (6 credits)

Complete at least 2 of the following courses:
- BIOL325 - Plant Systematics
- BIOL329 - Plant-Insect Interactions
- BIOL442 - Wildlife Ecology & Management
- BIOL443 - Conservation Biology
- BIOL445 - Aquatic Biology
- BIOL486 - Behavioral Ecology

BIOL325 Plant Systematics is recommended as one of your directed electives in advanced ecology.

AND

Organismal Biology (3-4 credits)

Complete at least 1 of the following courses:
- BIOL346 - Ornithology
- BIOL396 - Ichthyology
- BIOL415 - Mammalogy
  OR BIOL415H - Hon: Mammalogy
- BIOL416 - Entomology
- BIOL418 - Aquatic Entomology
- BIOL424 - Mycology
- BIOL361 - Microbiology
  OR BIOL361H - Hon: Microbiology

AND

Practical Experience in Environmental Biology (1 credit)

Complete at least 1 of the following courses:
- BIOL300 - Co-Op Ed Experience in Biol
- BIOL489 - Honors Course
- BIOL498 - Independent Study
- BIOL499 - Departmental Honors

Choose one of the above for a minimum of 1 credit. Co-op must involve research approved by advisor and result in co-op/internship and scientific research papers.

AND

Electives

Earn at least 1 credits from the following:
- Any 3-level BIOL course(s)
- Any 4-level BIOL course(s)

Note: This requirement may not be satisfied with BIOL340 Prspctv in Environm Awareness or BIOL 390.

In consultation with your advisor, choose additional

courses that would count towards the Biology Major to bring total to 46 minimum credits in the major. Note: BIOL375 Biometry may NOT be used as an elective if used to fulfill the statistics requirement in required related courses.

Req Related for Biology, BS (41-50 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (16-20 credits)

Fulfill ALL of the following requirements:

Required Courses (8 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Organic Chemistry I and II (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

OR

Option 2. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

Students interested in graduate or professional school should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2.

AND

Env Chemistry I & Lab (4 credits)

Complete ALL of the following Courses:

- CHEM375 - Environmental Chemistry

AND

Mathematics for Environmental Biology (7-8 credits)

Fulfill ALL of the following requirements:

Biometry (recommended) or Survey of Statistics (3 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- MATH235 - Survey of Statistics

AND

Calc for Mgmt, Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH151 - Calculus for Management
- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Physics (8-10 credits)

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Environmental Science (6-8 credits)

Complete at least 2 of the following courses:

- CHEM265 - Quantitative Analysis
- CHEM476 - Environmental Chemistry 2
- ESSC281 - GIS Applications for Earth Sci
- ESSC322 - Environmental Hydrology
- ESSC349 - Chemistry of the Atmosphere
  OR ESSC349H - Hon: Chemistry of the Atmosphere
- GEOG227 - Cities
- GEOG281 - Maps and GIS
- GEOG295 - GIS I: Vector Data Analysis
- GEOG304 - Water Resources Management
- GEOG306 - Environmental Impact Assessmnt
- GEOG372 - Urban and Regional Planning
- OSEH220 - Legal Aspects Environmental Safety
- OSEH321 - Environmental & Industrial Hygiene I - Chemical and Biological Hazards

AND

Requirement

Students are encouraged to complete a minor in Environmental Science and to choose courses from the list above that count in the desired minor. View more information on environmental minors.

Biology, B.S. - Marine Biology Option

Overview

The Marine Biology option prepares students for careers in marine biology and graduate study. Our affiliation with the Marine Science Consortium and its field station at Wallops Island, Virginia gives students hands-on experience and training with marine organisms and environments. Students in this program take several three-week long intensive courses during the summer at the field station.

Curriculum

Simple Requirements

Major in Biology, BS (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (20 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Option in Environmental Biology

See separate block

Concentration in Marine Biology (28 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Marine Biology Courses

Fulfill ALL of the following requirements:

Required Marine Biology (4 credits)

Complete at least 1 of the following:

Option 1. Marine Biology (4 credits)

Complete ALL of the following Courses:

- BIOL291 - Marine Biology

OR

Option 2. Coastal Marine Biology and Problem Solving Marine Biol (4 credits)

Complete ALL of the following Courses:

- BIOL290 - Coastal Marine Biology
- BIOL292 - Problem Solving in Marine Biol

AND

Required Courses (9 credits)

Complete ALL of the following Courses:

- BIOL295 - Marine Invertebrates
- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- BIOL396 - Ichthyology

AND

Biological Oceanography (3 credits)

Complete at least 1 of the following courses:

- BIOL495 - Biological Oceanography
- ESSC465 - Biological Oceanography

AND

Seminar in Marine Biology (1 credit)

Complete ALL of the following Courses:

- BIOL472 - Seminar In Biology
  OR BIOL472H - HNRS:Seminar In Biology

AND

Electives (5 credits)

Earn at least 5 credits from the following:

- Any 3-level BIOL course(s)
- Any 4-level BIOL course(s)

Note: This requirement may not be satisfied with BIOL340 Prspctv in Environm Awareness or BIOL 390.

In consultation with your advisor, choose additional courses at the 300-level or higher and approved for Biology majors to bring total credits in major to the minimum 47.

AND

Marine Science Field Courses (6 credits)

Earn at least 6 credits from the following:

- BIOL293 - Coastal Ornithology
- BIOL394 - Coral Reef Ecology
- BIOL295 - Marine Invertebrates
- BIOL296 - Marine Ecology
- BIOL392 - Marine Mammals
- BIOL396 - Ichthyology
- BIOL397 - Marine Botany
- BIOL495 - Biological Oceanography

Or any course(s) with DWLOCATION = W.

Note: At least 2 courses (6 credits) of a student's biology courses (required marine biology or biology electives) must be taken at a marine field site.

Additional Comments:
Students majoring in Marine Biology are encouraged to

consider completing a minor in Oceanography and and in consultation with their advisor and to take further courses in mathematics.

Req Related for Biology, BS

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (16-20 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- ESSC261 - Introduction to Oceanography
- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Organic Chemistry I and II (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

OR

Option 2. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

Students interested in graduate or professional school should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2.

AND

Environmental Chem or Chem Oceanography (3-4 credits)

Complete at least 1 of the following courses:

- CHEM375 - Environmental Chemistry
- ESSC363 - Chemical Oceanography

AND

Mathematics for Marine Biology: Calculus for Mgt, Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH151 - Calculus for Management
- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Physics (8-10 credits)

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Biology, B.S. - Medical Technology Option

Overview

In this program, students study for three years at Millersville and then apply for admission to an accredited regional teaching hospital for one year of clinical training in medical technology. Then students are awarded a B.S. in Biology, Medical Technology Option. After completing the required work, students may sit for a national examination which, if successfully completed, confers board certification in medical technology.

Affiliated Faculty:

Beitz, Edwin; Program Director, Medical Laboratory Science Program, WellSpan/York Hospital

MT(HHS), 1988; B.S., Lycoming College, 1990; M.H.A., St. Francis University, 2001; MLS(ASCP), 2004

Hurtt, Stanley D.; Medical Advisor, Medical Laboratory Science Program, WellSpan/York Hospital
B.A., University of Maryland, 1996; M.D., University of Pittsburgh School of Medicine, 2002; AP/CP, 2007

Kentzel, Ethan;Program Director, Medical Laboratory Science Program, Reading Hospital School of Health Sciences

MLS ASCP, B.S., Slippery Rock University, 2014, M.S., Drexel University, 2022

Miele, Mary Beth; Program Director, Medical Laboratory Science Program, Penn State Health
PhD, MLS(ASCP)CM, RM(NRCM)

Soost, Sherry; Program Director, Medical Laboratory Science Program, Pennsylvania College of Health Sciences
MSHS, MT(ASCP), CHO(NRCC)

Curriculum

Simple Requirements

Major in Biology, B.S. (16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (12 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL362 - Cell and Developmental Biology
  AND BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Option in Medical Technology

See separate block

Concentration in Medical Technology (42 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Medical Tech Courses (8 credits)

Complete ALL of the following Courses:

- BIOL257 - Introduction to Allied Health Professions
- BIOL454 - Immunology
  OR BIOL454H - Hon: Immunology
- BIOL361 - Microbiology
  OR BIOL361H - Hon: Microbiology

AND

Electives (8 credits)

Earn at least 8 credits from the following:

- BIOL254 - Human Anatomy & Physiology I **OR** BIOL254H - Hon: Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II **OR** BIOL255H - Hon: Human Anatomy & Physiology II
- BIOL318 - Comparative Vertebrate Anatomy
- BIOL352 - Nutritional Science **OR** BIOL352H - Hon: Nutritional Science
- BIOL356 - Functional Human Anatomy
- BIOL363 - Medical Microbiology **OR** BIOL363H - Hon: Medical Microbiology
- BIOL375 - Biometry **OR** BIOL375H - Hon: Biometry
- BIOL435 - Animal Physiology
- BIOL437 - Endocrinology **OR** BIOL437H - Hon: Endocrinology
- BIOL438 - Neurobiology
- BIOL462 - Molecular Biology
- BIOL463 - Virology
- BIOL465 - Developmental Biology
- BIOL466 - Molecular and Cell Techniques

BIOL356 Functional Human Anatomy or BIOL254 Human Anat and Physiology 1 & BIOL255 Human Anat and Physiology 2; and BIOL375 Biometry are strongly recommended.

AND

Clinical Lab Science Education (30 credits)

Upon completion of one year of Clinical Laboratory Science education at an affiliated hospital site, 30 credit hours will be credited.

Req Related for Biology, B.S. (24-29 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (16-20 credits)

Fulfill ALL of the following requirements:

Required Courses (8 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Organic Chemistry I and II (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

OR

Option 2. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

Students interested in graduate or professional school should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2.

AND

Required Courses (4 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1

AND

Mathematics for Medical Tech or Nuclear Med: Precalculus, Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH160 - Precalculus

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

Some clinical sites require a course in statistics such as MATH130 Elements of Statistics 1, MATH235 Survey of Statistics or BIOL375 Biometry. Students interested in graduate or professional school should take MATH161 Calculus 1.

AND

Physics (4 credits)

Complete at least 1 of the following courses:

- PHYS131 - Physics 1 with Algebra

Students interested in graduate or professional school should also take PHYS132 Physics 2 with Algebra.

Biology, B.S. - Molecular Biology/ Biotechnology Option

Overview

Designed to prepare students both for careers in the fast-growing industry associated with molecular biology and for admission into graduate and professional schools, this program allows students to concentrate in molecular and cellular biology while obtaining a broad background in biology and in the liberal arts. Students in this program complete advanced courses in biochemistry and in molecular and cellular techniques; many take advantage of opportunities to complete independent research projects in genetics, developmental biology, virology, cell and molecular biology, or endocrinology.

Curriculum

Simple Requirements

Major in Biology, BS (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (24 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (20 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and

Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Option in Molecular Biology

See separate block

Concentration in Molecular Biology (14 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Molecular/Biotechnology Courses (8 credits)

Fulfill ALL of the following requirements:

Required Courses (7 credits)

Complete ALL of the following Courses:
- BIOL462 - Molecular Biology
- BIOL466 - Molecular and Cell Techniques

AND

Seminar in Molecular Biology (1 credit)

Complete ALL of the following Courses:
- BIOL472 - Seminar In Biology
  OR BIOL472H - HNRS:Seminar In Biology

BIOL463 Virology and BIOL465 Developmental Biology and and BIOL467 Human Genetics:Analysis/Apps are recommended.

AND

Electives (6 credits)

Earn at least 6 credits from the following:
- Any 3-level BIOL course(s)
- Any 4-level BIOL course(s)
- Any 5-level BIOL course(s)

Note: This requirement may not be satisfied with BIOL340 Prspctv in Environm Awareness , BIOL 390, or BIOL324 Plant Biochemistry .

BIOL463 Virology, BIOL465 Developmental Biology, and BIOL467 Human Genetics:Analysis/Apps are recommended.

Req Related for Biology and BS

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (20-24 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:
- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM326 - Biochemistry 1

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Organic Chemistry I and II (8 credits)

Complete ALL of the following Courses:
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

OR

Option 2. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:
- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235

Organic Chemistry.

Students interested in graduate or professional school should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2.

AND

Plant Biochemistry or Biochemistry II (4 credits)

Complete at least 1 of the following courses:

- BIOL324 - Plant Biochemistry
- CHEM324 - Plant Biochemistry
- CHEM327 - Biochemistry 2

AND

Mathematics and Computer Science

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Addl Mathematics or Computer Science Electives

Complete at least 1 course in the following course sets:

- Any CMSC 140-599 course(s)
- Any MATH 160-599 course(s)

Note: This requirement may not be satisfied with CMSC101 Problem Solving with Computers, CMSC 111 or CSCI121 Intro to Web Development.

AND

Physics (8-10 credits)

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Additional Comments:
For Biology Majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

Biology, B.S. - Nuclear Medicine Technology Option

Overview

To earn a B.S. in Biology with the Nuclear Medicine Technology Option, students must complete three years of study at Millersville, then apply for admission to Lancaster Institute for Health Education for one year's training at a regional hospital. After completing the degree, students are prepared to take a national examination which, if passed, grants board certification in nuclear medicine technology.

Affiliated Faculty:

Bakel, Joanne; Clinical Coordinator-Radiologic Science Program
Penn State University

Baranowski, Jarrod; Clinical Supervisor
B.S., Millersville University, 2000; CNMT, 2000; Lancaster General Hospital Noninvasive Cardiology

Crincoli, Jonathan; CNMT, NMTCB(CT), PET
Fern Hill Medical Campus

Dreach, Heath Tanner; PharmD
Cardinal Health

Glenn, Jaime; Clinical Supervisor, Meritus Medical Center/ Diagnostic Imaging Services
A.S., Hagerstown Community College; ARRT(R), 2003; Pennsylvania College of Health Sciences, CNMT, 2004

Greth, Madeline; Program Director, Nuclear Medicine Program, Pennsylvania College of Health Sciences
B.S., Millersville University, 2012; CNMT, 2012, RT(CT), 2015, PET, 2018, NCT, 2020

Grove Shaffer, Jennifer; Clinical Instructor–Nuclear Medicine, Hershey Medical Center
B.S., York College of Pennsylvania/Lancaster Institute of Health Education, CNMT, 1998

Hansell, Amanda; Clinical Supervisor, WellSpan Good Samaritan Hospital
B.S., Pennsylvania College of Health Sciences; CNMT, 2010

Havanas, Olga; Clinical Supervisor, Wellspan York Hospital
B.A., York College/Lancaster General College of Health Sciences, 2018; CNMT, 2018

Hoffert, Kathleen, CNMT, RT(N)
B.S.,Cedar Crest College; ARRT(N), 1986; CNMT, 1986

Ingstad, Scott, PharmD, BCNP, Pharmacy Manager Cardinal Health

Kelkis, David; Program Director, Nuclear Medicine Technology, The Johns Hopkins Hospital Schools of Medical Imaging
BS, CNMT, NMTCB(CT), RT(N)(CT), B.S. University of Scranton, 2022, Hopkins' Schools of Medical Imaging, 2015,

Lazarus, Monica, CNMT, RT(N), Network Manager, Nuclear Medicine
St. Luke's University Health Network

Mancini, Paula; Adjunct Faculty, Nuclear Medicine Technology Program, Pennsylvania College of Health Sciences
B.S., Millersville University; M.H.A., The Pennsylvania State University, 2002; ARRT(N), 1987; CNMT, 1987.

Meley, Jessica; Clinical Supervisor, Hershey Medical Center
B.S., Millersville University/Lancaster General College of Health Sciences, 2004; CNMT, 2004,

Miles, Constance E.; Clinical Supervisor, Penn Medicine/ Lancaster General Hospital
B.S., Millersville University, 1994; CNMT, 1994.

Poulton, Bethany; Clinical Supervisor, Penn Medicine Chester County Hospital
B.S., Thomas Jefferson University, 2004; CNMT, 2004,

Satre, Susan; Clinical Supervisor, St. Luke's Health Network
B.S., Lyndon University, 1984; CNMT, 1995, RT(N), 1995, PET, 2004,

Shaffer, Jennifer; Clinical Instructor–Nuclear Medicine, WellSpan York Hospital
B.S., York College of Pennsylvania/Lancaster Institute of Health Education, CNMT, 1998;

Villanti, Alison; CNMT, RT (N) (CT), MHA
Fern Hill Medical Campus

Curriculum

Simple Requirements

Major in Biology, BS (16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (16 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (12 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Option in Molecular Biology

See separate block

Concentration in Nuclear Medical Technology (37 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Nuclear Medical Tech Courses (9 credits)

Complete ALL of the following Courses:

- BIOL257 - Introduction to Allied Health Professions
- BIOL356 - Functional Human Anatomy
- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry

AND

Clinical Lab Science Education (28 credits)

Upon completion of one year at the Lancaster General Hospital College of Nursing and Allied Health 28 credits will be applied.

Electives for Nuclear Medical Tech are not required.

Req Related for Biology, BS

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (16-20 credits)

Fulfill ALL of the following requirements:

Required Courses (8 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Organic Chemistry I and II (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

OR

Option 2. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

Students interested in graduate or professional school should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2.

AND

Required Courses (4 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1

AND

Mathematics for Medical Tech or Nuclear Med: Precalculus, Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH160 - Precalculus
- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

Some clinical sites require a course in statistics such as MATH130 Elements of Statistics 1, MATH235 Survey of Statistics or BIOL375 Biometry. Students interested in graduate or professional school should take MATH161 Calculus 1.

AND

Physics (8-10 credits)

Fulfill ALL of the following requirements:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

AND

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Biology, B.S. - Plant Sciences Option

Overview

This option is designed for students who wish to specialize in the study of plants in preparation for graduate study or for careers in plant sciences such as plant propagation, genetic plant engineering, horticulture, forestry, agriculture, plant ecology or the floral industry.

Curriculum

Simple Requirements

Major in Biology, BS (26 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (25 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (21 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology
- BIOL472 - Seminar In Biology
  OR BIOL472H - HNRS:Seminar In Biology

AND

Practical Experience (1 credit)

Earn a minimum grade of C- in the following:

- BIOL300 - Co-Op Ed Experience in Biol
  OR BIOL498 - Independent Study
  OR BIOL489 - Honors Course
  OR BIOL499 - Departmental Honors

AND

Option in Plant Sciences

See separate block

Concentration in Plant Sciences (26-27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Advanced Plant Science Electives (12 credits)

Complete at least 3 of the following courses:

- BIOL325 - Plant Systematics
- BIOL327 - Horticultural Science
  OR BIOL327H - Hon: Horticultural Science
- BIOL329 - Plant-Insect Interactions
- BIOL424 - Mycology

AND

Biochemistry (4 credits)

Complete at least 1 of the following courses:

- BIOL324 - Plant Biochemistry
- CHEM326 - Biochemistry 1

AND

Biometry (3-4 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- MATH235 - Survey of Statistics

- PSYC211 - Principles of Statistics and Experimental Design 1

BIOL375 Biometry recommended.

AND

Biology Electives (7 credits)

Earn at least 7 credits from the following:

- Any 3-level BIOL course(s)
- Any 4-level BIOL course(s)

Additional Comments:
In addition to Biology Core Courses, the Plant Sciences Concentration requires completion of a course sequence in Botany, Horticultural Science, Plant Biotech and Molecular, or Plant Ecology and the Environment in order to complete the required 52 credits for major.

Req Related for Biology, BS (24-31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (12-16 credits)

Fulfill ALL of the following requirements:

Required Courses (8 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Short-sequence (recommended) (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

OR

Option 2. Long-sequence (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

Students interested in graduate or professional school should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2.

AND

Computational: Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH151 - Calculus for Management
- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Physics (8-10 credits)

Fulfill ALL of the following requirements:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

AND

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Biology, B.S. - Pre-Medical Professions Option

Overview

As with all of its preprofessional programs, Millersville University believes that undergraduate training for medical school should focus on a well-rounded education. Therefore, premedical professional option students are required to take a core foundation of liberal arts courses. That foundation, in combination with the recommended scientific courses, prepares premedical students at Millersville for the rigors of medical education. It also challenges them to develop both their abilities and perceptions so they are primed for the diagnostic and ethical demands of medical practice.

Curriculum

Simple Requirements

Major in Biology, BS (25 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (25 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (21 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology
- BIOL472 - Seminar In Biology
  OR BIOL472H - HNRS:Seminar In Biology

AND

Option in Pre-Medical Professions

See separate block

Concentration in Pre-Medical Professions

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Pre-Professional Courses

Fulfill ALL of the following requirements:

Option 1. Human Anatomy & Physiology I and II (8 credits)

Complete ALL of the following Courses:

- BIOL254 - Human Anatomy & Physiology I
  OR BIOL254H - Hon: Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II
  OR BIOL255H - Hon: Human Anatomy & Physiology II

AND

Option 2. Comp Vert Anatomy and Animal Physiology (7 credits)

Complete ALL of the following Courses:

- BIOL318 - Comparative Vertebrate Anatomy
- BIOL435 - Animal Physiology

AND

Biology Electives (9-12 credits to bring total BIOL credits to 43 minimum)

Earn at least 9 credits from the following:

- BIOL300 - Co-Op Ed Experience in Biol
- BIOL352 - Nutritional Science
  OR BIOL352H - Hon: Nutritional Science
- BIOL361 - Microbiology
  OR BIOL361H - Hon: Microbiology
- BIOL363 - Medical Microbiology
  OR BIOL363H - Hon: Medical Microbiology
- BIOL415 - Mammalogy
  OR BIOL415H - Hon: Mammalogy
- BIOL437 - Endocrinology
  OR BIOL437H - Hon: Endocrinology
- BIOL438 - Neurobiology
- BIOL454 - Immunology
  OR BIOL454H - Hon: Immunology
- BIOL462 - Molecular Biology
- BIOL463 - Virology
- BIOL465 - Developmental Biology
- BIOL467 - Human Genetics:Analysis/Apps
- BIOL489 - Honors Course
- BIOL498 - Independent Study
- BIOL499 - Departmental Honors

Students interested in Veterinary School are encouraged to take BIOL318 Comparative Vertbrate Anatomy, BIOL361 Microbiology, & BIOL435 Animal Physiology; Students interested in Dental School are encouraged to take BIOL361 Microbiology, BIOL454H Hon: Immunology, & BIOL465 Developmental Biology; Students interested in Pharmacy programs should take BIOL361 Microbiology & BIOL454H Hon: Immunology; Students interested in Physician Assistant prograns should take BIOL361 Microbiology & BIOL454H Hon: Immunology.

Req Related for Biology, BS (35-37 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (20 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM326 - Biochemistry 1

AND

Organic Chemistry I and II (8 credits)

Earn a minimum grade of C- in the following:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

AND

Mathematics for Pre-Medical Professions (7 credits)

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1

AND

Biometry or Survey of Statistics (3 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- MATH235 - Survey of Statistics

AND

Physics (8-10 credits)

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Recommended Gened for MCAT

PSYC100 General Psychology. PSYC227 Devlopmnt Child and Adolescent/PSYC228 Life Span Human Devlopment, PHIL100 Introduction to Philosophy and SOCI101 Introduction to Sociology are recommended Gen Ed courses for students planning to take the MCAT.

PSYC100 General Psychology, PSYC227 Devlopmnt Child and Adolescent, PSYC228 Life Span Human Devlopment (G3), PHIL100 Introduction to Philosophy (G1), and SOCI101 Introduction to Sociology (G3)

Biology, B.S. - Optometry Option

Overview

This affiliated Optometry degree program is for students interested in pursuing a medical profession focusing on eye/vision health. Students in this program complete the first three years of Pre-Optometry study at Millersville by following a broad, interdisciplinary approach to general biology studies. Those who meet the admissions standards of the Pennsylvania College of Optometry (PCO) are eligible to apply for admission. After completion of the first year of study at PCO, the successful Millersville student is awarded the BS in Biology. After completing the PCO four-year program of study students then are awarded the Doctor of Optometry degree from PCO.

Curriculum

Simple Requirements

Major in Biology, BS (16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (16 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (12 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Option in Pre-Optometry

See separate block

Concentration in Pre-Optometry (31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Pre-Optometry Courses (8 credits)

Complete ALL of the following Courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- BIOL361 - Microbiology
  OR BIOL361H - Hon: Microbiology
- BIOL472 - Seminar In Biology
  OR BIOL472H - HNRS:Seminar In Biology

AND

Optometry Clinical Education (23 credits)

Upon completion of one year at Pennsylvania College of Optometry, 23 credits will be credited toward the B.S. degree in Biology with the Optometry option.

Req Related for Biology and BS

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (20 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM326 - Biochemistry 1

AND

Organic Chemistry I and II (8 credits)

Earn a minimum grade of C- in the following:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

AND

Mathematics and Computer Science

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Addl Mathematics or Computer Science Electives

Complete at least 1 course in the following course sets:

- Any CMSC 140-599 course(s)
- Any MATH 160-599 course(s)

Note: This requirement may not be satisfied with CMSC101 Problem Solving with Computers, CMSC 111 or CSCI121 Intro to Web Development.

AND

Physics (8-10 credits)

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus

- PHYS232 - Physics 2 with Calculus

Additional Comments:
For Biology Majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

Biology, B.S. - Pre-Podiatry Option

Overview

Students interested in pursuing a medical career focusing on the foot and ankle should consider the Pre-Podiatry degree program. This affiliated program between Millersville and the Temple University School of Podiatric Medicine allows Millersville students to transfer to the professional school after satisfactorily completing three years at Millersville. While at Millersville University, students will follow a broad, interdisciplinary approach to general biology studies. After successful completion of the basic science courses at Temple the student is awarded a B.S. in Biology from Millersville. Each year, three spaces for admission to the podiatric school are reserved for Millersville students. After four years of successful study at the podiatric school the student earns a Doctor of Podiatric Medicine degree from Temple University.

Curriculum

Simple Requirements

Major in Biology, B.S. (16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (16 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (12 credits)

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics &

Molecular Biology

AND

Option in Pre-Podiatry

See separate block

Concentration in Pre-Podiatry (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Pre-Podiatry Courses (9 credits)

Complete ALL of the following Courses:

- BIOL257 - Introduction to Allied Health Professions
- BIOL356 - Functional Human Anatomy
- BIOL435 - Animal Physiology

AND

Podiatry Clinical Education

Upon completion of one year at Temple University College of Podiatric Medicine 24 credit hours will be credited toward the B.S. degree in Biology with the Pre-podiatry option.

Req Related for Biology, BS

Type
Completion Requirement

Chemistry (20 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM326 - Biochemistry 1

AND

Organic Chemistry I and II (8 credits)

Earn a minimum grade of C- in the following:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

Requirements

Fulfill ALL of the following requirements:

Mathematics for Pre-Athl, Resp Ther, or PPOD: Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Physics (8-10 credits)

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Biology, B.S. - Respiratory Therapy Option

Overview

The Respiratory Therapy program consists of three years study as a Biology/Respiratory Therapy major or two years study as an Allied Health Technology/Respiratory Therapy major at Millersville followed by a 19-month clinical training phase cosponsored by a regional hospital. At the end of their studies students are awarded the BS in Biology, Respiratory Therapy option or Allied Health Technology, Respiratory Therapy option. They are eligible to sit for the entry-level national certification examination, and when that is passed, the Clinical Simulation Exam. Persons already holding baccalaureate degrees may apply for admission into the clinical phase of the program as certification students.

Affiliated Faculty:

Ahmad, Masood; Medical Director
M.D., F.Sc., Pre-Medicine, Government College, Gujranwala, Pakistan, 1989; M.B., B.S., Nishtar Medical College, Multan, Pakistan, 1996. Board Certifications: Internal Medicine, 2004; Critical Care Medicine, 2007; Pulmonary Disease, 2010; Sleep Medicine, 2011

Chrissos, Elaine; Program Director
B.S.Ed., Millersville University, 1980; Millersville University Program in Respiratory Therapy, 1988; RRT, 1989, MS Northeastern University, 2022

Harleman, Jarrod; Director of Clinical Education
B.S., Millersville University Program in Respiratory Therapy, 2010; M.S., Misericordia University, 2016; RRT, 2011. Neonatal- Pediatric Specialist, 2011

Curriculum

Simple Requirements

Major in Biology, BS (25 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (12 credits)

Fulfill ALL of the following requirements:

Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Courses (8 credits)

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Option in Respiratory Therapy

See separate block

Concentration in Respiratory Therapy (57 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Respiratory Therapy Courses (13 credits)

Fulfill ALL of the following requirements:

Required Courses (1 credit)

Complete ALL of the following Courses:

- BIOL257 - Introduction to Allied Health Professions

AND

: Required Courses (12 credits)

Earn a minimum grade of C- in the following:

- BIOL254 - Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II

- BIOL361 - Microbiology
  OR BIOL361H - Hon: Microbiology

AND

Respiratory Therapy Professional Phase I (32 credits)

Complete ALL of the following Courses:

- REST410 - Acute Cardiopulmonary Care
- REST411 - Respiratory Care Techniques 1
- REST412 - Principles of Aerosol & Gas Therapy
- REST413 - Respiratory Assessment & Therapeutics
- REST414 - Respiratory Care Techniques 2
- REST419 - Respiratory Care in Alternate Sites
- REST420 - Arterial Blood Gas Analysis
- REST421 - Physiology of Mechanical Ventilation
- REST422 - Pharmacology
- REST423 - Infectious Diseases
- REST424 - Non-Infectious Diseases
- REST425 - Neonatology for the Respiratory Therapist
- REST460 - Clinical Practice 1
- REST461 - Clinical Practicum 1

Student must complete the Phase II coursework in order to be employed and certified as a respiratory therapist.

AND

Respiratory Therapy Professional Phase II (22 credits)

Complete ALL of the following Courses:

- REST415 - Technical Aspects of Mechanical Ventilation
- REST417 - Respiratory Care Techniques 3
- REST462 - Clinical Practice 2
- REST463 - Clinical Practicum 2
- REST464 - Clinical Practicum 3
- REST495 - Respiratory Care Research

Following completion of Phase II coursework, the student will receive a respiratory therapy certificate, which will permit them to seek employment as a respiratory therapist and qualifies them to take the certification exam.

Req Related for Biology, BS (24-30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry (16-20 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM326 - Biochemistry 1

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Organic Chemistry I and II (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

OR

Option 2. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

AND

Mathematics for Pre-Athl, Resp Ther, or PPOD:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Physics: Physics 1 with Algebra or Calculus (4-5 credits)

Earn a minimum grade of C- in the following:

- PHYS131 - Physics 1 with Algebra
- PHYS231 - Physics 1 with Calculus

Students who might be interested in attending graduate or professional school after completing their professional phase should also take PHYS132 Physics 2 with Algebra or PHYS232 Physics 2 with Calculus.

Allied Health Technology, B.S. - Medical Technology 3+1 Year Option

Overview

In the Medical Technology program at Millersville University, students study for three years at Millersville and then apply to an accredited regional teaching hospital for one year of clinical training. Upon successful completion of the clinical phase of the program, students receive a Bachelor of Science (B.S.) in Biology degree with an option in Medical Technology. MU students are also eligible to sit for the national certification examination upon graduation.

Curriculum

Simple Requirements

Major in Allied Health Tech-Medical Technology, BS (59 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (1 credits)

Complete ALL of the following Courses:

- BIOL257 - Introduction to Allied Health Professions

AND

Biology Foundations: Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Biology Courses (23 credits)

Earn a minimum grade of C- in the following:

- BIOL254 - Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II
- BIOL362 - Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

- BIOL454 - Immunology
- BIOL361 - Microbiology

AND

Directed Electives (5 credits)

Earn at least 5 credits from the following:

- BIOL352 - Nutritional Science
- BIOL363 - Medical Microbiology
- BIOL437 - Endocrinology
- BIOL438 - Neurobiology
- BIOL455 - Cardiopulmonary Physiology
- BIOL462 - Molecular Biology
- BIOL463 - Virology
- BIOL465 - Developmental Biology
- BIOL466 - Molecular and Cell Techniques
- BIOL467 - Human Genetics:Analysis/Apps
- BIOL472 - Seminar In Biology
- REST422 - Pharmacology

AND

Med Tech Clinical Coursework (26 credits)

26 credits in Clinical Laboratory Science completed at an affiliate hospital site

Req Related for Allied Healt Tech-Medical Tech, BS (27-31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirement

Required Related Credits

AND

Required Courses (15 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM326 - Biochemistry 1
- MATH130 - Elements of Statistics 1

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

OR

Option 2. Organic Chemistry I and Organic Chemistry II (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

A C- or higher in CHEM231 Organic Chemistry 1 is a pre-requisite for CHEM232 Organic Chemistry 2.

Students planning to attend graduate school or pursue programs in medical, dental, veterinary, pharmacy, physical therapy or physician assistant after their clinical training should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2 for this requirement.

AND

Precalculus (4 credits)

Complete ALL of the following Courses:

- MATH160 - Precalculus

Students intereted in attending graduate or professional school should also take MATH161 Calculus 1

AND

Physics I with Algebra (4 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra

Students interested in attending graduate or professional school should also take PHYS132 Physics 2 with Algebra

Additional Comments:
For Allied Health Technology majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

Allied Health Technology, B.S. - Medical Imaging 3+1 Year Option

Overview

The Medical Imaging option within Millersville University's Allied Health major prepares students to become nuclear medicine technologists (NMTs), healthcare professionals who are trained to safely prepare and administer small doses of radioactive compounds (radiopharmaceuticals) to patients to help detect diseases, injuries or abnormalities. The NMT uses sophisticated radiation-detecting diagnostic equipment to create images of virtually every organ in the body, study body functions (stress test), analyze biological specimens, and treat diseases (certain cancers).

This 3 + 1 program gives students the benefit of learning in the classroom and in the hospital. At Millersville, courses focus on general education, math and science requirements. The clinical programs provide classroom, laboratory and patient experiences under the supervision of medical instructors. For MU students interning at local hospitals, University housing is available.

Curriculum

Simple Requirements

Major in Allied Health Tech-Medical Imaging, BS (58 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (1 credit)

Complete ALL of the following Courses:

- BIOL257 - Introduction to Allied Health Professions

AND

Biology Foundations: Foundations of Biology (4 credits)

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

AND

Required Biology Courses (23 credits)

Complete ALL of the following Courses:

- BIOL254 - Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II
- BIOL362 - Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology
- BIOL454 - Immunology
- BIOL361 - Microbiology

AND

Directed Electives (4 credits minimum)

Earn at least 4 credits from the following:

- BIOL352 - Nutritional Science
- BIOL363 - Medical Microbiology
- BIOL437 - Endocrinology
- BIOL438 - Neurobiology
- BIOL455 - Cardiopulmonary Physiology
- BIOL462 - Molecular Biology
- BIOL463 - Virology
- BIOL465 - Developmental Biology
- BIOL467 - Human Genetics:Analysis/Apps
- BIOL472 - Seminar In Biology
- REST422 - Pharmacology

AND

Nuclear Med Clinical Coursework (26 credits)

26 credits in Clinical Education at Lancaster General Hospital College of Nursing and Allied Health.

Req Related for Allied Hlth Tech-Medical Imaging, BS (28-32 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (16 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM326 - Biochemistry 1
- MATH130 - Elements of Statistics 1
- WSSD110 - Medical Terminology

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

OR

Option 2. Organic Chemistry I and Organic Chemistry II (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

A C- or higher in CHEM231 Organic Chemistry 1 is a pre-requisite for CHEM232 Organic Chemistry 2.

Students planning to attend graduate school or pursue programs in medical, dental, veterinary, pharmacy, physical therapy or physician assistant after their clinical training should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2 for this requirement.

AND

Precalculus (4 credits)

Complete ALL of the following Courses:

- MATH160 - Precalculus

Students intereted in attending graduate or professional school should also take MATH161 Calculus 1.

AND

Physics I with Algebra (4 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra

Students interested in attending graduate or professional school should also take PHYS132 Physics 2 with Algebra.

Additional Comments:
For Allied Health Technology majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

Allied Health Technology, B.S. - Pre-Athletic Training Dual-Degree Option

Overview

Millersville University's Pre-Athletic Training program puts students on their way to the master's degree now required by the Athletic Training Strategic Alliance. MU collaborates with other graduate-level athletic training education programs in Pennsylvania to allow students to meet that requirement in five years. Following three years of coursework, students can apply to one of the select graduate programs. Upon the completion of your first year in that graduate program, students receive a Bachelor of Science (B.S.) in Allied Health Technology with an option in Pre-Athletic Training from Millersville
University. Students who continue this course of study earn a Master of Science (M.S.) in Athletic Training from the affiliated university after a second year of graduate study.

Pre-Athletic Training students also have the option to complete all four years of their bachelor degree at MU before applying to an athletic training graduate program.

Curriculum

Simple Requirements

Major in Allied Health Tech-Pre-Athletic Trng, BS (44 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Biology Foundations: General Biology (3 credits)

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

AND

Required Biology Courses (23 credits)

Complete ALL of the following Courses:

- BIOL254 - Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II
- BIOL352 - Nutritional Science

OR BIOL352H - Hon: Nutritional Science
- BIOL362 - Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology
- BIOL361 - Microbiology

AND

Required Wellness & Sport Sciences Courses

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:
- WSSD311 - Resp to Emergen: First Aid CPR
- WSSD375 - Prevention and Care of Athletic Injuries
- WSSD450 - Kinesiology and Phys Found of Sport
- WSSD452 - Nutrition for Performance Enhancement
- WSSD491 - Exercise Physiology

AND

Sport Psychology (3 credits)

Complete at least 1 of the following courses:
- WSSD485 - Psychological Aspects of Sport and Exercise
- WSSD582 - Sport Psychology

AND

Clinical Education

Upon completion of one year of clinical education in an affiliated Athletic Training Program, up to 40% of the graduate credits will be counted toward the B.S. degree in Allied Health Technology, Pre-Athletic Training option.

Req Related for Allied Hlth Tech-Pre-Ath Trng, BS (23-27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (8 credits)

Complete ALL of the following Courses:
- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

AND

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:
- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

OR

Option 2. Organic Chemistry I and Organic Chemistry II (8 credits)

Complete ALL of the following Courses:
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

A C- or higher in CHEM231 Organic Chemistry 1 is a pre-requisite for CHEM232 Organic Chemistry 2.

Students planning to attend graduate school or pursue programs in medical, dental, veterinary, pharmacy, physical therapy or physician assistant after their clinical training should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2 for this requirement.

AND

Precalculus (4 credits)

Complete ALL of the following Courses:
- MATH160 - Precalculus

Students interested in attending graduate or professional school should also take MATH161 Calculus 1.

AND

Physics I with Algebra (4 credits)

Complete ALL of the following Courses:

- PHYS131 - Physics 1 with Algebra

Students interested in attending graduate or professional school should also take PHYS132 Physics 2 with Algebra.

AND

Health Psychology (3 credits)

Complete ALL of the following Courses:

- PSYC356 - Health Psychology

PSYC100 General Psychology and PSYC227 Devlopmnt Child and Adolescent or PSYC228 Life Span Human Devlopment should be taken as G3 electives, they are pre-requisites for PSYC356 Health Psychology. PHIL PHIL100 Introduction to Philosophy (G1), SOCI101 Introduction to Sociology or ANTH121 Cultural Anthropology (G3), BIOL307 Human Sexuality (D, W), COMM461 Health Communication (P) are also recommended courses to help students fulfill graduate school pre-requisites.

Additional Comments:
For Allied Health Technology majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

Allied Health Technology, B.S. - Respiratory Therapy 2+2 Year Option

Overview

Millersville University's Respiratory Therapy program is one of the longest continuously accredited Respiratory Care schools in the nation, with roots in a training course that was first offered in 1963. MU offers two tracks for aspiring respiratory therapists. The 2+2 Respiratory Therapy option within the Allied Health Technology major consists of two years of undergraduate liberal arts and science coursework at Millersville followed by a 19-month professional education and training phase. At the completion of the training, students are awarded a Bachelor of Science (B.S.) in Allied Health Technology degree with an option in Respiratory Therapy.

Curriculum

Simple Requirements

Major in Allied Hlth Tech-Respiratory Therapy, BS (72 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Biology Foundations: General Biology (3 credits)

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

AND

Required Biology Courses (15 credits)

Earn a minimum grade of C- in the following:

- BIOL254 - Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II
- BIOL352 - Nutritional Science
- BIOL361 - Microbiology
  OR BIOL361H - Hon: Microbiology

AND

Required Respiratory Therapy Courses (54 credits)

Complete ALL of the following Courses:

- REST410 - Acute Cardiopulmonary Care
- REST411 - Respiratory Care Techniques 1
- REST412 - Principles of Aerosol & Gas Therapy
- REST413 - Respiratory Assessment & Therapeutics
- REST414 - Respiratory Care Techniques 2
- REST415 - Technical Aspects of Mechanical Ventilation
- REST417 - Respiratory Care Techniques 3
- REST419 - Respiratory Care in Alternate Sites
- REST420 - Arterial Blood Gas Analysis
- REST421 - Physiology of Mechanical Ventilation
- REST422 - Pharmacology
- REST423 - Infectious Diseases
- REST424 - Non-Infectious Diseases
- REST425 - Neonatology for the Respiratory Therapist
- REST460 - Clinical Practice 1
- REST461 - Clinical Practicum 1
- REST462 - Clinical Practice 2
- REST463 - Clinical Practicum 2
- REST464 - Clinical Practicum 3
- REST495 - Respiratory Care Research

Req Related for Allied Hlth Tech-Resp Ther, BS (11 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry: General, Organic and Biochemistry (6 credits)

Complete ALL of the following Courses:

- CHEM103 - Gen Organic and Biochemistry 1
- CHEM104 - Gen Organic and Biochemistry 2

Students planning to attend graduate school or pursue programs in medical, dental, veterinary, pharmacy, physical therapy or physician assistant after their clinical training should take CHEM111 Introductory Chemistry 1, CHEM112 Introductory Chemistry 2, CHEM231 Organic Chemistry 1, CHEM232 Organic Chemistry 2 for this requirement. Others may take only CHEM103 Gen Organic and Biochemistry 1 and CHEM104 Gen Organic and Biochemistry 2.

AND

Elements of Statistics I (3 credits)

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1

AND

Physics I with Algebra (4 credits)

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1

Students interested in attending graduate or professional school should also take PHYS132 Physics 2 with Algebra.

Additional Comments:
For Allied Health Technology majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

Allied Health Technology, B.S. - Sports Medicine

Overview

The Sports Medicine degree program is for students who envision a future career in healthcare professions such as Athletic Trainer, Physical Therapist, Occupational Therapist, Physician Assistant, or Orthopedic Medicine – a branch of medicine that focuses on the care of the musculoskeletal system. This academic major provides students with the foundational knowledge of the human body, sport performance, and basic injury care. This major also provides students with the prerequisite coursework they will need to become eligible for graduate school.

Curriculum

Simple Requirements

Major in Allied Health Tech-Sports Medicine, BS (48 credits)

Type
Completion Requirement

Biology Foundations: General Biology (3 credits)

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

Required Biology Courses (23 credits)

Complete ALL of the following Courses:

- BIOL257 - Introduction to Allied Health Professions
- BIOL254 - Human Anatomy & Physiology I
  OR BIOL254H - Hon: Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II
  OR BIOL255H - Hon: Human Anatomy & Physiology II
- BIOL352 - Nutritional Science
  OR BIOL352H - Hon: Nutritional Science
- BIOL361 - Microbiology
  OR BIOL361H - Hon: Microbiology
- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry

Required Wellness & Sport Sciences Courses (14 credits)

Complete ALL of the following Courses:

- WSSD110 - Medical Terminology
- WSSD311 - Resp to Emergen: First Aid CPR
- WSSD375 - Prevention and Care of Athletic Injuries
- WSSD450 - Kinesiology and Phys Found of Sport
- WSSD491 - Exercise Physiology
- WSSD492 - Seminar in Sport Science

Sports Medicine Electives (8 credits)

Earn at least 8 credits from the following:

- BIOL300 - Co-Op Ed Experience in Biol
- BIOL363 - Medical Microbiology
  OR BIOL363H - Hon: Medical Microbiology
- BIOL364 - Foundations of Genetics & Molecular Biology
- BIOL438 - Neurobiology
- BIOL454 - Immunology
  OR BIOL454H - Hon: Immunology
- BIOL463 - Virology
- BIOL465 - Developmental Biology
- BIOL498 - Independent Study
- WSSD452 - Nutrition for Performance Enhancement
- WSSD483 - Legal Aspects of Sport
- WSSD400 - Co-Op Ed Experience in WSSD
- WSSD498 - Independent Study
- WSSD485 - Psychological Aspects of Sport and Exercise

To meet the requirement for Sports Medicine Electives, classes must include at least 2 hours from Biology courses.

Req Related for Allied Hlth Tech-Sports Med, BS (31-37 credits)

Type
Completion Requirement

Required Courses (12 credits)

Earn a minimum grade of C- in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2

OR CHEM112H - Hnrs:Introductory Chemistry 2
- CHEM326 - Biochemistry 1

Note: CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2 may substitute for CHEM235 Organic Chemistry.

Students considering medical school should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2. Students considering other graduate schools should consult with their academic advisor.

Organic Chemistry (4-8 credits)

Complete at least 1 of the following:

Option 1. Short Course in Organic Chemistry (4 credits)

Complete ALL of the following Courses:
- CHEM235 - Organic Chemistry

A C- or higher in CHEM111 Introductory Chemistry 1 and CHEM112 Introductory Chemistry 2 is a pre-requisite for CHEM235 Organic Chemistry.

OR

Option 2. Organic Chemistry I and Organic Chemistry II (8 credits)

Complete ALL of the following Courses:
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

A C- or higher in CHEM231 Organic Chemistry 1 is a pre-requisite for CHEM232 Organic Chemistry 2.

Students planning to attend graduate school or pursue programs in medical, dental, veterinary, pharmacy, physical therapy or physician assistant after their clinical training should take CHEM231 Organic Chemistry 1 and CHEM232 Organic Chemistry 2 for this requirement.

Precalculus (4 credits)

Complete ALL of the following Courses:
- MATH160 - Precalculus

Students intereted in attending graduate or professional school should also take MATH161 Calculus 1.

Physics (8-10 credits)

Complete at least 1 of the following:

Option 1. Physics with Algebra (8 credits)

Complete ALL of the following Courses:
- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

OR

Option 2. Physics with Calculus (10 credits)

Complete ALL of the following Courses:
- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus
  OR PHYS232H - Hon: Physics 2 with Calculus

Psychology (3 credits)

Complete ANY of the following Courses:
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
- PSYC228 - Life Span Human Development

PSYC100 General Psychology (G3) should also be taken as it is the prerequisite for PSYC227 Devlopmnt Child and Adolescent. PHIL100 Introduction to Philosophy (G1) and SOCI101 Introduction to Sociology or ANTH121 Cultural Anthropology, are required for students taking the MCAT. Students considering other graduate programs should consult with their academic advisor.

Additional Comments:
For Allied Health Technology majors the G2 block of the Liberal Arts Core will be fulfilled by your required related coursework.

Courses

BIOL100 - General Biology

Course Information

Course Title
General Biology

Subject code	Course Number	Academic Level
BIOL	100	Undergraduate

Course Description
An introduction to biology with emphasis on cell structure, metabolism, genetics, behavior, ecology, adaptations, evolution, and biodiversity. 2 hours lec., 2 hours lab. No credit toward BIOL major.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI), Problem Solving (PS)

BIOL101 - Foundations of Biology

Course Information

Course Title
Foundations of Biology

Subject code	Course Number	Academic Level
BIOL	101	Undergraduate

Course Description
This introduction of biological principles provides the foundation of modern biological knowledge essential for all higher-level courses. Topics include cell structure and function, cellular reproduction, energy acquisition, biochemical pathways, mechanisms of inheritance, natural selection, speciation and evolution. 2 hrs. lec., 1 hr. discussion, 3 hrs. lab. Offered in fall, spring. Prereq: Biology major or biology minor or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH101 or MATH151 or MATH160 or MATH161 or MATH211 or MATH311

Complete ANY of the following Courses:

- MATH101 - College Algebra
- MATH151 - Calculus for Management
- MATH160 - Precalculus
- MATH161 - Calculus 1
- MATH211 - Calculus 2
- MATH311 - Calculus 3

BIOL108H - Hnrs:Freshman Biology Seminar

Course Information

Course Title
Hnrs:Freshman Biology Seminar

Subject code	Course Number	Academic Level
BIOL	108H	Undergraduate

Course Description
Emphasis on the intellectual and historical context of the core ideas of BIOL 100 and an in-depth exploration of ideas raised in lecture and laboratory. Satisfies the honors lab when taken with Biology 100. 1 hr. seminar. Offered in fall, spring. Prereq or coreq: BIOL 100 or 101.

Simple Requirements

Completed Course Prerequisites or Corequisites

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

BIOL179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
BIOL	179	Undergraduate

Course Description
Experimental

BIOL204 - Human Biology

Course Information

Course Title
Human Biology

Subject code	Course Number	Academic Level
BIOL	204	Undergraduate

Course Description
A non-laboratory course in human biology designed specifically for those students planning to specialize in social work, psychology or related fields. An overview of the changes that take place in the course of a human lifetime; basics of human evolution, ecology, behavior, anatomy and physiology of the human organism are discussed. 3 hrs. lec. Offered fall, spring. Prereq: BIOL 100 or BIOL 101, or permission of instructor, and ENGL 110. No credit toward BIOL major.

Gateway Stage Labels
Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

Or permission of instructor.

BIOL205 - Heredity and Human Affairs

Course Information

Course Title
Heredity and Human Affairs

Subject code	Course Number	Academic Level
BIOL	205	Undergraduate

Course Description
Genetics for non-majors with reference to human heredity and development. The social implications of recent advances in genetics are considered. 3 hrs. lec. Offered periodically. Prereq: BIOL 100 or BIOL 101, or permission of instructor or RN, and MATH 1**. No credit toward BIOL major.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 1**

Complete ALL of the following Course Sets:
- Any 1-level MATH course(s)

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

Or must have permission of instructor or RN.

BIOL207 - Human Sexuality

Course Information

Course Title
Human Sexuality

Subject code	Course Number	Academic Level
BIOL	307	Undergraduate

Course Description
Human sexuality is a 3-credit lecture course that focuses on the nature of human sexuality, particularly as it relates to biological phenomena. Readings, discussions, and/or videos will cover the biology of human reproduction and sexual behavior and will explore the interface between the biological and social aspects of sex and sexuality. Topics such as gender, LGBTQIA sexuality, different types of partnerships, contraception, abortion, pornography, and sexually transmitted infections will be covered. Prereq: BIOL 100 or BIOL 101, ENGL 110, and COMM 100. No credit toward the BIOL major.

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

Must have permission of instructor or RN.

Complete at least 1 of the following courses:

- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech

BIOL208 - Plants and People

Course Information

Course Title
Plants and People

Subject code	Course Number	Academic Level
BIOL	208	Undergraduate

Course Description
Explores uses of plants and plant products by man and their impact on the development of civilization. Characteristics of plants that make them suitable for food, shelter, clothing, energy, medicines, entertainment, objects of worship, microclimate modification and aesthetic objects are discussed. 3 hrs. lec. Offered periodically. Prereq: BIOL 100 or BIOL 101, or permission of instructor. No credit toward BIOL major.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

Or must have permission of instructor.

BIOL211 - Concepts of Zoology

Course Information

Course Title
Concepts of Zoology

Subject code	Course Number	Academic Level
BIOL	211	Undergraduate

Course Description
Study of invertebrate and vertebrate animals. Classification, reproduction, development, ecology, physiology, behavior, genetics, scientific methodology (including simple statistical approaches), and evolution. Laboratory studies include microscopy, dissections, live observations, computer exercises and experimentation. 3 hrs. lec., 3 hrs. lab. Prereq: BIOL 101 or BIOL 100 with a grade of C- or higher for non-majors; B- or higher in BIOL 100 for biology majors.

Simple Requirements

Course Prerequisites for Non-Majors

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

Course Prerequisites for Biology Majors

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

BIOL212H - Hnrs:Zoology Seminar

Course Information

Course Title
Hnrs:Zoology Seminar

Subject code	Course Number	Academic Level
BIOL	212H	Undergraduate

Course Description
Continuation of BIOL 211. Original investigations and/or readings and discussions of the zoological literature about the diverse adaptations of animals to their environments. Completion of both BIOL/HNRS 212 and BIOL 211 earns 5 credits to be counted as one course in the G2 block. BIOL/HNRS 212 may not be used independently to fulfill a G2 requirement. 1 hr. seminar. Offered periodically. Prereq: completion of BIOL 211 with a grade of B- or higher and member of University Honors College, or 3.35 GPA, or instructor's permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Earn a minimum grade of B- in the following:
- BIOL211 - Concepts of Zoology

University Honors College Member or 3.35 GPA or Instructor Permission

Must be a member of the University Honors College, have a 3.35 GPA or permission from instructor.

BIOL221 - Concepts of Botany

Course Information

Course Title
Concepts of Botany

Subject code	Course Number	Academic Level
BIOL	221	Undergraduate

Course Description
Consideration of features unique to plants such as localized meristems and open growth, water relations, photosynthesis, cell structure. An integrated study of plant structure and function using angiosperms as principal examples. Includes brief discussions of plant and fungal diversity, plant ecology and evolution and economic botany. 3 hrs. lec., 3 hrs. lab. Prereq: BIOL 101 or BIOL 100 with a grade of C- or higher; B- or higher in BIOL 100 for biology majors.

Simple Requirements

Course Prerequisites for Non-Majors

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

Course Prerequisites for Majors

Type
Prerequisite

BIOL100 or BIOL101

Complete at least 1 of the following:

BIOL 100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL 101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

BIOL222H - Hnrs:Problem Solving In Botany

Course Information

Course Title
Hnrs:Problem Solving In Botany

Subject code	Course Number	Academic Level
BIOL	222H	Undergraduate

Course Description
A botanical science investigation of a problem or series of problems. Students define a problem with a botanical basis, search appropriate literature, formulate hypotheses and collect appropriate information to test hypotheses through experimentation and data gathering. Completion of both BIOL/ HNRS 222 and BIOL 221 earns 5 credits to be counted as one course in the G2 block. BIOL/HNRS 222 may not be used independently to fulfill a G2 requirement. 1 hr. seminar. Offered periodically. Prereq: completion of BIOL 221 with a grade of B- or higher and member University Honors College, or 3.35 GPA, or instructor's permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 221

Earn a minimum grade of B- in the following:
- BIOL221 - Concepts of Botany

University Honors College Member or 3.35 GPA or Instructor Permission

Must be a member University Honors College or have a 3.35 GPA or permission of the instructor.

BIOL254 - Human Anatomy & Physiology I

Course Information

Course Title
Human Anatomy & Physiology I

Subject code	Course Number	Academic Level
BIOL	254	Undergraduate

Course Description
Study of the structure and function of the human body. This first semester of a two-semester sequence deals with the development, histology, gross anatomy, function and pathophysiology of the cutaneous, skeletal, muscular and nervous systems. 3 hrs. lec., 3 hrs. lab. Offered in fall. Prereq: BIOL 100 or BIOL 101.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

BIOL254H - Hon: Human Anatomy & Physiology I

Course Information

Course Title
Hon: Human Anatomy & Physiology I

Subject code	Course Number	Academic Level
BIOL	254H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

BIOL255 - Human Anatomy & Physiology II

Course Information

Course Title
Human Anatomy & Physiology II

Subject code	Course Number	Academic Level
BIOL	255	Undergraduate

Course Description
Study of the structure and function of the human body. This second semester of a two-semester sequence deals with the development, histology, gross anatomy, function and pathophysiology of the endocrine, circulatory, respiratory, digestive, urinary, and reproductive systems. 3 hrs. lec., 3 hrs. lab. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 254 or BIOL 254H

Earn a minimum grade of C- in the following:

- BIOL254 - Human Anatomy & Physiology I **OR** BIOL254H - Hon: Human Anatomy & Physiology I

BIOL255H - Hon: Human Anatomy & Physiology II

Course Information

Course Title
Hon: Human Anatomy & Physiology II

Subject code	Course Number	Academic Level
BIOL	255H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 254 or BIOL 254H

Earn a minimum grade of C- in the following:

- BIOL254 - Human Anatomy & Physiology I **OR** BIOL254H - Hon: Human Anatomy & Physiology I

BIOL256 - Nutrition

Course Information

Course Title
Nutrition

Subject code	Course Number	Academic Level
BIOL	256	Undergraduate

Course Description
Principles of adequate nutrition including digestion and metabolism of foods; energy, protein, mineral and vitamin needs; environmental and industrial contaminants, additives and carcinogens; dietary treatment for nutritional disorders. 3 hrs. lec. Offered in fall, spring. Prereq: BIOL 100 and ENGL 110. No credit toward BIOL major or minor. No credit given if credit earned for BIOL 352.

Gateway Stage Labels
Personal Wellness (PWEL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- BIOL100 - General Biology
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BIOL257 - Introduction to Allied Health Professions

Course Information

Course Title
Introduction to Allied Health Professions

Subject code	Course Number	Academic Level
BIOL	257	Undergraduate

Course Description
A survey of the various disciplines in the allied health field. The course describes the type of training offered by hospitals for students who are planning to major in a health profession and for students who are undecided on a career. 1 hr. lec. Offered in fall.

BIOL266H - Hnrs:Adv Princ Cell Biology

Course Information

Course Title
Hnrs:Adv Princ Cell Biology

Subject code	Course Number	Academic Level
BIOL	266H	Undergraduate

Course Description
Cellular operations and processes: hormonal control of cell physiology, secretory activities and vesicular trafficking, control of cell division, neurotransmission, control of muscle contraction, signal transduction, interrupted genes, cell recognition, etc. Students explore and lead discussions on one of these topics. Completion of both BIOL/HNRS 266 and BIOL 263 earns 5 credits to be counted as one course in the G2 block. BIOL/ HNRS 266 may not be used independently to fulfill a G2 requirement. 1 hr. seminar. Offered periodically. Prereq: completion of BIOL 362 or BIOL 263 with a grade of B- or higher and member of University Honors College, or 3.35 GPA, or instructor's permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H

Earn a minimum grade of B- in the following:
- BIOL362 - Cell and Developmental Biology
- BIOL362H - HNRS:Cell and Developmental Biology

University Honors College Member or 3.35 GPA or Instructor Permission

Must be a member University Honors College or have a 3.35 GPA or permission of the instructor.

BIOL281 - Behavioral Biology

Course Information

Course Title
Behavioral Biology

Subject code	Course Number	Academic Level
BIOL	281	Undergraduate

Course Description
Provides an evolutionary and ethological frame of reference for further studies in psychology and animal behavior. Lectures supplemented by demonstrations and A-V media cover animal diversity, nervous systems, sensory reception, communication and behavior. 3 hrs. lec. Offered in fall or spring. Prereq: BIOL 100 or BIOL 101, and ENGL 110. No credit toward BIOL major.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 or BIOL 101 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:
- BIOL100 - General Biology
  OR BIOL101 - Foundations of Biology
- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

BIOL290 - Coastal Marine Biology

Course Information

Course Title
Coastal Marine Biology

Subject code	Course Number	Academic Level
BIOL	290	Undergraduate

Course Description
Introduction to marine organisms, marine communities, and the physical, chemical, and biological parameters that shape them; laboratory and field work will emphasize local coastal marine ecosystems. 2 hrs. lee., 3 hrs. lab. Offered in summer at the Chincoteague Bay Field Station. Prereq: BIOL 211 or 1 year of college biology or permission of instructor. No credit given If credit earned for BIOL 291.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Complete ALL of the following Courses:
- BIOL211 - Concepts of Zoology

Or 1 year of college biology or permission of the instructor.

BIOL291 - Marine Biology

Course Information

Course Title
Marine Biology

Subject code	Course Number	Academic Level
BIOL	391	Undergraduate

Course Description
Phylogeny, morphology and ecology of marine organisms. Similarities and differences in solutions to problems of life in the marine environment are stressed. 3 hrs. lec., 3 hrs. lab. Weekend field trips. Offered in fall. Prereq: C- or higher in BIOL 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology

BIOL292 - Problem Solving in Marine Biol

Course Information

Course Title
Problem Solving in Marine Biol

Subject code	Course Number	Academic Level
BIOL	292	Undergraduate

Course Description
An introduction to foundational topics within marine biology, Including (1) quantitative reasoning for aquatic biologists, (2) marine geography and mapping, (3) life in a fluid environment, (4) microcosms: marine aquarium systems, (5) scientific Illustration, (6) electronic resources In marine biology, (7) Internships, coops, jobs, and careers in marine biology, and (8) current topics. Offered In summer. Prereq: placement in college-level mathematics or permission of instructor. No credit given if credit earned for BIOL 291.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH100 or MATH101

Complete ANY of the following Courses:

- MATH100 - Survey of Mathematical Ideas
- MATH101 - College Algebra

BIOL293 - Coastal Ornithology

Course Information

Course Title
Coastal Ornithology

Subject code	Course Number	Academic Level
BIOL	293	Undergraduate

Course Description
Students will achieve a strong understanding of a variety of aspects in ornithology with the strongest focus on field techniques, including identification. Material covered will include evolution, anatomy, physiology, behavior and ecology. A portion of the course will include an overview of the avian families of North America, especially those found in coastal regions along the mid-Atlantic seaboard. The field component for this course will include mist netting, census techniques and field identification. Emphasis will be placed on field research and a portion of the course will involve the development of a novel research idea in ornithology.

BIOL295 - Marine Invertebrates

Course Information

Course Title
Marine Invertebrates

Subject code	Course Number	Academic Level
BIOL	295	Undergraduate

Course Description
The invertebrate phyla with emphasis on development, reproduction, structure, function and classification of selected marine organisms. Laboratory and field experience in collection, preservation and classification of the phyla.

BIOL296 - Marine Ecology

Course Information

Course Title
Marine Ecology

Subject code	Course Number	Academic Level
BIOL	296	Undergraduate

Course Description
Interrelationships among animals, plants and physical and chemical aspects of the environment will be studied, with stress on adaptations for survival that are unique to the marine environment.

BIOL300 - Co-Op Ed Experience in Biol

Course Information

Course Title
Co-Op Ed Experience in Biol

Subject code	Course Number	Academic Level
BIOL	300	Undergraduate

Course Description
Co-Op Ed Experience in Biol

BIOL318 - Comparative Vertebrate Anatomy

Course Information

Course Title
Comparative Vertebrate Anatomy

Subject code	Course Number	Academic Level
BIOL	318	Undergraduate

Course Description
Functional and comparative anatomy of selected vertebrates with developmental and evolutionary perspectives. Lab will primarily consist of dissection and histological analyses of animals representing various vertebrate classes. Comparisons between animals at the same level, and to see diverse features superimposed upon a common pattern. 3 hrs. lec., 3 hrs. lab. Offered in spring, 2 of 3 years. Prereq: BIOL 211 and BIOL 362 or 263, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Complete ALL of the following Courses:
- BIOL211 - Concepts of Zoology

BIOL 362 or BIOL 362H

Complete ANY of the following Courses:
- BIOL362 - Cell and Developmental Biology
- BIOL362H - HNRS:Cell and Developmental Biology

Or must have permission of instructor.

BIOL324 - Plant Biochemistry

Course Information

Course Title
Plant Biochemistry

Subject code	Course Number	Academic Level
BIOL	324	Undergraduate

Course Description
A study of enzymes and pathways involved in plant intermediary as related to plant cell structure, function and plant development. Topics include plant bioenergetics, biosynthesis of plant hormones and elicitor molecules, signal perception and transduction, and secondary metabolites (natural products). 3 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: BIOL 221 and BIOL 362 or BIOL 263, CHEM 232 or CHEM 235.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 221 and BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:
- BIOL221 - Concepts of Botany
- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

CHEM 232 or CHEM 235

Complete ALL of the following Courses:
- CHEM232 - Organic Chemistry 2 **OR** CHEM235 - Organic Chemistry

BIOL325 - Plant Systematics

Course Information

Course Title
Plant Systematics

Subject code	Course Number	Academic Level
BIOL	325	Undergraduate

Course Description
A survey of local vascular flora, use of dichotomous keys in identifying plants, distinguishing features of common plant families, principles of plant systematics. Phylogenetic, biosystematic and nomenclatural concepts are considered. 2 hrs. lec., 3 hrs. lab. Offered in fall. Prereq: C- or higher in BIOL 221.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 221

Earn a minimum grade of C- in the following:
- BIOL221 - Concepts of Botany

BIOL327 - Horticultural Science

Course Information

Course Title
Horticultural Science

Subject code	Course Number	Academic Level
BIOL	327	Undergraduate

Course Description
Principles of horticultural science including regulation of plant growth, propagation and breeding, plant nutrition, pruning, plant diseases and special topics related to individual types of plants. Laboratory includes propagation and handling of plants in the greenhouse and field trips. 2 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: BIOL 221 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 221

Earn a minimum grade of C- in the following:

- BIOL221 - Concepts of Botany

Or must have permission of instructor.

BIOL327H - Hon: Horticultural Science

Course Information

Course Title
Hon: Horticultural Science

Subject code	Course Number	Academic Level
BIOL	327H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 221

Earn a minimum grade of C- in the following:

- BIOL221 - Concepts of Botany

Or must have permission of instructor.

BIOL329 - Plant-Insect Interactions

Course Information

Course Title
Plant-Insect Interactions

Subject code	Course Number	Academic Level
BIOL	329	Undergraduate

Course Description
The chemical and biological interactions between plants and insects will be extensively examined with particular emphasis on the chemical ecology of important behaviors such as herbivory, oviposition, and pollination. The chemical communications between plants and insects will be examined regarding how plant-produced chemicals influence, both directly and indirectly, the behaviors of insects. Chemical, anatomical, behavioral, environmental and evolutionary concepts linked to plant-insect interactions will be examined. Unique laboratory experiences will include the design and implementation of an independent research project and the rearing of Lepidoptera to establish research colonies. 2 hrs. lec., 3 hrs. lab. Prereq: BIOL 221, BIOL 211, and either CHEM 231 or CHEM 235 or permission of the instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 221 and BIOL 211

Earn a minimum grade of C- in the following:
- BIOL221 - Concepts of Botany
- BIOL211 - Concepts of Zoology

CHEM 231 or CHEM 235

Complete ANY of the following Courses:
- CHEM231 - Organic Chemistry 1
- CHEM235 - Organic Chemistry

Or must have permission of instructor.

BIOL340 - Prspctv in Environm Awareness

Course Information

Course Title
Prspctv in Environm Awareness

Subject code	Course Number	Academic Level
BIOL	340	Undergraduate

Course Description
Interdisciplinary study of current environmental problems and their implications on future habitability of the planet. Physical, biological and social aspects of alterations to ecosystems presented and solutions considered. Course includes lectures, open forums and student participation. Offered in fall and spring. Prereq: COMM 100, ENGL 110, junior status and at least one science (G2 block) and one social science course (G3 block).

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

G2 Block Science Course and G3 Block Social Science Course

Must have taken at least one science (G2 block) and one social science course (G3 block).

BIOL340H - HNRS:Prspctv in Environm Awareness

Course Information

Course Title
HNRS:Prspctv in Environm Awareness

Subject code	Course Number	Academic Level
BIOL	340H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

G2 Block Science Course and G3 Block Social Science Course

Must have taken at least one science (G2 block) and one social science course (G3 block).

BIOL343 - Principles of Ecology & Evolution

Course Information

Course Title
Principles of Ecology & Evolution

Subject code	Course Number	Academic Level
BIOL	343	Undergraduate

Course Description
The basic concepts and principles of evolution and ecology. Topics include natural selection, genetic variation, macro- and microevolution, population genetics, evolutionary stable strategies, species concepts, biodiversity, extinction, reproductive strategies, population dynamics, the ecological niche concept, predation, competition, mutualism, parasitism, coevolution, biogeography, disturbance ecology, and ecosystem structure and function. 3 hrs. lec., 3 hrs. lab. Offered in fall and spring. Prereq: BIOL 101 or 100 with a grade of C- or higher; B- or higher in BIOL 100 for biology majors; C- or higher in BIOL 211 and BIOL 221; MATH 151, 160 or math equivalent; ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL211 and BIOL221

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany

MATH160 or MATH151 or MATH160 or MATH161 or MATH163H

Complete ANY of the following Courses:
- MATH160 - Precalculus
- MATH151 - Calculus for Management
- MATH160 - Precalculus
- MATH163H - Honors Calculus 1

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College

Writing

Additional Course Prerequisites for Non-Majors

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

Additional Course Prerequisites for Biology Majors

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

BIOL343H - Hon: Principles of Ecology & Evolution

Course Information

Course Title
Hon: Principles of Ecology & Evolution

Subject code	Course Number	Academic Level
BIOL	343H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL211 and BIOL221

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany

MATH160 or MATH151 or MATH160 or MATH161 or MATH163H

Complete ANY of the following Courses:
- MATH160 - Precalculus
- MATH151 - Calculus for Management
- MATH160 - Precalculus
- MATH163H - Honors Calculus 1

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Additional Course Prerequisites for Non-Majors

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

Additional Course Prerequisites for Biology Majors

Type
Prerequisite

BIOL 100 or BIOL 101

Complete at least 1 of the following:

BIOL100

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

OR

BIOL101

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

BIOL344 - Population Community Ecology

Course Information

Course Title
Population Community Ecology

Subject code	Course Number	Academic Level
BIOL	344	Undergraduate

Course Description
An intermediate course that will explore population biology, species interactions, trophic structure, community organization, succession, island biogeography and biological diversity at a more advanced level than BIOL 343. The laboratory portion of the course will focus on the use of quantitative methods and manipulative experimental designs to verify fundamental principles and test new hypotheses. 2 hrs. lec., 3 hrs. lab. Offered in fall or spring. Prereq: BIOL 343, MATH 151 or MATH 161, and BIOL 375.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 343 or BIOL 343H

Earn a minimum grade of C- in the following:

- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution

MATH 151 or MATH 161 and BIOL 375 or BIOL 375H

Complete ALL of the following Courses:

- MATH151 - Calculus for Management
  OR MATH161 - Calculus 1
- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry

BIOL346 - Ornithology

Course Information

Course Title
Ornithology

Subject code	Course Number	Academic Level
BIOL	346	Undergraduate

Course Description
Ecology, behavior, taxonomy and evolution of birds with emphasis on field studies. 2 hrs. lec., 3 hrs. lab. Weekend field trips. Offered in spring. Prereq: C- or higher in BIOL 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology

BIOL352 - Nutritional Science

Course Information

Course Title
Nutritional Science

Subject code	Course Number	Academic Level
BIOL	352	Undergraduate

Course Description
Biological and biochemical roles of nutrients for the proper functioning of the human body. Designed for students with a more advanced understanding of chemistry and math. Nutrition concepts will be used to design and evaluate personal diet plans. No credit given if credit earned for BIOL 256. (BIOL 256 does not count for biology majors or minors.) Offered in fall, spring. Prereq: C- or higher in BIOL 362 or BIOL 263, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:
- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL352H - Hon: Nutritional Science

Course Information

Course Title
Hon: Nutritional Science

Subject code	Course Number	Academic Level
BIOL	352H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:
- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL356 - Functional Human Anatomy

Course Information

Course Title
Functional Human Anatomy

Subject code	Course Number	Academic Level
BIOL	356	Undergraduate

Course Description
A systemic approach to the study of the structure of the human body with discussion of general function. Course designed primarily for those planning to enter medical or allied health professions. Clinical laboratory experiences related to human anatomy. 3 hrs. lec., 4 hrs. lab. Offered in spring. Prereq: C- or higher in BIOL 211 and BIOL 362 or BIOL 263.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H and BIOL 211

Earn a minimum grade of C- in the following:
- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology
- BIOL211 - Concepts of Zoology

BIOL361 - Microbiology

Course Information

Course Title
Microbiology

Subject code	Course Number	Academic Level
BIOL	361	Undergraduate

Course Description
The structure, physiology and ecology of microorganisms. Symbiotic associations between organisms will be examined in depth. Principles of microbial virulence and immunology are also discussed. Laboratory investigations include the isolation and identification of unknown microorganisms. 3 hrs. lec., 3 hrs. lab. Offered in fall. Prereq: BIOL101 C- or better or BIOL 100 B- or better; CHEM 112 (Prereq or Coreq) or CHEM 104

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 112 or CHEM 112H (Prereq or Coreq) or CHEM 104

Complete ANY of the following Courses:
- CHEM112 - Introductory Chemistry 2
- CHEM112H - Hnrs:Introductory Chemistry 2
- CHEM104 - Gen Organic and Biochemistry 2

Additional Course Prerequisites: Complete 1 of the following

Type
Prerequisite

BIOL 101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

BIOL 100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

BIOL361H - Hon: Microbiology

Course Information

Course Title
Hon: Microbiology

Subject code	Course Number	Academic Level
BIOL	361H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 112 or CHEM 112H (Prereq or Coreq) or CHEM 104

Complete ANY of the following Courses:
- CHEM112 - Introductory Chemistry 2
- CHEM112H - Hnrs:Introductory Chemistry 2
- CHEM104 - Gen Organic and Biochemistry 2

Additional Course Prerequisites: Complete 1 of the following

Type
Prerequisite

BIOL 101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

BIOL 100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

BIOL362 - Cell and Developmental Biology

Course Information

Course Title
Cell and Developmental Biology

Subject code	Course Number	Academic Level
BIOL	362	Undergraduate

Course Description
Cell structure and function, including cell ultrastructure, methods used in cell biology research, cell motility, signal transduction, cell division, macromolecules, metabolism and the cytomembrane system. Basic concepts in developmental biology are also covered: fertilization, early embryonic cleavage in model systems, cell-cell communication, extracellular matrix and research methods. Examples from developmental biology are employed to illustrate the functions and roles of cellular structures and processes. Laboratory includes isolation of cell components, fertilization and cleavage in sea urchins, microscopy and other techniques used in the study of cell and developmental biology. 3 hrs. lec., 3 hrs. lab. Offered in fall and spring. Prereq: BIOL 101 or 100 with a grade of C- or higher; B- or higher in BIOL 100 for biology majors; ENGL 110; CHEM 112 (Prereq or Coreq).

Simple Requirements

Course Prerequisites for Non-Majors

Type
Prerequisite

BIOL 101 or BIOL 100

Complete at least 1 of the following:

BIOL 101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

OR

BIOL 100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

Course Prerequisites for Biology Majors

Type
Prerequisite

BIOL 101 or BIOL 100

Complete at least 1 of the following:

BIOL 101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

OR

BIOL 100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

Additional Course Prerequisites

Type
Prerequisite

CHEM 112 or CHEM 112H (Prereq or Coreq) and ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- CHEM112 - Introductory Chemistry 2 **OR** CHEM112H - Hnrs:Introductory Chemistry 2
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BIOL362H - HNRS:Cell and Developmental Biology

Course Information

Course Title
HNRS:Cell and Developmental Biology

Subject code	Course Number	Academic Level
BIOL	362H	Undergraduate

Simple Requirements

Course Prerequisites for Non-Majors

Type
Prerequisite

BIOL 101 or BIOL 100

Complete at least 1 of the following:

BIOL 101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

OR

BIOL 100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

Course Prerequisites for Biology Majors

Type
Prerequisite

BIOL 101 or BIOL 100

Complete at least 1 of the following:

BIOL 101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

OR

BIOL 100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

Additional Course Prerequisites

Type
Prerequisite

CHEM 112 or CHEM 112H (Prereq or Coreq) and ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- CHEM112 - Introductory Chemistry 2 **OR** CHEM112H - Hnrs:Introductory Chemistry 2
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BIOL363 - Medical Microbiology

Course Information

Course Title
Medical Microbiology

Subject code	Course Number	Academic Level
BIOL	363	Undergraduate

Course Description
An in-depth exploration into the nature of disease-causing microorganisms, with an emphasis on medically important bacteria, viruses and fungi. This course will provide a comprehensive analysis of the structure of microorganisms, epidemiology and pathogenesis of microbial diseases, control of microbes, host responses to infection, vaccination strategies and antimicrobial therapy. 3 hrs. lec. Offered periodically in fall or spring. Prereq: BIOL 362 or BIOL 263.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:
- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL363H - Hon: Medical Microbiology

Course Information

Course Title
Hon: Medical Microbiology

Subject code	Course Number	Academic Level
BIOL	363H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL364 - Foundations of Genetics & Molecular Biology

Course Information

Course Title
Foundations of Genetics & Molecular Biology

Subject code	Course Number	Academic Level
BIOL	364	Undergraduate

Course Description
Concepts and principles essential for a basic understanding of genetics and molecular biology are covered. Topics include Mendelian genetics, gene mapping, molecular structure of the gene, gene expression and regulation, chromatin structure, molecular methodologies, human genome project, population genetics and evolution. 3 hrs. lec., 3 hrs. lab. Offered in fall, spring. Prereq: BIOL 101 or 100 with a grade of C- or higher; B- or higher in BIOL 100 for biology majors; CHEM 112.

Simple Requirements

Course Prerequisites for Non-Majors

Type
Prerequisite

BIOL 101 or BIOL 100

Complete at least 1 of the following:

BIOL 101

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

OR

BIOL 100

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

Course Prerequisites for Biology Majors

Type
Prerequisite

BIOL 101 or BIOL 100

Complete at least 1 of the following:

BIOL 101

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

OR

BIOL 100

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

Additional Course Prerequisites

Type
Prerequisite

CHEM 112 or CHEM 112H

Complete ANY of the following Courses:

- CHEM112 - Introductory Chemistry 2
- CHEM112H - Hnrs:Introductory Chemistry 2

BIOL375 - Biometry

Course Information

Course Title
Biometry

Subject code	Course Number	Academic Level
BIOL	375	Undergraduate

Course Description
Use of statistical techniques in descriptive and experimental biology and the use of mathematical models in describing biological phenomena. 3 hrs. lec. Offered in fall, spring. Prereq: BIOL 100 or BIOL 101, and MATH 151 or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 101 or BIOL 100

Complete at least 1 of the following:

BIOL 101

Earn a minimum grade of C- in the following:

- BIOL101 - Foundations of Biology

OR

BIOL 100

Earn a minimum grade of B- in the following:

- BIOL100 - General Biology

MATH 151 or Higher

Complete ANY of the following Course Sets:

- Any MATH 151 or higher course(s)

BIOL375H - Hon: Biometry

Course Information

Course Title
Hon: Biometry

Subject code	Course Number	Academic Level
BIOL	375H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 101 or BIOL 100

Complete at least 1 of the following:

BIOL 101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

OR

BIOL 100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

MATH 151 or Higher

Complete ANY of the following Course Sets:
- Any MATH 151 or higher course(s)

BIOL385 - Principles of Animal Behavior

Course Information

Course Title
Principles of Animal Behavior

Subject code	Course Number	Academic Level
BIOL	385	Undergraduate

Course Description
Animal groups from protozoa to mammals, studied from an ethologist's point of view. Inheritance, learning, development and motivations will be covered. 2 hrs. lec., 3 hr. labs. Offered in spring. Prereq: BIOL 211 and Junior Standing. BIOL 343 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology

BIOL 343 recommended.

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

BIOL385H - H: Principles of Animal Behavior

Course Information

Course Title
H: Principles of Animal Behavior

Subject code	Course Number	Academic Level
BIOL	385H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology

BIOL 343 recommended.

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

BIOL392 - Marine Mammals

Course Information

Course Title
Marine Mammals

Subject code	Course Number	Academic Level
BIOL	392	Undergraduate

Course Description

The distribution, population size, physiology, evolution, adaptations and ecological relationships of marine mammals will be studied with an emphasis on mammals of the Atlantic Ocean. This course will stress hands-on understanding of marine mammal physiology, behavior, population dynamics and species diversity. Laboratory and field work will include an extended off-campus field trip to facilities holding and/or studying marine mammals of the NE Atlantic Ocean. In addition, the laboratory portion of this course will emphasize data collection in the field, and subsequent analysis and presentation of the data through a required mini-research project.

BIOL394 - Coral Reef Ecology

Course Information

Course Title
Coral Reef Ecology

Subject code	Course Number	Academic Level
BIOL	394	Undergraduate

Course Description

The focus of this course is to introduce students to the unique aspects of coral reefs, and to provide a working knowledge of reef species and reef ecology. Students will learn basic taxonomy, biology, ecology, and conservation of coral reefs and the organisms associated with this habitat. Laboratory will consist of hands-on field experiences in a coral reef habitat. Students will learn techniques for study and assessment of marine habitats and complete an independent project.

Simple Requirements

Two college-level courses in biology or relevant field.

Type
Prerequisite

BIOL396 - Ichthyology

Course Information

Course Title
Ichthyology

Subject code	Course Number	Academic Level
BIOL	396	Undergraduate

Course Description
Morphology, anatomy, physiology, systematics and behavior of fishes. Laboratory and field experiences involve collection and study of specimens from nearby field sites. Zoogeography, life histories and speciation also discussed. Prereq: BIOL 211 or 1 year college biology (department override required if BIOL 211 not completed)

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology

Or 1 year college biology (department override required if BIOL 211 not completed).

BIOL397 - Marine Botany

Course Information

Course Title
Marine Botany

Subject code	Course Number	Academic Level
BIOL	397	Undergraduate

Course Description
The taxonomy, ecology, distribution, life histories, physiology and economic status of marine and marine-fringe plants of the Middle Atlantic coast. Covers techniques of collecting, preserving, identifying and cataloging.

BIOL400 - Co-Op Ed Experience in Biol

Course Information

Course Title
Co-Op Ed Experience in Biol

Subject code	Course Number	Academic Level
BIOL	400	Undergraduate

Course Description
Co-Op Ed Experience in Biol

BIOL415 - Mammalogy

Course Information

Course Title
Mammalogy

Subject code	Course Number	Academic Level
BIOL	415	Undergraduate

Course Description
Phylogeny, taxonomy, adaptations, behavior and ecological relationships of mammals. Acquisition of laboratory and field techniques are stressed. 2 hrs. lec., 3 hrs. lab. Weekend field trips. Offered periodically in fall. Prereq: C- or higher in BIOL 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology

BIOL415H - Hon: Mammalogy

Course Information

Course Title
Hon: Mammalogy

Subject code	Course Number	Academic Level
BIOL	415H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology

BIOL416 - Entomology

Course Information

Course Title
Entomology

Subject code	Course Number	Academic Level
BIOL	416	Undergraduate

Course Description
Introduction to insects with emphasis on structure and function, behavior, adaptations, ecology, systematics, and economic and medical significance. Collecting, pinning and preservation techniques are covered. Field trips. 2 hrs. lec., 3 hrs. lab. Offered periodically. Prereq: C- or higher in BIOL 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology

BIOL418 - Aquatic Entomology

Course Information

Course Title
Aquatic Entomology

Subject code	Course Number	Academic Level
BIOL	418	Undergraduate

Course Description
Aquatic entomology covers topics such as aquatic insect morphology, physiology, ecology, behavior and evolution in a variety of aquatic systems and includes a significant taxonomic component. Each student will be required to make an aquatic insect collection. Prereq: BIOL 211 and BIOL 343 or permission of instructor. 3 hrs lec., 3 hrs. lab.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology

BIOL 343 or BIOL 343H

Earn a minimum grade of C- in the following:
- BIOL343 - Principles of Ecology & Evolution **OR** BIOL343H - Hon: Principles of Ecology & Evolution

Or must have permission of instructor.

BIOL424 - Mycology

Course Information

Course Title
Mycology

Subject code	Course Number	Academic Level
BIOL	424	Undergraduate

Course Description
The taxonomy, morphology, physiology and ecology of fungi. Laboratory activities include surveys of local populations of fleshy fungi, fungal pathogens of plants and soil fungi; physiological studies on growth and reproduction; experimental studies of fungal ecology; and studies of comparative morphology of diverse fungal groups. 2 hrs. lec., 3 hrs. lab. Offered periodically. Prereq: C- or higher in BIOL 221 and BIOL 362 or BIOL 263.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 221 and BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL221 - Concepts of Botany
- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL435 - Animal Physiology

Course Information

Course Title
Animal Physiology

Subject code	Course Number	Academic Level
BIOL	435	Undergraduate

Course Description
Structure and functions of animals. Independent investigation and recent physiological theories emphasized. 2 hrs. lec., 3 hrs. lab. Offered in fall. Prereq: C- or higher in BIOL 211 and BIOL 362 or BIOL 263; CHEM 112.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211 and BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

CHEM 112

Complete ALL of the following Courses:

- CHEM112 - Introductory Chemistry 2

BIOL436 - Plant Physiology

Course Information

Course Title
Plant Physiology

Subject code	Course Number	Academic Level
BIOL	436	Undergraduate

Course Description
Life processes of plants. Water relations, nutrition, translocation, photosynthesis, metabolism, growth, development and reproduction will be considered with particular reference to higher plants. 2 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: BIOL 221 and BIOL 362 or BIOL 263. CHEM 231 or 235 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 221 and BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL221 - Concepts of Botany
- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

CHEM 231 or CHEM 235 recommended.

BIOL437 - Endocrinology

Course Information

Course Title
Endocrinology

Subject code	Course Number	Academic Level
BIOL	437	Undergraduate

Course Description
The role of hormones in the integration and control of physiological and developmental process is stressed as well as the molecular mechanism of hormone action. 3 hrs. lec. Offered in fall. Prereq: BIOL 362 or BIOL 263.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL437H - Hon: Endocrinology

Course Information

Course Title
Hon: Endocrinology

Subject code	Course Number	Academic Level
BIOL	437H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL438 - Neurobiology

Course Information

Course Title
Neurobiology

Subject code	Course Number	Academic Level
BIOL	438	Undergraduate

Course Description
The structure and function of the nervous system. Lectures will cover a broad range of topics, from the molecular to the cognitive. One of the major themes is the relationship between the brain and behavior. 3 hrs. lec. Offered periodically. Prereq: BIOL 362 or BIOL 263.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL442 - Wildlife Ecology & Management

Course Information

Course Title
Wildlife Ecology & Management

Subject code	Course Number	Academic Level
BIOL	442	Undergraduate

Course Description
Wildlife management involves protecting and conserving endangered species, increasing the number of game species and controlling pest species. We will discuss how the understanding of wildlife ecology, history, policy and statistics help shape the decisions a wildlife manager makes in the real world. Unique laboratory experiences will include field orienteering, radiotracking, soil and water assessment, vegetative measurements and animal trapping. Students will use these lab experiences to collect and analyze data in the development of a wildlife management plan. 2 hrs.lec., 3 hrs.lab. Prereq: BIOL 375 and BIOL 343.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 375 or BIOL 375H

Complete ALL of the following Courses:
- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry

BIOL 343 or BIOL 343H

Earn a minimum grade of C- in the following:
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution

BIOL443 - Conservation Biology

Course Information

Course Title
Conservation Biology

Subject code	Course Number	Academic Level
BIOL	443	Undergraduate

Course Description
Population ecology and genetics applied to the conservation of rare, threatened and endangered species. Emphasis on the regulation of abundance, theoretical models of population dynamics, experimental design, sampling approaches and case studies. 2 hrs. lec., 3 hrs. lab. Offered annually (usually in fall). Prereq: C- or higher in BIOL 101, 343.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 101 and BIOL 343 or BIOL 343H

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution

BIOL445 - Aquatic Biology

Course Information

Course Title
Aquatic Biology

Subject code	Course Number	Academic Level
BIOL	445	Undergraduate

Course Description
Study of the physical and biotic aspects of temporary pools, streams, ponds and rivers. Field trips. 2 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: BIOL 211, 221, PHYS 132 or 232 desirable.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 211 and BIOL 221

Earn a minimum grade of C- in the following:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany

PHYS 132 or PHYS 232

Complete ALL of the following Courses:

- PHYS132 - Physics 2 with Algebra
  OR PHYS232 - Physics 2 with Calculus

PHYS 232 desirable.

BIOL446 - Ecosystems

Course Information

Course Title
Ecosystems

Subject code	Course Number	Academic Level
BIOL	446	Undergraduate

Course Description
Ecosystem processes including nutrient cycles, energy budgets and trophodynamics are discussed for terrestrial, coastal and marine ecosystems. Processes are discussed for ecosystem types such as those controlled by fire, volcanism, chemosynthetic bacteria, detrital food resources, herbivory and predation. Ecosystems viewed in a global perspective to understand global carbon and nutrient cycles. 3 hrs. lec./discussion. Offered in spring of even years. Prereq: BIOL 343 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 343 or BIOL 343H

Earn a minimum grade of C- in the following:

- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution

ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

BIOL447 - Chesapeake Bay System

Course Information

Course Title
Chesapeake Bay System

Subject code	Course Number	Academic Level
BIOL	447	Undergraduate

Course Description
Study of the effects of human activity on the ecosystems of the Chesapeake Bay System and the role of ecological principles in current restoration efforts. Investigation of how agricultural practices, riparian forests, tidal and nontidal wetlands and urban development affect the input of nutrients and toxins, and the estuarine processes in Chesapeake Bay that cause eutrophication and population declines in fisheries. 2 hrs. lec., 4 hrs. lab/field. Offered in fall. Prereq: BIOL 343 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 343 or BIOL 343H

Earn a minimum grade of C- in the following:

- BIOL343 - Principles of Ecology & Evolution **OR** BIOL343H - Hon: Principles of Ecology & Evolution

ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BIOL448 - Wetland Ecology and Management

Course Information

Course Title
Wetland Ecology and Management

Subject code	Course Number	Academic Level
BIOL	448	Undergraduate

Course Description
The investigation of the various biotic and abiotic components of wetland ecosystems, with an emphasis on wetland vegetation, hydrology, and biogeochemical processes. Course content will be a mix of fundamental and applied ecology and will cover topics such as vegetation succession, hydric soil, nutrient cycling, wetland classification and delineation, restoration and management, invasive species, and wetland loss. Prereq: BIOL 343 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 343 or BIOL 343H

Earn a minimum grade of C- in the following:

- BIOL343 - Principles of Ecology & Evolution
- BIOL343H - Hon: Principles of Ecology & Evolution

Or must have permission of instructor.

BIOL454 - Immunology

Course Information

Course Title
Immunology

Subject code	Course Number	Academic Level
BIOL	454	Undergraduate

Course Description
The development of innate, humoral and cellular immunity to an antigenic stimulus is discussed. Role of these mechanisms in immunogenetics, immunologically mediated disease, immunological protection against infectious agents, use of antibodies in diagnostic tests, and antibody- and cell-based cancer therapy are also considered. 3 hrs. lec. Prereq: BIOL 362 or 263

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL454H - Hon: Immunology

Course Information

Course Title
Hon: Immunology

Subject code	Course Number	Academic Level
BIOL	454H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL455 - Cardiopulmonary Physiology

Course Information

Course Title
Cardiopulmonary Physiology

Subject code	Course Number	Academic Level
BIOL	455	Undergraduate

Course Description
Cardiovascular and pulmonary function. Covers heart muscle, electro-mechanical properties of the heart, hemodynamics, mechanics of ventilation, gas transport and cardiopulmonary insufficiencies. Laboratory exercises include use of human subjects, animal experimentation and computer simulations. 2 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: BIOL 211, 362 or 263, 356 and CHEM 231 or 235 for the B.S. in biology; CHEM 103 and CHEM 104 for the B.S. in allied health technology.

Simple Requirements

Course Prerequisites for B.S. in Biology

Type
Prerequisite

CHEM 231 or CHEM 235

Complete ANY of the following Courses:
- CHEM231 - Organic Chemistry 1
- CHEM235 - Organic Chemistry

Course Prerequisites for B.S. in Allied Health Technology

Type
Prerequisite

CHEM 103 and CHEM 104

Complete ALL of the following Courses:
- CHEM103 - Gen Organic and Biochemistry 1
- CHEM104 - Gen Organic and Biochemistry 2

Additional Course Prerequisites

Type
Prerequisite

BIOL 211 and BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:
- BIOL211 - Concepts of Zoology
- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

BIOL 356

Complete ALL of the following Courses:
- BIOL356 - Functional Human Anatomy

BIOL462 - Molecular Biology

Course Information

Course Title
Molecular Biology

Subject code	Course Number	Academic Level
BIOL	462	Undergraduate

Course Description
The molecular and macromolecular basis of life. The structure and function of cellular macromolecules, molecular techniques of genetic analysis and the control of cellular processes will be examined in depth. 3 hrs. lec., 3 hrs. lab. Offered in fall. Prereq: BIOL 362, 364 or 365, and ENGL 110. BIOL 461 or CHEM 326 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H and BIOL 364

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BIOL463 - Virology

Course Information

Course Title
Virology

Subject code	Course Number	Academic Level
BIOL	463	Undergraduate

Course Description
Comprehensive investigation of animal viruses. In- depth analysis of virus particles, modes of replication, epidemiology of virus infection, virus host interactions and vaccines. Focus is on medically important viruses such as herpes, influenza, hepatitis and human immunodeficiency viruses. Laboratory exercises include the culture and analysis of viruses in bacterial and mammalian systems. 3 hrs. lec., 3 hrs. lab. Offered in fall. Prereq: 364 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 364

Earn a minimum grade of C- in the following:

- BIOL364 - Foundations of Genetics & Molecular Biology

Or must have permission of instructor.

BIOL465 - Developmental Biology

Course Information

Course Title
Developmental Biology

Subject code	Course Number	Academic Level
BIOL	465	Undergraduate

Course Description
Principles of development and differentiation in animals and plants at the molecular and supramolecular levels of organization. The laboratory includes both experimental and descriptive embryology. 2 hrs. lec., 3 hrs. lab. Offered in spring. BIOL 362 or 263, 364 or 365, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL362 or BIOL362H and BIOL364

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology
- BIOL364 - Foundations of Genetics & Molecular Biology

Or must have permission of instructor.

BIOL466 - Molecular and Cell Techniques

Course Information

Course Title
Molecular and Cell Techniques

Subject code	Course Number	Academic Level
BIOL	466	Undergraduate

Course Description
Application and theory of techniques commonly used in biotechnology, and cell and molecular biological research. Cell culture, plant tissue culture, immunological techniques, cell fusion, radioisotope labeling and detection, centrifugation, microscopic techniques and electrophoretic protocols will be covered in depth. Intended for biology B.S. majors in the molecular biology/biotechnology option. 5 hrs. integrated lecture/lab. Offered in spring. Prereq: BIOL 462. BIOL 461 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 462

Complete ALL of the following Courses:

- BIOL462 - Molecular Biology

Or must have permission of instructor.

BIOL467 - Human Genetics:Analysis/ Apps

Course Information

Course Title
Human Genetics:Analysis/Apps

Subject code	Course Number	Academic Level
BIOL	467	Undergraduate

Course Description
Applications of traditional and molecular approaches in understanding the genetic basis for human traits. Gene mapping and identification, cytogenetics and DNA sequence analysis will be covered in depth. Gene function, regulation, mutations and cloning will be explored in the context of human diseases. The Human Genome Project, genetic diagnostics, gene therapy and transgenic organisms will be addressed, along with the genetic basis of cancer, behavior, immunity and development. Genetic counseling and medical genetics will be discussed. 3 hrs. lec./discussion. Offered annually. Prereq: BIOL 364 or 365, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 364

Earn a minimum grade of C- in the following:
- BIOL364 - Foundations of Genetics & Molecular Biology

ENGL 110 or ENGL 110H

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BIOL470 - Biology Colloquium

Course Information

Course Title
Biology Colloquium

Subject code	Course Number	Academic Level
BIOL	470	Undergraduate

Course Description
An opportunity to meet visiting scientists and to discuss their research work. Students will read and discuss, in a seminar format, assigned papers prior to the presentation of the colloquium by the visiting scholar. In addition, they will be expected to participate in discussions with the speaker after the colloquium hosted by the Department of Biology. Offered periodically. Prereq: BIOL 101 or BIOL 100. Other courses indicated by instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 101 or BIOL 100

Complete at least 1 of the following:

BIOL 101

Earn a minimum grade of C- in the following:
- BIOL101 - Foundations of Biology

OR

BIOL 100

Earn a minimum grade of B- in the following:
- BIOL100 - General Biology

Other courses indicated by instructor.

BIOL471 - Topics In Biology

Course Information

Course Title
Topics In Biology

Subject code	Course Number	Academic Level
BIOL	471	Undergraduate

Course Description
Detailed investigations of a topic of current interest. Topic to be announced each time course is offered. Offered periodically. Prereq: Upperclass standing or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

BIOL471H - Hon: Topics In Biology

Course Information

Course Title
Hon: Topics In Biology

Subject code	Course Number	Academic Level
BIOL	471H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

BIOL472 - Seminar In Biology

Course Information

Course Title
Seminar In Biology

Subject code	Course Number	Academic Level
BIOL	472	Undergraduate

Course Description
Group discussions. General theme to be determined by professor. Offered annually. Prereq: 16 s.h. of biology and courses indicated by the instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Minimum Biology Credits

Earn at least 16 credits

Other Requirement

Courses indicated by the instructor.

BIOL472H - HNRS:Seminar In Biology

Course Information

Course Title
HNRS:Seminar In Biology

Subject code	Course Number	Academic Level
BIOL	472H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

Minimum Biology Credits

Earn at least 16 credits

Other Requirement

Courses indicated by the instructor.

BIOL473 - Methods/Teaching Biological Issues in the Secondary School

Course Information

Course Title
Methods/Teaching Biological Issues in the Secondary School

Subject code	Course Number	Academic Level
BIOL	473	Undergraduate

Course Description
A seminar for prospective life science teachers to consider methods a teacher might employ to present controversial aspects of biology in intellectually honest, balanced ways which also demonstrate sensitivity to the various moral, ethical and political dilemmas secondary school students may encounter. 1 hr. lecture. Offered annually. Co- or prereq: SEED 435; required of all B.S.Ed./BIOL students prior to or with SEED 461.

Simple Requirements

Completed Course Prerequisite or Corequisite

Type
Prerequisite

SEED435

Complete ALL of the following Courses:
- SEED435 - Teaching of Science in Secondary Schools

BIOL483 - Applied Ethology

Course Information

Course Title
Applied Ethology

Subject code	Course Number	Academic Level
BIOL	483	Undergraduate

Course Description
An introduction to applied animal behavior, including (1) the behavior of companion animals, animals in zoos & aquaria, animals in labs, and animals in agriculture/aquaculture; (2) animal welfare, (3) ethical issues in animal use, (4) methods of training captive animals, and (5) career options and certifications in animal behavior. 3 hrs lecture. Offered periodically. Prereq: PSYC 316 or BIOL 385; PSYC 300 or BIOL 300 or PSYC 495; Senior standing or permission of instructor. Students cannot also earn credit in PSYC 483.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 316 or BIOL 385 or BIOL 385H

Complete ANY of the following Courses:
- PSYC316 - Adv Lab Learn Beh Analysis
- BIOL385 - Principles of Animal Behavior
- BIOL385H - H: Principles of Animal Behavior

PSYC 300 or BIOL 300 or PSYC 495

Complete ANY of the following Courses:
- PSYC300 - Co-Op Ed Experience in Psyc
- BIOL300 - Co-Op Ed Experience in Biol
- PSYC495 - Directed Projects in Psych

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits
Or must have permission of instructor.

BIOL484 - Mech of Animal Behavior

Course Information

Course Title
Mech of Animal Behavior

Subject code	Course Number	Academic Level
BIOL	484	Undergraduate

Course Description
An exploration of the physiological mechanisms that regulate animal behavior. Nervous and endocrine system physiology are examined and applied to understanding behavioral neuroendocrinology, the integrative study of hormones, brain, and behavior. Research methods in behavioral physiology and the importance of genetic control mechanisms are recurrent topics. A comparative approach is taken, and behavioral physiology is considered in ecological and evolutionary contexts. 3 hrs. lec. Prereq: BIOL 362 or permission of instructor. BIOL 385 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 362 or BIOL 362H

Earn a minimum grade of C- in the following:

- BIOL362 - Cell and Developmental Biology **OR** BIOL362H - HNRS:Cell and Developmental Biology

Or must have permission of instructor.

Additional Comments:
BIOL 385 recommended.

BIOL486 - Behavioral Ecology

Course Information

Course Title
Behavioral Ecology

Subject code	Course Number	Academic Level
BIOL	486	Undergraduate

Course Description
An in-depth examination of the evolution of animal behavior via natural selection with a on the adaptive significance (i.e., fitness consequences) of behaviors involved in foraging, resource defense, cooperation, mating, parental care, and communication. Predator-prey interactions, animal sociality, and approaches to studying behavioral ecology are recurrent topics. Involves a substantial field component where students learn to observe, document, and quantify animal behavior in the wild. 2 hrs. lec., 3 hrs. lab/field. Prereq: C- or higher in BIOL 343. BIOL 385 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 343 or BIOL 343H

Earn a minimum grade of C- in the following:

- BIOL343 - Principles of Ecology & Evolution **OR** BIOL343H - Hon: Principles of Ecology & Evolution

BIOL 385 recommended.

BIOL489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
BIOL	489	Undergraduate

Course Description
For the definition of honors course and student eligibility, refer to the Special Academic Opportunities section of this catalog.

BIOL495 - Biological Oceanography

Course Information

Course Title
Biological Oceanography

Subject code	Course Number	Academic Level
BIOL	495	Undergraduate

Course Description
Intensive summer lecture and field course teaching the physical, chemical and biological factors controlling the structure and dynamics of marine ecosystems. Classroom instruction focuses on theoretical principles concerning the environmental control of phytoplankton communities by sunlight, nutrients and grazing. The dynamics and complexity of marine food webs including the phytoplankton, zooplankton and upper trophic levels. Laboratory and field instruction focuses on ocean monitoring and sampling from research vessels, biomass determination and identification of key plankton species, measurement of the rates of net and gross primary production using oxygen light-dark bottle experiments, and optical and chemical techniques of determining phytoplankton biomass and species composition. Approximately 40-50% of course time is spent in field. Prerequisites: C- or higher in ESSC 261 and BIOL (211 or 221), or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC261

Earn a minimum grade of C- in the following:

- ESSC261 - Introduction to Oceanography

BIOL211 or BIOL221

Complete ANY of the following Courses:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany

Or must have permission of instructor.

BIOL498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
BIOL	498	Undergraduate

Course Description
Student research on a topic agreed on with faculty supervisor. Applicant for independent study is required to submit a Request for Special Study Assignment form.

BIOL499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
BIOL	499	Undergraduate

Course Description
For the definition of honors course and student eligibility, refer to the Special Academic Opportunities section of this catalog.

BIOL564 - Genetics and Molecular Biology

Course Information

Course Title
Genetics and Molecular Biology

Subject code	Course Number	Academic Level
BIOL	564	Graduate

Course Description
Genetics and Molecular Biology

BIOL589 - Topics In Biology

Course Information

Course Title
Topics In Biology

Subject code	Course Number	Academic Level
BIOL	589	Graduate

Course Description
Topics In Biology

BIOL602 - Prblms:

Course Information

Course Title
Prblms:

Subject code	Course Number	Academic Level
BIOL	602	Graduate

Course Description
Prblms:

BIOL625 - Plant Systematics

Course Information

Course Title
Plant Systematics

Subject code	Course Number	Academic Level
BIOL	625	Graduate

Course Description
Plant Systematics

BIOL643 - Conservation Biology

Course Information

Course Title
Conservation Biology

Subject code	Course Number	Academic Level
BIOL	643	Graduate

Course Description
Conservation Biology

BIOL647 - Chesapeake Bay System

Course Information

Course Title
Chesapeake Bay System

Subject code	Course Number	Academic Level
BIOL	647	Graduate

Course Description
Chesapeake Bay System

BIOL651 - General Microbiology

Course Information

Course Title
General Microbiology

Subject code	Course Number	Academic Level
BIOL	651	Graduate

Course Description
General Microbiology

BIOL662 - Molecular Biology

Course Information

Course Title
Molecular Biology

Subject code	Course Number	Academic Level
BIOL	662	Graduate

Course Description
Molecular Biology

BIOL667 - Human Genetics:Analysis/ Apps

Course Information

Course Title
Human Genetics:Analysis/Apps

Subject code	Course Number	Academic Level
BIOL	667	Graduate

Course Description
Human Genetics:Analysis/Apps

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL564

Complete ALL of the following Courses:

- BIOL564 - Genetics and Molecular Biology

BIOL685 - Animal Behavior

Course Information

Course Title
Animal Behavior

Subject code	Course Number	Academic Level
BIOL	685	Graduate

Course Description
Animal Behavior

FYEX100F - First-Year Experience: The evolutionary history of the human body

Course Information

Course Title
First-Year Experience: The evolutionary history of the human body

Subject code	Course Number	Academic Level
FYEX	100F	Undergraduate

Course Description
FYEX 100: The evolutionary history of the human body

The human body is the product of millions of years of evolution. We can trace this history by examining our genes and comparing the arrangement of our bones to those of other animals. This course will explore the evolution of vertebrate anatomy through investigations in paleontology, comparative anatomy and evolutionary developmental biology. In this course, you will: (1) embrace your natural curiosity by exploring state-of-the-art research, (2) discover your passion and career goals in biology and the medical professions, and (3) develop the skills necessary for being successful in college and beyond.

Biology and Allied Health majors will be enrolled into this class.

Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100X - First Year Experience: Becoming a Biologist

Course Information

Course Title
First Year Experience: Becoming a Biologist

Subject code	Course Number	Academic Level
FYEX	100X	Undergraduate

Course Description
FYEX 100X – Becoming a Biologist:

This course is designed for students embarking on their journey as a biology major. We will delve into a variety of topics aimed at helping students with transitioning into college and meeting academic expectations at the university level. Through engagement with the many important services, resources, and opportunities on campus, the course is designed to foster a sense of belonging to the major, Biology Department, and Millersville University. Along the way, we will provide you with access to an active peer network, and build a skillset that will foster success in the biology major and beyond. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

Simple Requirements

For first-year Biology majors only.

Type
Prerequisite

REST410 - Acute Cardiopulmonary Care

Course Information

Course Title
Acute Cardiopulmonary Care

Subject code	Course Number	Academic Level
REST	410	Undergraduate

Course Description
This course is designed to give the student a complete understanding of artificial airways, manual artificial ventilation methods, and cardiopulmonary resuscitation. A basic study of cardiac physiology and electrocardiograph interpretation will be discussed. Integrated lecture/lab. Prereq: BIOL 356, for the B.S. in biology; BIOL 254 and BIOL 255 for the B.S. in allied health technology. Basic Life Support for Healthcare Providers, for both programs.

Simple Requirements

Course Prerequisites for B.S. in Biology

Type
Prerequisite

BIOL 356

Complete ALL of the following Courses:
- BIOL356 - Functional Human Anatomy

Course Prerequisites for B.S. in Allied Health Technology

Type
Prerequisite

BIOL 254 or BIOL 254H and BIOL 255 or BIOL 255H

Complete ALL of the following Courses:
- BIOL255 - Human Anatomy & Physiology II **OR** BIOL254H - Hon: Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II **OR** BIOL255H - Hon: Human Anatomy & Physiology II

Course Prerequisites

Type
Prerequisite

Basic Life Support for Healthcare Providers

Basic Life Support for Healthcare Providers, for both programs.

REST411 - Respiratory Care Techniques 1

Course Information

Course Title
Respiratory Care Techniques 1

Subject code	Course Number	Academic Level
REST	411	Undergraduate

Course Description
A study of the basic techniques of respiratory care, including professional organizations, ethics, legal aspects, aerosol phamacology, lung hyper- inflation therapy and basic diagnostic appliances. Integrated lecture/lab. Prereq: BIOL 356 for the B.S. in biology; BIOL 254 and BIOL 255 for the B.S. in allied health technology.

Simple Requirements

Course Prerequisites for B.S. in Biology

Type
Prerequisite

BIOL 356

Complete ALL of the following Courses:
- BIOL356 - Functional Human Anatomy

Course Prerequisites for B.S. in Allied Health Technology

Type
Prerequisite

BIOL 254 or BIOL 254H and BIOL 255 or BIOL 255H

Complete ALL of the following Courses:
- BIOL254 - Human Anatomy & Physiology I **OR** BIOL254H - Hon: Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II **OR** BIOL255H - Hon: Human Anatomy & Physiology II

REST412 - Principles of Aerosol & Gas Therapy

Course Information

Course Title
Principles of Aerosol & Gas Therapy

Subject code	Course Number	Academic Level
REST	412	Undergraduate

Course Description
A study of medical gas therapy, bland and pharmacologic aerosol administration, and related theory guides the learner in making sound judgments in their application. Particular attention is given to the operating principles of the devices used in this therapy and their use and maintenance. Integrated lecture/lab. Prereq: BIOL 356, CHEM 112, and PHYS 131 for the B.S. in biology; BIOL 254 and BIOL 255, CHEM 103 and CHEM 104, and PHYS 131 for the B.S. in allied health technology.

Simple Requirements

Course Prerequisites for B.S. in Biology

Type
Prerequisite

BIOL 356 and PHYS 131 and CHEM 112 or CHEM 112H

Complete ALL of the following Courses:
- BIOL356 - Functional Human Anatomy
- PHYS131 - Physics 1 with Algebra
- CHEM112 - Introductory Chemistry 2 **OR** CHEM112H - Hnrs:Introductory Chemistry 2

Course Prerequisites for B.S. in Allied Health Technology

Type
Prerequisite

BIOL 254 or BIOL 254H and BIOL 255 or BIOL 255H and CHEM 103 and CHEM 104 and PHYS 131

Complete ALL of the following Courses:
- BIOL254 - Human Anatomy & Physiology I **OR** BIOL254H - Hon: Human Anatomy & Physiology I

- BIOL255 - Human Anatomy & Physiology II **OR** BIOL255H - Hon: Human Anatomy & Physiology II
- CHEM103 - Gen Organic and Biochemistry 1
- CHEM104 - Gen Organic and Biochemistry 2
- PHYS131 - Physics 1 with Algebra

REST413 - Respiratory Assessment & Therapeutics

Course Information

Course Title
Respiratory Assessment & Therapeutics

Subject code	Course Number	Academic Level
REST	413	Undergraduate

Course Description
The lungs and chest wall are studied to gain an understanding of breathing mechanics in health and disease. Therapeutic measures are considered as to their value in reducing the work of breathing imposed by disease. Each student learns to examine the pulmonary patient and to integrate and evaluate the findings. Bronchopulmonary hygiene, chest physical therapy techniques and an overview of pulmonary rehabilitation are introduced and discussed. Prereq: REST 411, REST 412.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 411 and REST 412

Complete ALL of the following Courses:
- REST411 - Respiratory Care Techniques 1
- REST412 - Principles of Aerosol & Gas Therapy

REST414 - Respiratory Care Techniques 2

Course Information

Course Title
Respiratory Care Techniques 2

Subject code	Course Number	Academic Level
REST	414	Undergraduate

Course Description
The chest-imaging component prepares the student to evaluate chest X-ray films and to recognize and track the progression/resolution of abnormalities. CT scanning and MRI are given emphasis proportional to their utilization in chest medicine. Measurement and calculation of volume, flow rate, and ratios, and their physiologic significance, and testing procedures for performing various pulmonary function studies are included. Prereq: REST 411.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 411

Complete ALL of the following Courses:
- REST411 - Respiratory Care Techniques 1

REST415 - Technical Aspects of Mechanical Ventilation

Course Information

Course Title
Technical Aspects of Mechanical Ventilation

Subject code	Course Number	Academic Level
REST	415	Undergraduate

Course Description
The mechanics of basic models: Discussion includes the mechanics of ventilator models classification, the control interrelation, the electro-pneumatic/ microprocessor systems and the audiovisual alarm systems; a selection of current ventilator models are presented using workshops to provide hands-on experience in troubleshooting, setup, control function, alarm setting and mode change. Prereq: REST 421.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 421

Complete ALL of the following Courses:
- REST421 - Physiology of Mechanical Ventilation

REST417 - Respiratory Care Techniques 3

Course Information

Course Title
Respiratory Care Techniques 3

Subject code	Course Number	Academic Level
REST	417	Undergraduate

Course Description
The course provides an overview of cardiovascular physiology, management of invasive monitoring catheters, calculation of all commonly used mechanics, and interpretation of data in pathologic states. Also, each student researches, prepares a journal-quality paper and presents a 40-50- minute verbal presentation on a selected pulmonary disease condition. Prereq: ENGL 110, REST 414.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and REST 414

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- REST414 - Respiratory Care Techniques 2

REST419 - Respiratory Care in Alternate Sites

Course Information

Course Title
Respiratory Care in Alternate Sites

Subject code	Course Number	Academic Level
REST	419	Undergraduate

Course Description
Alternate sites for respiratory care are studied to give the students a better understanding of the career opportunities within their reach. The students will understand their role as respiratory therapists in the home care, subacute care and pulmonary rehabilitation settings. Lecture, guest speakers, a camp experience, a one-day site visit and in-class presentations are included. Prereq: REST 413.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 413

Complete ALL of the following Courses:
- REST413 - Respiratory Assessment & Therapeutics

REST420 - Arterial Blood Gas Analysis

Course Information

Course Title
Arterial Blood Gas Analysis

Subject code	Course Number	Academic Level
REST	420	Undergraduate

Course Description
The physiologic role of various gas pressures (alveolar gas pressures, blood gas pressures, inspired gas pressures, tissue gas pressures, etc.) and pulmonary abnormalities causing hypoxemia are discussed. Control of ventilation, oxygen transport (including oxygen content and oxygen dissociation curve) and carbon dioxide transport are presented. The student will interpret acid-base imbalances and blood gas abnormalities. Prereq: CHEM 112 and PHYS 131 for the B.S. in biology; CHEM 103 and CHEM 104 and PHYSICS 131 for the B.S. in allied health technology.

Simple Requirements

Course Prerequisites for B.S. in Biology

Type
Prerequisite

CHEM 112 and PHYS 131

Complete ALL of the following Courses:
- CHEM112 - Introductory Chemistry 2
- PHYS131 - Physics 1 with Algebra

Course Prerequisites for B.S. in Allied Health Technology

Type
Prerequisite

CHEM 103 and CHEM 104 and PHYS 131

Complete ALL of the following Courses:
- CHEM103 - Gen Organic and Biochemistry 1
- CHEM104 - Gen Organic and Biochemistry 2
- PHYS131 - Physics 1 with Algebra

REST421 - Physiology of Mechanical Ventilation

Course Information

Course Title
Physiology of Mechanical Ventilation

Subject code	Course Number	Academic Level
REST	421	Undergraduate

Course Description
Aspects of continuous positive and negative pressure breathing are discussed. Special emphasis is placed on the complications of mechanical ventilation and analysis of various waveform patterns produced by different ventilator modes. Theory and measurement of airway resistance and lung thorax compliance are presented. The student learns guidelines and calculations for correct ventilator setup. Prereq: REST 411 and REST 420.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 411 and REST 420

Complete ALL of the following Courses:
- REST411 - Respiratory Care Techniques 1
- REST420 - Arterial Blood Gas Analysis

REST422 - Pharmacology

Course Information

Course Title
Pharmacology

Subject code	Course Number	Academic Level
REST	422	Undergraduate

Course Description
A concise core of pharmacologic knowledge that will be used by the respiratory therapist to understand how chemical agents affect disease processes. Emphasis is placed on the chemical and molecular structures, toxic aspects, actions and hazards of drugs. Prereq: CHEM 112 for the B.S. in biology; CHEM 104 for the B.S. in allied health technology.

Simple Requirements

Course Prerequisites for B.S. in Biology

Type
Prerequisite

CHEM 112

Complete ALL of the following Courses:
- CHEM112 - Introductory Chemistry 2

Course Prerequisites for B.S. in Allied Health Technology

Type
Prerequisite

CHEM 104

Complete ALL of the following Courses:
- CHEM104 - Gen Organic and Biochemistry 2

REST423 - Infectious Diseases

Course Information

Course Title
Infectious Diseases

Subject code	Course Number	Academic Level
REST	423	Undergraduate

Course Description
Infectious diseases resulting in respiratory infections, host defense mechanisms, the immunology of the respiratory system and temporary or permanent failure of many protective mechanisms of the body to ward off infectious agents. Fluid and electrolyte management is stressed. Prereq: BIOL 461.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 461H

Complete ALL of the following Courses:
- BIOL461H - H:General Microbiology (Inactive)

REST424 - Non-Infectious Diseases

Course Information

Course Title
Non-Infectious Diseases

Subject code	Course Number	Academic Level
REST	424	Undergraduate

Course Description
Diseases of the airway, parenchyma and pleura are covered in an assessment-based format to understand the etiology, diagnosis, treatment and management of patients with noninfectious pulmonary diseases. Prereq: REST 413.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 413

Complete ALL of the following Courses:
- REST413 - Respiratory Assessment & Therapeutics

REST425 - Neonatology for the Respiratory Therapist

Course Information

Course Title
Neonatology for the Respiratory Therapist

Subject code	Course Number	Academic Level
REST	425	Undergraduate

Course Description
Uterine development of the embryo is discussed with emphasis on the fetal pulmonary system. The respiratory and circulatory changeover of the neonate at birth is studied. Temperature regulation, signs of respiratory distress, oxygen administration, arterial blood analysis, congenital abnormalities and disease states are studied with respect to the newborn. Prereq: BIOL 356 or BIOL 254/255.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 356 or BIOL 254 or BIOL 254H or BIOL 255 or BIOL 255H

Complete ANY of the following Courses:

- BIOL356 - Functional Human Anatomy
- BIOL254 - Human Anatomy & Physiology I
- BIOL254H - Hon: Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II
- BIOL255H - Hon: Human Anatomy & Physiology II

REST460 - Clinical Practice 1

Course Information

Course Title
Clinical Practice 1

Subject code	Course Number	Academic Level
REST	460	Undergraduate

Course Description
The student will complete three diagnostic lab units and three clinical skills lab units in general care therapeutics and general care patient management. Upon successful completion of each of the skills labs, the student will be scheduled for a clinical practice rotation in patient care. The students are assigned to a clinical preceptor to observe/ practice/develop competency in their newly acquired clinical skills. Prereq: admission to the Program in Respiratory Therapy.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Admission to the Respiratory Therapy Program

Must be admitted to the program in Respiratory Therapy.

REST461 - Clinical Practicum 1

Course Information

Course Title
Clinical Practicum 1

Subject code	Course Number	Academic Level
REST	461	Undergraduate

Course Description
This course provides a 60-hour supervised clinical experience for each student enrolled. It immediately follows the completion of REST 460, in which all of the general patient-care skills were presented, practiced in simulation, observed in patient care and practiced on patients. The expectation is that each student will progress to mastery in the assigned general patient-care clinical skills. The former 40 hours will be devoted to supervised practice, and the latter 20 hours will consist of further practice, with a focus on skill assessment through direct observation by a regular faculty member. Prereq: REST 460.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 460

Complete ALL of the following Courses:
- REST460 - Clinical Practice 1

REST462 - Clinical Practice 2

Course Information

Course Title
Clinical Practice 2

Subject code	Course Number	Academic Level
REST	462	Undergraduate

Course Description
The student will complete three clinical skills lab units in critical care therapeutics and critical care patient management, and three diagnostic lab units. The format for each of these labs is similar to that of REST 460. Upon successful completion of each of these labs, the student will be scheduled for a clinical practice rotation in patient care. The students are assigned to a faculty member to observe/practice/achieve competency in their newly acquired clinical skills. Prereq: REST 461.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 461

Complete ALL of the following Courses:
- REST461 - Clinical Practicum 1

REST463 - Clinical Practicum 2

Course Information

Course Title
Clinical Practicum 2

Subject code	Course Number	Academic Level
REST	463	Undergraduate

Course Description
This course provides a 120-hour supervised clinical experience for each student enrolled. It immediately follows the completion of REST 462, in which all of the critical-care patient-care skills were presented, practiced in simulation, observed in patient care and practiced on patients. The expectation is that each student will progress to mastery in the assigned critical-care patient-care clinical skills. The former 100 hours will be devoted to supervised practice, and the latter 20 hours will consist of further practice, with a focus on skill assessment through direct observation by a faculty member. Prereq: REST 462.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 462

Complete ALL of the following Courses:
- REST462 - Clinical Practice 2

REST464 - Clinical Practicum 3

Course Information

Course Title
Clinical Practicum 3

Subject code	Course Number	Academic Level
REST	464	Undergraduate

Course Description
This course provides a 600-hour supervised clinical experience for each student enrolled. The final semester of the program is devoted to refinement of all skills through practicing a great variety of equipment and procedures. Advanced techniques and procedures are stressed. A total of 16 structured weeks of clinical experiences is offered at contracted affiliated regional hospitals and medical centers. Students will accomplish learning objectives while assigned to various content experts and specialists. The focus is on pulmonary rehabilitation, home care, sleep medicine, pulmonary diagnostics, neonatal/pediatric critical care, advanced airway care, pulmonary medicine and adult critical care patient management. Each rotation area is complete with schedules, content outlines, specific learning objectives and assignments to be completed by the student. Prereq: REST 463.

Simple Requirements

Course Prerequisites

Type
Prerequisite

REST 463

Complete ALL of the following Courses:
- REST463 - Clinical Practicum 2

REST495 - Respiratory Care Research

Course Information

Course Title
Respiratory Care Research

Subject code	Course Number	Academic Level
REST	495	Undergraduate

Course Description
Each student selects, designs and conducts a research project, individually or with a research partner. The project culminates in a verbal presentation of the research and a manuscript from each student suitable for publication. Each project is assigned a faculty adviser to oversee and guide the research. Prereq: permission of program director.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Program Director Permission

Must have permission from the program director.

Chemistry Department

The Department of Chemistry, approved by the American Chemical Society (ACS), offers two degree programs leading to the baccalaureate degree with a major in chemistry. There are five options available within the B.S. degree program that allow students to pursue focused study in specific areas of chemistry. The recommended course sequence during the first year is identical for all programs and differs minimally through the junior year, meaning that a change in career emphasis within chemistry need not delay graduation. Completion of specific requirements within their program qualifies a graduate for certification by the department to the American Chemical Society, which offers immediate membership eligibility in the ACS as well as more desirable employment opportunities.

The Bachelor of Science degree (B.S.) offers intensive training in chemistry and mathematics with the greatest flexibility in selecting broad training that covers all areas of chemistry. This degree is designed specifically for students who wish to pursue graduate studies or employment as a chemist.

The biochemistry option provides enhanced study in the chemistry of life processes and macromolecules. This program offers the best preparation for acceptance to medical or dental school as well as graduate programs or lab work that includes biological techniques.

The environmental chemistry option provides focused study in areas that involve the traditional chemistry of the atmosphere, hydrosphere, geosphere, and biosphere. The study of environmental chemistry prepares students for work related to environmental analysis, industrial hygiene, or engineering.

The nanotechnology option provides study in the control of materials at very small dimensions to make smaller, cheaper and better materials used in many fields. Students in this program spend a semester at the Penn State University Park campus in their nanofabrication facility. Graduates can pursue graduate studies or employment in materials science.

The engineering instrumentation automation option provides an interdisciplinary program focused on using, controlling, and improving instruments for chemical analysis and interpreting/analyzing data. This degree includes study of industrial electronics, control systems, and robotics that prepares graduates for scientific careers where instrumentation plays a key role, including industry, forensics, or graduate school.

For students wanting a career in teaching chemistry at the high school level, the Bachelor of Science in Education degree (B.S.Ed.) provides a sound background in chemistry as well as the necessary pedagogical methods courses.

An important program option in chemistry is an internship that integrates on-site learning applicable to any of the above degree options. Internships offer students invaluable experience in a job related to their career goal as well as financial remuneration, which helps significantly to defray the expenses of college study. Beginning after the first-year, students choosing this option may alternate periods of on-campus study with off-campus employment until graduation. In addition, up to three credits may be approved to count toward major sequence requirements for each internship experience; up to six credits may be counted toward degree requirements. For more information, see Cooperative Education in the Special Academic Opportunities section.

The chemistry 3+4 pre-pharmacy option within the B.S. program requires three years of study as a chemistry major in the Millersville liberal arts curriculum along with coursework from the first year in the Lake Erie College of Osteopathic Medicine (LECOM) Pharmacy school program. At the end of the four years, the student receives a B.S. in chemistry degree from Millersville, and after seven years, the student receives a Doctorate in Pharmacy degree from LECOM.

Students majoring in other sciences can readily round out studies in chemistry to complete one of three minors. Additional coursework provides deeper expertise in chemistry, biochemistry, or environmental chemistry that expands professional opportunities.

FACULTY LIST
Albert, Daniel; Department Chairperson, Associate Professor College of Science and Technology B.A., Ohio Wesleyan University, 2007; M.S., University of Wisconsin-Madison, 2008; Ph.D., Cornell University, 2013
Baker, Kristen; Assistant Professor College of Science and Technology B.S., Gettysburg College, 2016; Ph.D., University of Delaware, 2021
Elioff, Michael; Associate Professor College of Science and Technology B.S., University of Texas at Tyler, 1991; M.S., University of Texas at Arlington, 1995; Ph.D., Boston University, 2001
Kennedy, Steven; Associate Professor College of Science and Technology B.S., Lewis-Clark State College, 2004; Ph.D., University of California, 2010
Mbindyo, Jeremiah; Professor College of Science and Technology B.Ed., Kenyatta University (Kenya), 1987; M.Sc., University of Nairobi (Kenya), 1993; Ph.D., University of Connecticut, 1999
Miller, Aimee; Associate Professor College of Science and Technology B.A., Eastern Mennonite University, 1992; Ph.D., University of Virginia, 2000
Mullen Davis, Melissa; Associate Professor College of Science and Technology B.A., Colby College, 2005; Ph.D., The Pennsylvania State University, 2011
Rajaseelan, R; Professor College of Science and Technology B.S., University of Peradeniya (Sri Lanka), 1981; Ph.D., University of Arizona, 1989
Rickard, Lyman; Professor College of Science and Technology B.S., University of Southern Mississippi, 1973; M.S., Ibid., 1975; Ph.D., Florida Institute of Technology, 1985
Schiza, Maria; Associate Professor College of Science and Technology B.S., Roosevelt University, 1995; Ph.D., University of South Carolina, 2001

Programs

Chemistry Post-Baccalaureate Certification

Overview

For post-baccalaureate information please see the "Post-Bacc Teacher Certification" section of the Graduate Course Catalog.

Curriculum

Simple Requirements

Major in Chemistry, Post-Bacc Certification (39 credits)

Type
Completion Requirement

Requirements

Credits Required for Major

Minimum GPA

Earn a minimum GPA of 2.0

Requirements

Fulfill ALL of the following requirements:

100 and 200 Level Chemistry Requirements (23 credits)

Earn a minimum grade of C in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2
- CHEM251 - Inorganic Chemistry 1
- CHEM265 - Quantitative Analysis

AND

300 AND 400 LEVEL CHEMISTRY REQUIREMENTS: Required Courses (16 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1
- CHEM341 - Physical Chemistry 1
- CHEM342 - Physical Chemistry 2
- CHEM375 - Environmental Chemistry

Req Related for Chemistry, Post-Bacc Cert (22 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (12 credits)

Complete ALL of the following Courses:

- MATH161 - Calculus 1
- MATH211 - Calculus 2
- MATH311 - Calculus 3

AND

Physics (10 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Professional Education - Certification (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc (6 credits)

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology

- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/241 and please register for both courses in the same block.

AND

Professional Bloc (15 credits)

Fulfill ALL of the following requirements:

Instructional Technology, Design & Assessment (3 credits)

Complete at least 1 of the following courses:

- EDFN530 - Instructional Technology, Design and Assessment
- EDFN330 - Instructional Technology, Design & Assessment

AND

Issues in Secondary Education (3 credits)

Complete at least 1 of the following courses:

- SEED521 - Issues in Second Education
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education

AND

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- SEED435 - Teaching of Science in Secondary Schools

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc, but prior to Student Teaching.

AND

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. View the Student Teaching Website.

AND

Student Teaching Semester (9 credits)

Complete ALL of the following Courses:

- SCED461 - Student Teaching in Science
- SCED462 - Student Teaching in Science

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

Advanced Professional Studies - Post-Bacc Cert (6

credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Course Requirements for APS: Foundations Courses (6 credits)

Complete at least 1 of the following:

Option 1. Foundations Graduate Level

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Biochemistry Minor

Overview

The Biochemistry Minor provides students with a strong program in chemistry. The advantages to the student are increased understanding of the applicability of their major to chemical systems, increased adaptability to changing circumstances in employment, and the ability to cross-reference knowledge and expand one's ability to understand more complex problems and discover solutions through research and testing.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Biochemistry (25 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (21 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

- CHEM326 - Biochemistry 1
- CHEM328 - Analytical Biochemistry Lab

AND

Plant Biochemistry or Biochemistry II (4 credits)

Complete at least 1 of the following courses:

- BIOL324 - Plant Biochemistry
- CHEM324 - Plant Biochemistry
- CHEM327 - Biochemistry 2

Chemistry Minor

Overview

Students pursuing other degrees at Millersville University who wish to have a special understanding of Chemical Systems or Chemical Principles can opt to minor in Chemistry. This emphasis can greatly increase a graduate's employment opportunities in certain areas, such as Occupational Safety and Health, Industrial Technology, Biology and others. The Chemistry minor option allows students to take a concentration of courses in the area of chemistry while pursuing their primary degree.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Chemistry (20 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM265 - Quantitative Analysis

AND

Chemistry Required Courses (8 credits)

Complete at least 1 of the following:

Option 1 (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

If CHEM235 Organic Chemistry is selected, you will need an additional Chemistry Elective, CHEM326 Biochemistry 1 or CHEM375 Environmental Chemistry. If CHEM231 Organic Chemistry 1/CHEM232 Organic Chemistry 2 or CHEM341 Physical Chemistry 1/CHEM342 Physical Chemistry 2 are selected, no elective is needed to reach 20 credits for the minor.

OR

Option 2. Organic Chemistry I & II (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

OR

Option 3. Physical Chemistry I & II (8 credits)

Complete ALL of the following Courses:

- CHEM341 - Physical Chemistry 1
- CHEM342 - Physical Chemistry 2
  OR CHEM342H - H: Physical Chemistry 2

Environmental Chemistry Minor

Overview

This program, a minor within the Chemistry program, incorporates all the scientific areas but focuses on green chemistry and sustainability. You will prepare for graduate training or professional work in chemistry under the instruction of faculty members who are active researchers and reflect the diversity of expertise across chemical disciplines.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Environmental Chemistry (20-24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (16 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM375 - Environmental Chemistry
- CHEM476 - Environmental Chemistry 2

AND

Chemistry Required Courses (4-8 credits)

Complete at least 1 of the following:

Option 1. Organic Chemistry I & II (8 credits)

Complete ALL of the following Courses:

- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

OR

Option 2. Organic Chemistry (4 credits)

Complete ALL of the following Courses:

- CHEM235 - Organic Chemistry

Additional Comments:
CHEM265 Quantitative Analysis Quantitative Analysis recommended.

Chemistry, B.S.Ed.

Overview

The BSE-CHEM degree leads to certification to teach chemistry at the secondary level in the public schools of the Commonwealth of Pennsylvania. Millersville University's Chemistry Education program allows you to pursue a comprehensive study of the scientific discipline while gaining the skills to teach 7th to 12th grade students. By successfully completing this program, students earn a Bachelor of Science in Education (B.S.E.) degree with a certification in Secondary Chemistry Education and are prepared for Pennsylvania licensure exams.

Curriculum

Simple Requirements

Major in Chemistry, BSE (41 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

AND

Minimum GPA

Earn a minimum GPA of 2.0

AND

Required Courses (1 credit)

Complete ALL of the following Courses:

- CHEM188 - Freshman Seminar in Chemistry

Waived for transfer students

AND

100 and 200 Level Chemistry Requirements (23 credits)

Earn a minimum grade of C in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
  OR CHEM112H - Hnrs:Introductory Chemistry 2
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2
- CHEM251 - Inorganic Chemistry 1
- CHEM265 - Quantitative Analysis
  OR CHEM265H - H:Quantitative Analysis

AND

300 and 400 Level Chemistry Requirements (17 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1
- CHEM341 - Physical Chemistry 1
- CHEM342 - Physical Chemistry 2
- CHEM375 - Environmental Chemistry
- CHEM487 - Seminar in Chemistry 1
- CHEM488 - Seminar in Chemistry 2

Professional Education (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (9 credits)

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- EDFN330 - Instructional Technology, Design & Assessment
- SEED435 - Teaching of Science in Secondary Schools

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- SCED461 - Student Teaching in Science

Req Related for Chemistry, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (8 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2

- MATH311 - Calculus 3

AND

Physics (8 credits)

Complete at least 1 of the following courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Biology

General Biology competency may be demonstrated by:

1. A course grade of 'A' or 'B' in AP Biology
2. A score of 3 or better in the national AP exam
3. A successful score on the CLEP exam
4. A passing grade for General Biology (BIOL BIOL100 General Biology)

Advanced Professional Studies, BSE (12 credits)

Type
Completion Requirement

APS Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Chemistry, B.S.

Overview

The four-year outline of BS-CHEM courses is designed for the student who wishes to become a chemist, and wishes to prepare for further education beyond the college level in the field. Most students intending to pursue professional careers in the field of chemistry pursue this degree.

Curriculum

Simple Requirements

Major in Chemistry, BS (57 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum credits for 50% residency

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- CHEM188 - Freshman Seminar in Chemistry

Waived for transfer students.

AND

100 and 200 Level Chemistry Required Courses (23 credits)

Earn a minimum grade of C in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2

- CHEM251 - Inorganic Chemistry 1
- CHEM265 - Quantitative Analysis

AND

300 and 400 Level Chemistry Required Courses (10 credits)

Complete ALL of the following Courses:

- CHEM341 - Physical Chemistry 1
- CHEM342 - Physical Chemistry 2
- CHEM487 - Seminar in Chemistry 1
- CHEM488 - Seminar in Chemistry 2
- CHEM498 - Independent Study

AND

Requirements When No Option Is Chosen (21 credits)

Fulfill ALL of the following requirements:

Required Courses (13 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1
- CHEM391 - Advanced Laboratory 1
- CHEM392 - Advanced Inorganic Laboratory
- CHEM452 - Inorganic Chemistry
- CHEM465 - Analytical Chemistry

AND

Chemistry Electives (8 credits)

Earn at least 8 credits from the following:

- CHEM300 - Co-Op Ed Experience in Chem
- CHEM312 - Chemistry in Nanotechnology
- CHEM324 - Plant Biochemistry
- CHEM327 - Biochemistry 2
- CHEM328 - Analytical Biochemistry Lab
- CHEM375 - Environmental Chemistry
- CHEM381 - Polymer Chemistry 1
- CHEM400 - Co-Op Ed Experience in Chem
- CHEM435 - Advanced Organic Chemistry
- CHEM476 - Environmental Chemistry 2
- CHEM482 - Polymer Chemistry 2
- CHEM486 - Topics in Chemistry
- CHEM489 - Honors Course
- CHEM498 - Independent Study
- CHEM499 - Departmental Honors

CHEM342 Physical Chemistry 2 must be taken prior to CHEM452 Inorganic Chemistry and CHEM465 Analytical Chemistry for ACS certification. CHEM342 Physical Chemistry 2 is a required course for all BS CHEM majors.

AND

American Chemical Society Certification

Optional - See separate block

American Chemical Society Certification - Optional (8 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses for ACS Certification (8 credits)

Fulfill ALL of the following requirements:

Required Courses (5 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1
- CHEM392 - Advanced Inorganic Laboratory

AND

Required Independent Research (3 credits)

Earn at least 3 credits from the following:

- CHEM489 - Honors Course
- CHEM498 - Independent Study
- CHEM499 - Departmental Honors

AND

Recommended Courses for Acs Certification

Fulfill ALL of the following requirements:

Introductory Economics

Optional Recommended

AND

Elementary Language German or Russian

Optional Recommended

Additional Comments:
THIS BLOCK IS NOT REQUIRED FOR DEGREE COMPLETION. This block contains courses which are required/recommended to students opting for ACS Certification. While not required, an introductory Economics course, elementary German or Russian (GERM/RUSS 101 and 102) are recommended for inclusion in the core Liberal Arts core requirements for general education. Students must take a minimum of two hours of CHEM489 Honors Course, CHEM498 Independent Study or CHEM499 Departmental Honors (Research) under Chemistry Electives. This means you will need a total of 3 credits in CHEM489 Honors Course, CHEM498 Independent Study or CHEM499 Departmental Honors

Req Related for Chemistry, BS (24-25 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (12-13 credits)

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (8 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3

AND

Physics (10 credits)

Complete at least 1 of the following courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Related Science Electives

Fulfill ANY of the following requirements:

Option 1

Earn at least 2 credits from the following:

- CMSC161 - Introduction to Programming 1
- CMSC162 - Introduction to Programming 2
- MATH235 - Survey of Statistics
- MATH236 - Elements of Statistics 2
- MATH322 - Linear Algebra 1
- MATH333 - Probablity and Statistics
- MATH335 - Mathematical Statistics 1
- MATH365 - Ordinary Differential Equations
- MATH435 - Mathematical Statistics 2

OR

Option 2

Earn at least 2 credits from the following:

- Any PHYS 233-599 course(s)

Note: This requirement may not be satisfied with PHYS351 Intermediate Physics Lab 1 and PHYS352 Intermediate Physics Lab 2 and PHYS451 Advanced Physics Lab 1 or PHYS452 Advanced Physics Lab 2.

Chemistry, B.S. - Biochemistry Option

Overview

Millersville University is one of the few universities in the Commonwealth of Pennsylvania that awards an ACS approved Bachelor of Science Degree with an option in Biochemistry. The program provides the student with a basic background in chemistry and biology as well as a flexible science elective block that will allow the student to pursue any one of a number of major areas of interest upon graduation. The student may also elect to participate in the Cooperative Education Program during his or her course of study. This opportunity affords the student with invaluable practical on-the-job experience, as well as earning college credits and a salary. The career opportunities available in biochemistry are many and diverse.

Curriculum

Simple Requirements

Major in Chemistry, BS (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum credits for 50% residency

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- CHEM188 - Freshman Seminar in Chemistry

Waived for transfer students.

AND

100 and 200 Level Chemistry Required Courses (23 credits)

Earn a minimum grade of C in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2
- CHEM251 - Inorganic Chemistry 1
- CHEM265 - Quantitative Analysis

AND

300 and 400 Level Chemistry Required Courses (10 credits)

Complete ALL of the following Courses:

- CHEM341 - Physical Chemistry 1
- CHEM342 - Physical Chemistry 2
- CHEM487 - Seminar in Chemistry 1
- CHEM488 - Seminar in Chemistry 2
- CHEM498 - Independent Study

AND

American Chemical Society Certification

Optional - See separate block

AND

Chemistry Options

Option in Biochemistry - See separate block

Option in Chemistry, Biochemistry, BS (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

- Credits Required for Concentration
- Minimum 50% Residency credits

AND

Required Courses (13 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1
- CHEM327 - Biochemistry 2
- CHEM328 - Analytical Biochemistry Lab
- CHEM465 - Analytical Chemistry

AND

Chemistry Electives (5 credits)

Earn at least 5 credits from the following:

- CHEM300 - Co-Op Ed Experience in Chem
- CHEM312 - Chemistry in Nanotechnology
- CHEM324 - Plant Biochemistry
- CHEM327 - Biochemistry 2
- CHEM328 - Analytical Biochemistry Lab
- CHEM375 - Environmental Chemistry
- CHEM381 - Polymer Chemistry 1
- CHEM391 - Advanced Laboratory 1
- CHEM392 - Advanced Inorganic Laboratory
- CHEM400 - Co-Op Ed Experience in Chem
- CHEM435 - Advanced Organic Chemistry
- CHEM452 - Inorganic Chemistry
- CHEM476 - Environmental Chemistry 2
- CHEM482 - Polymer Chemistry 2
- CHEM486 - Topics in Chemistry
- CHEM489 - Honors Course
- CHEM498 - Independent Study
- CHEM499 - Departmental Honors

If you are opting for ACS Certification and you should take CHEM392 Advanced Inorganic Laboratory as one of your elective courses.

American Chemical Society Certification - Optional (8 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses for ACS Certification (8 credits)

Fulfill ALL of the following requirements:

Required Courses (5 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1
- CHEM392 - Advanced Inorganic Laboratory

AND

Required Independent Research (3 credits)

Earn at least 3 credits from the following:

- CHEM489 - Honors Course
- CHEM498 - Independent Study
- CHEM499 - Departmental Honors

AND

Recommended Courses for Acs Certification

Fulfill ALL of the following requirements:

Introductory Economics

Optional Recommended

AND

Elementary Language German or Russian

Optional Recommended

Additional Comments:
THIS BLOCK IS NOT REQUIRED FOR DEGREE COMPLETION. This block contains courses which are required/recommended to students opting for ACS Certification. While not required, an introductory Economics course, elementary German or Russian (GERM/RUSS 101 and 102) are recommended for inclusion in the core Liberal Arts core requirements for general education. Students must take a minimum of two hours of CHEM489 Honors Course, CHEM498 Independent Study or CHEM499 Departmental Honors (Research) under Chemistry Electives. This means you will need a total of 3 credits in CHEM489 Honors Course, CHEM498 Independent Study or CHEM499 Departmental Honors

Req Related for Chemistry, BS (30-31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (12-13 credits)

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (8 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3

AND

Physics (10 credits)

Complete at least 1 of the following courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Biology Competency

General Biology: Competency may be demonstrated with credits earned for BIOL100 General Biology through any of the following:

1. A successful score on either the national AP Biology exam or the Biology CLEP exam.
2. A passing grade for General Biology (BIOL100 General Biology) or equivalent.

AND

Additional Required Related for Biochemistry (8 credits)

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Complete ALL of the following Courses:

- BIOL364 - Foundations of Genetics & Molecular Biology

AND

Biochemistry Related Directed Electives (4 credits)

Complete at least 1 of the following courses:

- BIOL362 - Cell and Developmental Biology
  OR BIOL362H - HNRS:Cell and Developmental Biology
- BIOL361 - Microbiology
  OR BIOL361H - Hon: Microbiology
- BIOL462 - Molecular Biology

Additional Comments:
It is strongly recommended that students pursuing the Bachelor of Science degree achieve competency equivalent to the first two courses in a foreign language. A course in economics is also recommended.

Chemistry, B.S. - Engineering Instrumentation Automation Option

Overview

The B.S. Chemistry degree with an option in Engineering Instrumentation Automation is focused on using, controlling, and improving instruments for chemical analysis and interpreting/analyzing data. Many chemistry employment opportunities exist in analytical laboratories or graduate school where sophisticated instrumentation is used extensively. This option maintains a core chemistry curriculum and supplements the chemistry knowledge content with industrial electronics, control systems, and robotics. This option is a unique learning experience available at Millersville due to the collaboration of the Department of Chemistry and the Department of Applied Engineering Safety and Technology. Graduate of this option will be well prepared for positions where instrumentation and analysis plays a key role.

Curriculum

Simple Requirements

Major in Chemistry, BS (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum credits for 50% residency

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- CHEM188 - Freshman Seminar in Chemistry

Waived for transfer students.

AND

100 and 200 Level Chemistry Required Courses (23 credits)

Earn a minimum grade of C in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2
- CHEM251 - Inorganic Chemistry 1
- CHEM265 - Quantitative Analysis

AND

300 and 400 Level Chemistry Required Courses (10 credits)

Complete ALL of the following Courses:

- CHEM341 - Physical Chemistry 1
- CHEM342 - Physical Chemistry 2
- CHEM487 - Seminar in Chemistry 1
- CHEM488 - Seminar in Chemistry 2
- CHEM498 - Independent Study

AND

Chemistry Options

Option in Engineering Instrumentation Automation - See separate block

Option in Chemistry, Engineering Inst. Automat, BS (13 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (5 credits)

Complete ALL of the following Courses:

- CHEM391 - Advanced Laboratory 1
- CHEM465 - Analytical Chemistry

AND

Chemistry Electives (8 credits)

Earn at least 8 credits from the following:

- CHEM300 - Co-Op Ed Experience in Chem
- CHEM312 - Chemistry in Nanotechnology
- CHEM326 - Biochemistry 1
- CHEM327 - Biochemistry 2
- CHEM328 - Analytical Biochemistry Lab
- CHEM375 - Environmental Chemistry
- CHEM381 - Polymer Chemistry 1
- CHEM392 - Advanced Inorganic Laboratory
- CHEM400 - Co-Op Ed Experience in Chem
- CHEM435 - Advanced Organic Chemistry
- CHEM452 - Inorganic Chemistry
- CHEM476 - Environmental Chemistry 2
- CHEM482 - Polymer Chemistry 2
- CHEM486 - Topics in Chemistry
- CHEM489 - Honors Course
- CHEM498 - Independent Study
- CHEM499 - Departmental Honors

Req Related for Chemistry, BS (34-35 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (12-13 credits)

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (8 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3

AND

Physics (10 credits)

Complete at least 1 of the following courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Control Systems (12 credits)

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems
- AENG325 - Power Conversion and Control
- AENG425 - Industrial Robotic Systems 2

AND

Programming Logic Controllers (3 credits)

Complete ALL of the following Courses:

- AENG427 - Programmable Logic Controllers 2

Chemistry, B.S. - Environmental & Green Chemistry Option

Overview

The Environmental and Green Chemistry option is designed for students interested in chemistry and passionate about environmental issues. It provides a strong foundation in all the core areas of chemistry, while integrating coursework and laboratory experiences focused on environmental systems, sustainable chemical practices, and interdisciplinary applications.

Students develop skills in pollution prevention, sustainable chemical design, principles of green chemistry, environmental sampling, toxicology, risk assessment, regulatory frameworks and other environmentally relevant areas. These skills are highly valued and increasingly sought after as employers work to achieve sustainability goals.

Laboratory experiences incorporate modern analytical instrumentation, environmental sampling, data analysis and green chemistry experiments. Students gain practical, hands-on experience through required supervised research and can build real-world skills through internships done in partnership with local industry collaborators.

Graduates of this option are well prepared for graduate work in chemistry or related disciplines such as environmental engineering. They are equally equipped for careers in chemical and pharmaceutical industries, environmental consulting, government agencies, sustainability-related roles, regulatory affairs, and quality assurance positions.

Curriculum

Simple Requirements

Major in Chemistry, BS (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum credits for 50% residency

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- CHEM188 - Freshman Seminar in Chemistry

Waived for transfer students.

AND

100 and 200 Level Chemistry Required Courses (23 credits)

Earn a minimum grade of C in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2
- CHEM251 - Inorganic Chemistry 1
- CHEM265 - Quantitative Analysis

AND

300 and 400 Level Chemistry Required Courses (10 credits)

Complete ALL of the following Courses:

- CHEM341 - Physical Chemistry 1
- CHEM342 - Physical Chemistry 2
- CHEM487 - Seminar in Chemistry 1
- CHEM488 - Seminar in Chemistry 2
- CHEM498 - Independent Study

AND

American Chemical Society Certification

Optional - See separate block

AND

Chemistry Options

Option in Environmental Chemistry - See separate block

Option in Environmental & Green Chemistry, BS (17 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- CHEM375 - Environmental Chemistry
- CHEM465 - Analytical Chemistry
- CHEM476 - Environmental Chemistry 2

AND

Chemistry Electives (5 credits)

Earn at least 5 credits from the following:

- CHEM300 - Co-Op Ed Experience in Chem
- CHEM312 - Chemistry in Nanotechnology
- CHEM324 - Plant Biochemistry
- CHEM326 - Biochemistry 1
- CHEM327 - Biochemistry 2
- CHEM328 - Analytical Biochemistry Lab
- CHEM381 - Polymer Chemistry 1
- CHEM391 - Advanced Laboratory 1
- CHEM392 - Advanced Inorganic Laboratory
- CHEM400 - Co-Op Ed Experience in Chem
- CHEM435 - Advanced Organic Chemistry
- CHEM452 - Inorganic Chemistry
- CHEM486 - Topics in Chemistry
- CHEM489 - Honors Course
- CHEM498 - Independent Study
- CHEM499 - Departmental Honors

American Chemical Society Certification - Optional (8 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses for ACS Certification (8 credits)

Fulfill ALL of the following requirements:

Required Courses (5 credits)

Complete ALL of the following Courses:

- CHEM326 - Biochemistry 1
- CHEM392 - Advanced Inorganic Laboratory

AND

Required Independent Research (3 credits)

Earn at least 3 credits from the following:

- CHEM489 - Honors Course
- CHEM498 - Independent Study
- CHEM499 - Departmental Honors

AND

Recommended Courses for Acs Certification

Fulfill ALL of the following requirements:

Introductory Economics

Optional Recommended

AND

Elementary Language German or Russian

Optional Recommended

Additional Comments:
THIS BLOCK IS NOT REQUIRED FOR DEGREE COMPLETION. This block contains courses which are required/recommended to students opting for ACS Certification. While not required, an introductory Economics course, elementary German or Russian (GERM/RUSS 101 and 102) are recommended for inclusion in the core Liberal Arts core requirements for general education. Students must take a minimum of two hours of CHEM489 Honors Course, CHEM498 Independent Study or CHEM499 Departmental Honors (Research) under Chemistry Electives. This means you will need a total of 3 credits in CHEM489 Honors Course, CHEM498 Independent Study or CHEM499 Departmental Honors

Req Related for Chemistry, BS (25-27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (12-13 credits)

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (8 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3

AND

Physics (10 credits)

Complete at least 1 of the following courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Biology Competency

General Biology: Competency may be demonstrated with credits earned for BIOL100 General Biology through any of the following:

1. A successful score on either the national AP Biology exam or the Biology CLEP exam.
2. A passing grade for General Biology (BIOL100 General Biology) or equivalent.

AND

Environmental Chemistry Related Directed Electives (3-4 credits)

Complete at least 2 of the following courses:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL241 - Principles of Ecology (Inactive)
- BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- ESSC245 - Environmental Meteorology
- ESSC322 - Environmental Hydrology
- ESSC349 - Chemistry of the Atmosphere
  OR ESSC349H - Hon: Chemistry of the Atmosphere
- ESSC426 - Groundwater Resources and Contamination
- GEOG202 - Environmental Sustainability
- GEOG230 - Physical Geography
- GEOG304 - Water Resources Management
- OSEH321 - Environmental & Industrial Hygiene I - Chemical and Biological Hazards
- OSEH422 - Environmental & Industrial Health II - Physical Hazards
- OSEH435 - Environmental Health

Other relevant environmental courses may also be selected by consulting with your academic advisor and submitting an exception to graduation requirements. A related minor may be earned by completing the minor requirements that include courses from the disciplines above.

Chemistry, B.S. - Nanotechnology Option

Overview

The Chemistry Department at Millersville offers a B.S. Chemistry degree with an option in Nanotechnology. The curriculum includes courses that give students a strong background in chemistry and electives in nanotechnology and other sciences. As part of the current program, students spent a semester at Penn State University Park Campus to gain practical experience in nanofabrication and the use of clean room facilities. Nanotechnology - which is the control of materials at very small dimensions to make smaller, cheaper and better products is being adopted in many industries. Upon graduation students can pursue graduate studies in chemistry or materials sciences, or work in industry or government usually in an environment involving interaction with scientists from other disciplines such as biology, physics and engineering.

Curriculum

Simple Requirements

Major in Chemistry, BS (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum credits for 50% residency

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- CHEM188 - Freshman Seminar in Chemistry

Waived for transfer students.

AND

100 and 200 Level Chemistry Required Courses (23 credits)

Earn a minimum grade of C in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2
- CHEM251 - Inorganic Chemistry 1
- CHEM265 - Quantitative Analysis

AND

300 and 400 Level Chemistry Required Courses (10 credits)

Complete ALL of the following Courses:

- CHEM341 - Physical Chemistry 1
- CHEM342 - Physical Chemistry 2
- CHEM487 - Seminar in Chemistry 1
- CHEM488 - Seminar in Chemistry 2
- CHEM498 - Independent Study

AND

Chemistry Options

Option in Nanotechnology - See separate block

Option in Nanotechnology, Chemistry, BS (7-8 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3-4 credits)

Complete at least 1 of the following courses:

- CHEM312 - Chemistry in Nanotechnology
- CHEM465 - Analytical Chemistry

AND

Electives (4 credits)

Earn at least 4 credits from the following:

- CHEM300 - Co-Op Ed Experience in Chem
- CHEM326 - Biochemistry 1
- CHEM375 - Environmental Chemistry
- CHEM381 - Polymer Chemistry 1
- CHEM391 - Advanced Laboratory 1
- CHEM392 - Advanced Inorganic Laboratory
- CHEM435 - Advanced Organic Chemistry
- CHEM452 - Inorganic Chemistry
- CHEM486 - Topics in Chemistry
- CHEM489 - Honors Course
- CHEM498 - Independent Study
- CHEM499 - Departmental Honors

Req Related for Chemistry, BS (40-41 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (12-13 credits)

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (8 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3

AND

Physics (10 credits)

Complete at least 1 of the following courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Professional Block Penn State Courses (18 credits)

Complete ALL of the following Courses:

- NANO311 - Materials, Safety & Equipment Overview for Nanotechnology
- NANO312 - Basic Nanotechnology Processes
- NANO313 - Thin Film Utilization
- NANO314 - Lithography
- NANO315 - Materials Modification in Nanotechnology
- NANO316 - Characterization, Testing Nanotech Structures & Materials

Courses taken in a Capstone Semester at Penn State University in the Nanofabrication Facility.

Chemistry, B.S. - 3+4 Pre-Pharmacy Option

Overview

The 3+4 Pre-Pharmacy option is designed within the B.S. Chemistry program, allowing students to complete both B.S. Chemistry and Doctor of Pharmacy degrees in seven years. Students will be admitted into this program by Millersville University and complete a 3-year program in the Chemistry department that includes all courses required in the first three years (101.0 credits) of a B.S. chemistry degree. To remain in the program, each student must maintain an overall GPA of 3.0 as well as a science GPA of 3.0 at Millersville University. The students will then enroll in a 4-year Pharm. D. degree program at the pharmacy school of their choice. Upon successful completion of the first-year pharmacy program coursework, the chemistry department will accept a professional block of 19.0 credits from the pharmacy school. The 120.0 total credits earned will be the basis for awarding a B.S. chemistry degree from Millersville University, provided the student has completed all other requirements.

Curriculum

Simple Requirements

Major in Chemistry, BS (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum credits for 50% residency

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- CHEM188 - Freshman Seminar in Chemistry

Waived for transfer students.

AND

100 and 200 Level Chemistry Required Courses (23 credits)

Earn a minimum grade of C in the following:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM231 - Organic Chemistry 1
- CHEM232 - Organic Chemistry 2
- CHEM251 - Inorganic Chemistry 1
- CHEM265 - Quantitative Analysis

AND

300 and 400 Level Chemistry Required Courses (10 credits)

Complete ALL of the following Courses:

- CHEM341 - Physical Chemistry 1
- CHEM342 - Physical Chemistry 2
- CHEM487 - Seminar in Chemistry 1
- CHEM488 - Seminar in Chemistry 2
- CHEM498 - Independent Study

AND

Chemistry Options

Option in Pre-Pharmacy - See separate block

Option in Chemistry, Pre-Pharmacy, BS (23 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry Electives (4 credits)

Earn at least 4 credits from the following:

- CHEM300 - Co-Op Ed Experience in Chem
- CHEM375 - Environmental Chemistry

- CHEM381 - Polymer Chemistry 1
- CHEM391 - Advanced Laboratory 1
- CHEM392 - Advanced Inorganic Laboratory
- CHEM435 - Advanced Organic Chemistry
- CHEM452 - Inorganic Chemistry
- CHEM465 - Analytical Chemistry
- CHEM486 - Topics in Chemistry
- CHEM489 - Honors Course
- CHEM498 - Independent Study
- CHEM499 - Departmental Honors

AND

1st Year Pharmacy School Credits (19 credits)

19 Credits will be awarded upon receipt of transcripts from first year of Pharmacy School.

Req Related for Chemistry, BS (22-23 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (15-16 credits)

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (11 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3
- MATH235 - Survey of Statistics

AND

Physics (10 credits)

Complete at least 1 of the following courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Biology Competency

General Biology: Competency may be demonstrated with credits earned for BIOL100 General Biology through any of the following:

1. A successful score on either the national AP Biology exam or the Biology CLEP exam.
2. A passing grade for General Biology (BIOL100 General Biology) or equivalent.

Additional Comments:
Specific pharmacy curricula have additional requirements; students should consult with their advisor or chemistry department chairperson.

Courses

CHEM101 - Chemistry in Society

Course Information

Course Title
Chemistry in Society

Subject code	Course Number	Academic Level
CHEM	101	Undergraduate

Course Description
A brief introduction to chemistry and its uses in modern society: consumer, environmental, and industrial application. Presented in a mostly descriptive fashion. No credit toward chemistry major. 3 hrs. lec. Offered in fall, spring.

Gateway Stage Labels
Problem Solving (PS)

CHEM102 - Demonstration Chemistry

Course Information

Course Title
Demonstration Chemistry

Subject code	Course Number	Academic Level
CHEM	102	Undergraduate

Course Description
Chemical reactions that are encountered in everyday living, present in living systems, the basis of societal issues, the foundation of producing new materials and used to modify materials into finished products. Investigated by observing, describing, explaining and presenting demonstrations. Emphasis on readily understood reactions that begin with and produce nonhazardous materials. No credit toward chemistry major. 2 hrs. lec., 2 hrs. lab. Offered in spring.

CHEM103 - Gen Organic and Biochemistry 1

Course Information

Course Title
Gen Organic and Biochemistry 1

Subject code	Course Number	Academic Level
CHEM	103	Undergraduate

Course Description
An introduction to the basic theories of general and organic chemistry, including nomenclature, reactions and problem solving. Appropriate for nonscience majors and satisfies general education requirements. Proficiency in algebra is essential. High school chemistry is required. 2 hrs. lec., 2 hrs. lab. Offered fall, summer.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

CHEM104 - Gen Organic and Biochemistry 2

Course Information

Course Title
Gen Organic and Biochemistry 2

Subject code	Course Number	Academic Level
CHEM	104	Undergraduate

Course Description
Solutions, acids and bases, oxidation reduction and organic chemistry, including nomenclature and basic reactions with relevancy to biochemistry. Appropriate for nonscience majors and satisfies general education requirements. 2 hrs. lec., 2 hrs. lab. Offered in spring. Prereq: CHEM 103.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 103 or CHEM 111

Complete ANY of the following Courses:

- CHEM103 - Gen Organic and Biochemistry 1
- CHEM111 - Introductory Chemistry 1

CHEM105 - Culinary Chemistry

Course Information

Course Title
Culinary Chemistry

Subject code	Course Number	Academic Level
CHEM	105	Undergraduate

Course Description
Introduction to foundational chemical principles using examples from food, cooking, and baking. Topics include chemical terminology, reactions, problem solving, and the scientific method. Includes specific examples from global cuisines including comparisons of ingredients and cooking methods on the molecular level. At-home laboratory activities provide hands-on experience with measurement, inquiry, and applying the scientific method to recipe development. There are no pre-requisites for this course which is appropriate for non-science majors and satisfies general education requirements. No credit toward chemistry major. 2 hrs lec, 2 hrs lab. Offered: fall, summer.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

CHEM110 - Fundamentals of Chemistry

Course Information

Course Title
Fundamentals of Chemistry

Subject code	Course Number	Academic Level
CHEM	110	Undergraduate

Course Description
An intensive review of the fundamentals of chemistry, with particular emphasis placed on solving chemistry problems. Topics include: measurements, formulas and nomenclature, equations, stoichiometry, atomic and molecular structure, solution concentrations, acids and bases. This course is designed to prepare students majoring in the sciences for their general chemistry sequence, CHEM 111 and CHEM 112. This course may be counted only as an elective beyond normal graduation requirements. 3 hrs. lec./problem solving. Pre- or Coreq: MATH 101 or MPT of 160 or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH101

Complete ALL of the following Courses:
- MATH101 - College Algebra

Or MPT of 160 or higher.

CHEM111 - Introductory Chemistry 1

Course Information

Course Title
Introductory Chemistry 1

Subject code	Course Number	Academic Level
CHEM	111	Undergraduate

Course Description
The properties and theories of the solid, liquid and gaseous states of matter, the stoichiometry and thermochemistry of chemical reactions, and theories and applications of molecular structure and bonding. Proficiency in algebra is essential. High school chemistry is strongly recommended. Intended for science majors: biology, chemistry, Earth sciences, physics. 3 hrs. lec., 1 hr. discussion, 2 hrs. lab. Prereq: Placement in Chem.111 or C- grade or higher in CHEM 110, AND MATH 101 with a grade of C- or higher or MPT of 160 or higher, or permission of instructor.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 110

Earn a minimum grade of C- in the following:
- CHEM110 - Fundamentals of Chemistry

Or must be placed in CHEM 111.

MATH 101

Earn a minimum grade of C- in the following:
- MATH101 - College Algebra

Or MPT of 160 or higher or must have permission of instructor.

CHEM112 - Introductory Chemistry 2

Course Information

Course Title
Introductory Chemistry 2

Subject code	Course Number	Academic Level
CHEM	112	Undergraduate

Course Description
Continuation of CHEM 111. The interactions of matter and energy-thermodynamics, kinetics and electrochemistry. Equlibria in aqueous systemstheory and practice. Coordination chemistry and descriptive chemistry of the elements. 3 hrs. lec., 1 hr. discussion, 2 hrs. lab. Prereq: CHEM 111 with a grade of C- or higher; C for chemistry majors.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 111

Earn a minimum grade of C- in the following:

- CHEM111 - Introductory Chemistry 1

Chemistry majors must earn a C or better.

CHEM112H - Hnrs:Introductory Chemistry 2

Course Information

Course Title
Hnrs:Introductory Chemistry 2

Subject code	Course Number	Academic Level
CHEM	112H	Undergraduate

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 111

Earn a minimum grade of C- in the following:

- CHEM111 - Introductory Chemistry 1

Chemistry majors must earn a C or better.

CHEM113H - H:Introductory Chem 2 Seminar

Course Information

Course Title
H:Introductory Chem 2 Seminar

Subject code	Course Number	Academic Level
CHEM	113H	Undergraduate

Course Description
The ideas of introductory chemistry are studied in extended depth, using problems, laboratory exercises, readings and discussion. Grades of B-or higher in both CHEM 112 and CHEM 113 will result in honors designation for the pair. The pair of courses counts as one entry in the science component of general education and results in 5 hours of general education credit. 1 hr. discussion. Prereq or Coreq: CHEM 112 is required

Simple Requirements

Completed Course Prerequisite or Corequisite

Type
Prerequisite

CHEM112

Complete ALL of the following Courses:
- CHEM112 - Introductory Chemistry 2

CHEM179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
CHEM	179	Undergraduate

Course Description
Experimental

CHEM188 - Freshman Seminar in Chemistry

Course Information

Course Title
Freshman Seminar in Chemistry

Subject code	Course Number	Academic Level
CHEM	188	Undergraduate

Course Description
An orientation to the opportunities and services available to chemistry students in the university and professional environments. Students will develop a better understanding of the major and career options and will be introduced to the chemistry department faculty and programs. 1 hr. discussion. Required of all freshman chemistry majors. Recommended for transfer students. Offered in fall.

CHEM231 - Organic Chemistry 1

Course Information

Course Title
Organic Chemistry 1

Subject code	Course Number	Academic Level
CHEM	231	Undergraduate

Course Description
Organic structural theory, including conformations and configurations of molecules and functional group classification of organic compoundsalkanes, alkenes, alcohols, ethers, alkyl halides, aldehydes and ketones, and aromatic and organometallic compounds. Major emphasis on relationships among molecular structure, chemical reactivity and physical properties. Thorough integration of reaction mechanisms as elucidated using principles of kinetics, thermodynamics, stereochemistry and spectroscopy. Introduction to the instrumentation of organic chemistry: proton and carbon-13 NMR, infrared and mass spectrometry. 3 hrs. lec., 3 hrs. lab. Prereq: CHEM 112 with a grade of C- or higher; C for chemistry majors.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 112

Earn a minimum grade of C- in the following:

- CHEM112 - Introductory Chemistry 2

Chemistry majors must earn a C or better.

CHEM232 - Organic Chemistry 2

Course Information

Course Title
Organic Chemistry 2

Subject code	Course Number	Academic Level
CHEM	232	Undergraduate

Course Description
The structure-property-reactivity-mechanism-synthesis approach from CHEM 231 continues with application to, and/or emphasis on, unsaturated compounds-alkynes, dienes and aromatic compounds. Also, carbonyl compounds, including carboxylic acids and derivatives, along with amines, phenols and complex compounds with multiple functionality. Introduction to natural and synthetic polymers; biomolecules, including fats, oils, amino acids and carbohydrates, along with the basic reactions of metabolism. Thorough integration of structural relationships to spectral properties using UV, IR, C-13 and H-1 NMR, and mass spectral instrumentation and derived data. 3 hrs. lec., 3 hrs. lab. Prereq: CHEM 231 with a grade of C- or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 231

Earn a minimum grade of C- in the following:

- CHEM231 - Organic Chemistry 1

Chemistry majors must earn a C or better.

CHEM235 - Organic Chemistry

Course Information

Course Title
Organic Chemistry

Subject code	Course Number	Academic Level
CHEM	235	Undergraduate

Course Description
The elementary theory, reactions, and properties of organic compounds in an integrated fashion. No credit toward chemistry major. 3 hrs. lec., 3 hrs. lab. Offered fall. Prereq: CHEM 112 with a grade of C- or higher; C for chemistry majors. CHEM 235 is not an acceptable Prereq for CHEM 232.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 112

Earn a minimum grade of C- in the following:

- CHEM112 - Introductory Chemistry 2

C or better for Chemistry majors.

CHEM251 - Inorganic Chemistry 1

Course Information

Course Title
Inorganic Chemistry 1

Subject code	Course Number	Academic Level
CHEM	251	Undergraduate

Course Description
Emphasis on the unification of descriptive chemistry with the basic principles that may be used to explain natural phenomena in inorganic chemistry. The physical and chemical properties of the elements and classes of compounds such as oxides, halides, hydrides, etc., will be described and explained. Acid-base and oxidation-reduction behavior will be emphasized, along with coordination chemistry. Periodic trends are an integral part of the course. 3 hrs. lec. Offered in spring. Prereq: CHEM 112 with a grade of C- or higher; C for chemistry majors; or Coreq: CHEM 112.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 112

Earn a minimum grade of C- in the following:

- CHEM112 - Introductory Chemistry 2

Chemistry majors must earn a C or better and or Coreq: CHEM 112.

CHEM265 - Quantitative Analysis

Course Information

Course Title
Quantitative Analysis

Subject code	Course Number	Academic Level
CHEM	265	Undergraduate

Course Description
An integrated study of advanced chemical equilibrium, activity, experimental uncertainty and accepted practice in the analytical laboratory. Titrimetry, potentiometry, extraction theory, introductory spectroscopy and chromatography are discussed. 3 hrs. lec., 3 hrs. lab. Offered spring, summer. Prereq: CHEM 112 with a grade of C- or higher; C for chemistry majors.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 112

Earn a minimum grade of C- in the following:
- CHEM112 - Introductory Chemistry 2

Chemistry majors must earn a C or better.

CHEM265H - H:Quantitative Analysis

Course Information

Course Title
H:Quantitative Analysis

Subject code	Course Number	Academic Level
CHEM	265H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 112

Earn a minimum grade of C- in the following:
- CHEM112 - Introductory Chemistry 2

Chemistry majors must earn a C or better.

CHEM279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
CHEM	279	Undergraduate

Course Description
Experimental

CHEM300 - Co-Op Ed Experience in Chem

Course Information

Course Title
Co-Op Ed Experience in Chem

Subject code	Course Number	Academic Level
CHEM	300	Undergraduate

Course Description
Co-Op Ed Experience in Chem

CHEM312 - Chemistry in Nanotechnology

Course Information

Course Title
Chemistry in Nanotechnology

Subject code	Course Number	Academic Level
CHEM	312	Undergraduate

Course Description
A study of principles, methods and applications of chemistry in nanotechnology, with a special emphasis on the chemistry of materials. Topics include synthesis, characterization and manipulation of nanomaterials, sensors, bioinspired nanomaterials, atomic force and scanning electron microscopy. 2 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: NANO 313 and CHEM 104 or 111; or CHEM 232; or CHEM 235; or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

(NANO 313 and CHEM 104) or CHEM 111 or CHEM 232 or CHEM 235

Complete ANY of the following Courses:

- NANO313 - Thin Film Utilization **AND** CHEM104 - Gen Organic and Biochemistry 2
- CHEM111 - Introductory Chemistry 1
- CHEM232 - Organic Chemistry 2
- CHEM235 - Organic Chemistry

Or must have permission of instructor.

CHEM312H - Hon: Chemistry in Nanotechnology

Course Information

Course Title
Hon: Chemistry in Nanotechnology

Subject code	Course Number	Academic Level
CHEM	312H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

(NANO 313 and CHEM 104) or CHEM 111 or CHEM 232 or CHEM 235

Complete ANY of the following Courses:

- NANO313 - Thin Film Utilization **AND** CHEM104 - Gen Organic and Biochemistry 2
- CHEM111 - Introductory Chemistry 1
- CHEM232 - Organic Chemistry 2
- CHEM235 - Organic Chemistry

Or must have permission of instructor.

CHEM324 - Plant Biochemistry

Course Information

Course Title
Plant Biochemistry

Subject code	Course Number	Academic Level
CHEM	324	Undergraduate

Course Description
A study of enzymes and pathways involved in plant intermediary metabolism as related to plant cell structure, function and plant development. Topics include plant bioenergetics, biosynthesis of plant hormones and elicitor molecules, signal perception and transduction, and secondary metabolites (natural products). 3 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: BIOL 221 and 263; CHEM 232 or 235.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 221 and CHEM 232 or CHEM 235

Complete ALL of the following Courses:
- BIOL221 - Concepts of Botany
- CHEM232 - Organic Chemistry 2
  OR CHEM235 - Organic Chemistry

CHEM326 - Biochemistry 1

Course Information

Course Title
Biochemistry 1

Subject code	Course Number	Academic Level
CHEM	326	Undergraduate

Course Description
The structure and physical and chemical properties of carbohydrates, lipids, nucleic acids and other biological compounds, and their importance in life processes. Introduction to metabolic processes. Laboratory studies include the properties of chemicals of biological origin, techniques in isolation, identification, qualitative and quantitative analysis. 3 hrs. lec., 3 hrs. lab. Prereq: C- in CHEM 232 or 235.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 232 or CHEM 235

Earn a minimum grade of C- in the following:
- CHEM232 - Organic Chemistry 2
  OR CHEM235 - Organic Chemistry

Chemistry majors must earn a C or better.

CHEM327 - Biochemistry 2

Course Information

Course Title
Biochemistry 2

Subject code	Course Number	Academic Level
CHEM	327	Undergraduate

Course Description
Major focus on understanding the chemistry behind the function of biological compounds involved in cellular processes. Specific topics include enzyme mechanisms and energetics, membrane dynamics and transport, replication, transcription, protein translation and signal transduction. Additionally, metabolism of lipids, amino acids and nucleotides is studied in detail. 3 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: CHEM 326 with a grade of C- or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 326

Earn a minimum grade of C- in the following:
- CHEM326 - Biochemistry 1

CHEM327H - Hon: Biochemistry 2

Course Information

Course Title
Hon: Biochemistry 2

Subject code	Course Number	Academic Level
CHEM	327H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 326

Earn a minimum grade of C- in the following:
- CHEM326 - Biochemistry 1

CHEM328 - Analytical Biochemistry Lab

Course Information

Course Title
Analytical Biochemistry Lab

Subject code	Course Number	Academic Level
CHEM	328	Undergraduate

Course Description
Laboratory course designed to expand the technical experience of biochemistry students. Experiments completed focus on the analysis of major classes of biological compounds using advanced techniques and instrumentation. Includes opportunities to develop literature research, writing and presentation skills critical for scientific study. 3 hrs. lab. Offered in spring. Prereq or Coreq: CHEM 327 or CHEM 324 or BIOL 324.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM327 or CHEM324 or BIOL324

Complete ANY of the following Courses:
- CHEM327 - Biochemistry 2
- CHEM324 - Plant Biochemistry
- BIOL324 - Plant Biochemistry

CHEM341 - Physical Chemistry 1

Course Information

Course Title
Physical Chemistry 1

Subject code	Course Number	Academic Level
CHEM	341	Undergraduate

Course Description
A thermodynamic study of chemical systems, including ideal and nonideal solutions, chemical and phase equilibria, and electrochemistry. Investigation of the macroscopic behavior of gases and its theoretical explanations. Summary of the determination and application of additive properties. 3 hrs. lec., 3 hrs. lab. Offered in fall. Prereq: CHEM 265 with a grade of C or higher, PHYS 232, MATH 311 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 265

Earn a minimum grade of C in the following:
- CHEM265 - Quantitative Analysis

PHYS 232 and MATH 311 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:
- PHYS232 - Physics 2 with Calculus
- MATH311 - Calculus 3
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

CHEM342 - Physical Chemistry 2

Course Information

Course Title
Physical Chemistry 2

Subject code	Course Number	Academic Level
CHEM	342	Undergraduate

Course Description
Chemical kinetics, statistical mechanics and the development and present state of quantum theory, including chemical bonding theories, atomic and molecular spectroscopy, and methods of structure determination. 3 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: CHEM 341 with a grade of D or higher and ENGL 110, or permission of instructor.

Capstone Stage Label
Yes

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 341

Earn a minimum grade of D in the following:
- CHEM341 - Physical Chemistry 1

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Or must have permission of instructor.

CHEM342H - H: Physical Chemistry 2

Course Information

Course Title
H: Physical Chemistry 2

Subject code	Course Number	Academic Level
CHEM	342H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 341

Earn a minimum grade of D in the following:
- CHEM341 - Physical Chemistry 1

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Or must have permission of instructor.

CHEM372 - History of Chem and Society

Course Information

Course Title
History of Chem and Society

Subject code	Course Number	Academic Level
CHEM	372	Undergraduate

Course Description
The history of the development of the science of chemistry from its roots in Egyptian and Greek societies through its specialization in the early 20th century. The relationships between chemical developments and society are explored, as well as the influences of chemistry on Western thought. 3 hrs. discussion. Offered in fall. Prereq: COMM 100; ENGL 110; junior status; CHEM 102, 104 or 111; two social science courses, including one history course: HIST 101, 102 or 410 preferred.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

CHEM 102 or CHEM 104 or CHEM 111

Complete ANY of the following Courses:
- CHEM102 - Demonstration Chemistry
- CHEM104 - Gen Organic and Biochemistry 2
- CHEM111 - Introductory Chemistry 1

2 Social Science Courses, Including 1 History Course

Must have completed two social science courses, including one history course. HIST 101, 102 or 410 preferred.

CHEM372H - Hnrs:History of Chem and Society

Course Information

Course Title
Hnrs:History of Chem and Society

Subject code	Course Number	Academic Level
CHEM	372H	Undergraduate

Course Description
The history of the development of the science of chemistry from its roots in Egyptian and Greek societies through its specialization in the early twentieth century. The relationships between chemical developments and society are explored, as well as the influences of chemistry on Western thought. 3 hrs. of discussion. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

CHEM 102 or CHEM 104 or CHEM 111

Complete ANY of the following Courses:
- CHEM102 - Demonstration Chemistry
- CHEM104 - Gen Organic and Biochemistry 2
- CHEM111 - Introductory Chemistry 1

2 Social Science Courses, Including 1 History Course

Must have completed two social science courses, including one history course. HIST 101, 102 or 410 preferred.

CHEM375 - Environmental Chemistry

Course Information

Course Title
Environmental Chemistry

Subject code	Course Number	Academic Level
CHEM	375	Undergraduate

Course Description
The application of modern chemical principles to the chemical and physical interactions among the hydrosphere, lithosphere, atmosphere and biosphere. Also discussed are the more recent topics in the areas of pollution, energy and waste control. (The laboratory covers the current, fundamental instrumental methods and techniques encountered in environmental analysis.) 3 hrs. lec., 3 hrs. lab. Offered in fall. Prereq: CHEM 112 with a grade of C- or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 112

Earn a minimum grade of C- in the following:

- CHEM112 - Introductory Chemistry 2

CHEM379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
CHEM	379	Undergraduate

Course Description
Experimental

CHEM381 - Polymer Chemistry 1

Course Information

Course Title
Polymer Chemistry 1

Subject code	Course Number	Academic Level
CHEM	381	Undergraduate

Course Description
An introduction to polymer chemistry. Covered are nomenclature, solutions and solubility, molecular weight determination, morphology, structure determination, polymerization reactions and synthetic methods, physical properties and fabrication methods. The laboratory provides an introduction to the methods of polymer synthesis and characterization. 3 hrs. lec., 3 hrs. lab. Offered in alternate fall semesters. Prereq: C or higher in CHEM 232 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 232

Earn a minimum grade of C in the following:

- CHEM232 - Organic Chemistry 2

Or must have permission of instructor.

CHEM381H - Hon: Polymer Chemistry 1

Course Information

Course Title
Hon: Polymer Chemistry 1

Subject code	Course Number	Academic Level
CHEM	381H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 232

Earn a minimum grade of C in the following:
- CHEM232 - Organic Chemistry 2

Or must have permission of instructor.

CHEM391 - Advanced Laboratory 1

Course Information

Course Title
Advanced Laboratory 1

Subject code	Course Number	Academic Level
CHEM	391	Undergraduate

Course Description
Application of advanced techniques in organic synthesis including chemical and physical methods of separation with major emphasis on advanced spectroscopic methods of characterizing organic compounds. 3 hrs. lab. Offered in fall. Prereq: C or higher in CHEM 265, 232.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 265 and CHEM 232

Earn a minimum grade of C in the following:
- CHEM265 - Quantitative Analysis
- CHEM232 - Organic Chemistry 2

CHEM392 - Advanced Inorganic Laboratory

Course Information

Course Title
Advanced Inorganic Laboratory

Subject code	Course Number	Academic Level
CHEM	392	Undergraduate

Course Description
Advanced techniques in inorganic synthesis and analysis. 3 hrs. lab. Offered in fall. Prereq: CHEM 232, 251, and 265 with a grade of C or higher.

Simple Requirements

Prerequisites

Type
Prerequisite

Earn a minimum Letter Grade of C in the following:
- CHEM232 - Organic Chemistry 2

Earn a minimum Letter Grade of C in the following:
- CHEM251 - Inorganic Chemistry 1

Earn a minimum Letter Grade of C in the following:
- CHEM265 - Quantitative Analysis

CHEM400 - Co-Op Ed Experience in Chem

Course Information

Course Title
Co-Op Ed Experience in Chem

Subject code	Course Number	Academic Level
CHEM	400	Undergraduate

Course Description
Co-Op Ed Experience in Chem

CHEM435 - Advanced Organic Chemistry

Course Information

Course Title
Advanced Organic Chemistry

Subject code	Course Number	Academic Level
CHEM	435	Undergraduate

Course Description
Current theories of organic chemistry, with major emphasis on physical aspects as applied to structure, reactions, spectroscopy and reaction mechanisms. 3 hrs. lec. and reading in current literature. Offered in spring. Prereq: C or higher in CHEM 232.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 232

Earn a minimum grade of C in the following:
- CHEM232 - Organic Chemistry 2

CHEM452 - Inorganic Chemistry

Course Information

Course Title
Inorganic Chemistry

Subject code	Course Number	Academic Level
CHEM	452	Undergraduate

Course Description
Theories of bonding and structure of inorganic elements and compounds, acid-base theories, coordination chemistry, organometallic chemistry, and bioinorganic chemistry. 3 hrs. lec. Offered in fall. Prereq: C or higher in CHEM 251 and 342 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 342

Complete ALL of the following Courses:
- CHEM342 - Physical Chemistry 2

CHEM 251

Earn a minimum grade of C in the following:
- CHEM251 - Inorganic Chemistry 1

Or must have permission of instructor.

CHEM452H - H: Inorganic Chemistry

Course Information

Course Title
H: Inorganic Chemistry

Subject code	Course Number	Academic Level
CHEM	452H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 342

Complete ALL of the following Courses:
- CHEM342 - Physical Chemistry 2

CHEM 251

Earn a minimum grade of C in the following:
- CHEM251 - Inorganic Chemistry 1

Or must have permission of instructor.

CHEM465 - Analytical Chemistry

Course Information

Course Title
Analytical Chemistry

Subject code	Course Number	Academic Level
CHEM	465	Undergraduate

Course Description
Theory and practice of modern analytical techniques in chemical separations and instrumental analysis. 3 hrs. lec., 3 hrs. lab. Offered in spring. Prereq: ENGL 110 and Prereq or Coreq: CHEM 342.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Completed Course Prerequisite or Corequisite

Type
Prerequisite

CHEM 342

Complete ALL of the following Courses:
- CHEM342 - Physical Chemistry 2

CHEM476 - Environmental Chemistry 2

Course Information

Course Title
Environmental Chemistry 2

Subject code	Course Number	Academic Level
CHEM	476	Undergraduate

Course Description
Extension of the principle topics covered in CHEM 375, with emphasis on quantitative aspects of topics such as the ozone layer, potential greenhouse effects, tropospheric chemistry, chemical fate and transport in aquatic systems, phase interactions and chemical equilibrium. Includes computer modeling, government regulations, pesticides and pollutants, hazardous waste and disposal methods. All topics will be studied from chemical, political and socioeconomic perspectives. 3 hrs. lec., 3 hrs. lab. Offered alternate spring semesters. Prereq: CHEM 375.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 375

Complete ALL of the following Courses:
- CHEM375 - Environmental Chemistry

CHEM482 - Polymer Chemistry 2

Course Information

Course Title
Polymer Chemistry 2

Subject code	Course Number	Academic Level
CHEM	482	Undergraduate

Course Description
Topics in polymer physical chemistry, including conformation of polymer molecules, polymer solutions, theory of molecular weight determination methods, rheology, orientation, time-temperature dependence of physical properties, thermodynamics and kinetics of polymerization, rubber elasticity and spectroscopic methods of polymer characterization. 3 hrs. lec. Offered alternate spring semesters. Prereq: CHEM 342 and 381 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 342

Complete ALL of the following Courses:
- CHEM342 - Physical Chemistry 2

CHEM 381

Complete ALL of the following Courses:
- CHEM381 - Polymer Chemistry 1

Or must have permission of instructor.

CHEM486 - Topics in Chemistry

Course Information

Course Title
Topics in Chemistry

Subject code	Course Number	Academic Level
CHEM	486	Undergraduate

Course Description
Detailed investigation of a topic in chemistry of current interest. Topic to be announced each time course is offered. Offered infrequently. Prereq: permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Instructor Permission

Must have permission of instructor.

CHEM487 - Seminar in Chemistry 1

Course Information

Course Title
Seminar in Chemistry 1

Subject code	Course Number	Academic Level
CHEM	487	Undergraduate

Course Description
Topics of current chemical interest. 1 hour. Offered in fall. Prereq: senior standing or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits
Or must have permission of instructor.

CHEM488 - Seminar in Chemistry 2

Course Information

Course Title
Seminar in Chemistry 2

Subject code	Course Number	Academic Level
CHEM	488	Undergraduate

Course Description
Topics of current chemical interest. 1 hour. Offered in spring. Prereq: CHEM 487; Coreq: GRAD 999 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CHEM 487

Complete ALL of the following Courses:
- CHEM487 - Seminar in Chemistry 1

Course Corequisites

Type
Prerequisite

GRAD 999 or Instructor Permission

GRAD 999 or must have permission of instructor.

CHEM489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
CHEM	489	Undergraduate

Course Description
For the definition of honors course and eligibility, refer to the Special Academic Opportunities section of this catalog.

CHEM498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
CHEM	498	Undergraduate

Course Description
A course for qualified students to investigate problems in chemistry. Guidance in the methods of chemical research. A minimum of 3 hours of lab required per semester hour. Prereq: permission of instructor. For further information on independent study, see the Special Academic Opportunities section.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Instructor Permission

Must have permission of instructor.

CHEM499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
CHEM	499	Undergraduate

Course Description
For the definition of honors course and eligibility, refer to the Special Academic Opportunities section of this catalog.

FYEX100C - First Year Experience: Chemistry in Your Life

Course Information

Course Title
First Year Experience: Chemistry in Your Life

Subject code	Course Number	Academic Level
FYEX	100C	Undergraduate

Course Description
Chemistry is all around us including the colors we see, the food we eat, and the materials we use every day. This course will examine the chemistry of the world around us. We will discuss properties of molecules and light and learn what comprises the materials we use in daily life. This course does not have a laboratory component, but some hands-on activities will be incorporated. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

Communication and Theatre Department

The Department of Communication and Theatre offers a Bachelor of Science in communication, a Bachelor of Arts in entertainment technology and theatre, and a Bachelor of Science in media arts production along with minors in journalism, media arts production, strategic public relations and theatre.

FACULTY LIST
Boyer, Adam; Assistant Professor College of Arts, Humanities and Social Sciences B.A., Indiana University of Pennsylvania, 2006; M.F.A., University of Iowa, 2009
Boyle, Thomas; Professor College of Arts, Humanities and Social Sciences A.A., Harrisburg Area Community College, 1985; B.H., The Pennsylvania State University, 1987; M.A., Ibid., 1989; Ph.D., Ibid., 1998
Chang, Changfu; Professor College of Arts, Humanities and Social Sciences B.A., Yancheng Teachers College (China), 1984; M.A., Jiangxi University (China), 1991; Ph.D., Purdue University, 2000
Hughes, Jessica; Associate Professor College of Arts, Humanities and Social Sciences B.A., Boston University, 2000; M.A., Lancaster University (United Kingdom), 2004; Ph.D., University of Colorado, 2015
Irwin, Stacey; Department Chairperson, Professor College of Arts, Humanities and Social Sciences B.A., Salem College, 1987; M.A., Emerson College, 1993; Ph.D., University of Maryland, 2002
Machado, James; Associate Professor College of Arts, Humanities and Social Sciences B.A., The College of New Jersey, 1998; M.F.A., City College of New York, 2004
Seigworth, Gregory; Professor College of Arts, Humanities and Social Sciences B.S., Clarion University, 1982; M.A., Ohio University, 1987; Ph.D., University of Illinois, 1998
Spicer, Robert; Associate Professor College of Arts, Humanities and Social Sciences B.S., Millersville University, 2000; M.A., Temple University, 2003; Ph.D., Rutgers University, 2014
Strayer, Jonathan; Associate Professor College of Arts, Humanities and Social Sciences B.S., Clarks Summit University, 2003; M.A., Bowling Green State University, 2004; M.Ed., Clarks Summit University, 2013; M.F.A., University of Idaho, 2019
Wood, Jennifer; Associate Professor College of Arts, Humanities and Social Sciences B.A., Rockhurst College, 1988; M.A., Webster University, 1991; Ph.D., Bowling Green State University, 1999
Woodall, Lowery; Professor College of Arts, Humanities and Social Sciences B.F.A., Houston State University, 2004; M.S., University of Southern Mississippi, 2007; Ph.D., Ibid., 2010
Yang, Ping; Associate Professor College of Arts, Humanities and Social Sciences B.A., Xi'an International Studies University (China), 1995; M.A., Ibid., 2001;l M.A., Bowling Green State University, 2004; Ph.D., Arizona State University, 2009

Programs

Journalism Minor

Overview

The journalism minor at Millersville introduces students to the craft of creating content for news media. The program focuses on strengthening students' writing and presentation skills, teaching journalism through the lens of social responsibility, and installing the importance of the ethics of verification and professionalism. The curriculum is designed to open up potential career options in the field of journalism and news media while completing a different degree program. The journalism minor pairs especially well with degree programs in media arts production, sociology and government and political affairs.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Journalism (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations in Journalism (12 credits)

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- JOUR250 - Journalism & Society
- JOUR313 - Fundamentals of Journalism
- JOUR328 - Ethics in Digital Media Journalism

AND

Advanced Reporting in a Diverse World or Investigative and Computer Assisted Reporting (3 credits)

Complete at least 1 of the following courses:

- JOUR315 - Advanced Reporting in a Diverse World
- JOUR430 - Investigative and Computer Assisted Reporting

AND

Electives (6 credits)

Complete at least 2 of the following courses:

- ART376 - Intro to Photo: Digital
- COMM121 - Intro to Media Arts Production
- COMM251 - Public Relations I: Intro to Principles & Theory
- COMM320 - Radio Production
  OR COMM320H - H:Radio Production
- COMM321 - Television Production
  OR COMM321H - Hnrs: Television Production
- COMM322 - Media Aesthetics & Criticism
- COMM323 - Producing for Digital Media
- COMM326 - Media Writing: News
- COMM330 - Media and Women's Culture
- COMM333 - Gender and Communication
- COMM337 - Documentary Film I: Concepts
- COMM351 - Public Relations II: Public Relations Writing
- COMM380 - Digital Media Writing
- COMM390 - Social Media Campaigns
- COMM300 - Co-Op Ed Experience in Comm
- COMM400 - Co-Op Ed Experience in Comm

OR COMM400H - Co-Op Ed Experience in Comm
- COMM421 - Advanced Television Production
  OR COMM421H - Hnrs: Advanced Television Production
- COMM425 - Broadcast News Reporting
- COMM429 - Topics in Communication
  OR COMM429H - Hon: Topics in Communication
- COMM437 - Documentary Filmmaking II
- COMM440 - Leadership and Media
- COMM441 - Political Communication
- WRIT318 - Web Writing
  OR WRIT318H - Hon: Web Writing
- WRIT340 - Rhetorical Analysis
- ENGL435 - Journlsm Thru Women's Prspctvs
- ENTR370 - Media Entrepreneurship
- JOUR315 - Advanced Reporting in a Diverse World
- JOUR327 - Feature Writing and Magazine Journalism
- JOUR430 - Investigative and Computer Assisted Reporting

Media Arts Production Minor

Overview

The minor in Media Arts Production helps students learn to create original content across genres to inform, entertain, persuade and enlighten audiences by learning creative, management and production processes and hands-on experiences to build your portfolio of digital content. The curriculum is designed to help students practice and reinforce industry specific skills and standards in a professional media workflow while juggling projects, meeting tight deadlines, and collaborating with production teams.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Media Arts Production (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- COMM121 - Intro to Media Arts Production
- COMM220 - Survey of Media
- COMM320 - Radio Production

OR COMM320H - H:Radio Production
- COMM321 - Television Production
  OR COMM321H - Hnrs: Television Production

AND

Required Writing Course (3 credits)

Complete at least 1 of the following courses:
- COMM326 - Media Writing: News
- COMM327 - Media Writing: Fiction

AND

Advanced Elective (3 credits)

Earn at least 3 credits from the following:
- ESSC348 - Broadcast Meteorology
- COMM323 - Producing for Digital Media
- COMM421 - Advanced Television Production
  OR COMM421H - Hnrs: Advanced Television Production
- COMM422 - Adv Radio Prod: Podcasting
- COMM425 - Broadcast News Reporting
- COMM437 - Documentary Filmmaking II

Media Studies Minor

Overview

The aim of the Media Studies minor is to complement and enhance students existing major programs in their understanding of the foundational, conceptual and theoretical study of media, through analyzing and critiquing media messages, emerging technological trends, and law and ethics. This curriculum can help students better examine the contemporary media landscape of our increasingly diverse world, increase digital, informational and media literacy, and complement their major curricula. The minor is especially designed for programs where students may have a related interest in this complimentary area of study, like anthropology, business, criminology, English, government, public relations, and sociology. This Media Studies minor does not overlap our other program's minor in Media Arts Production because the Media Studies minor has no production courses in the curriculum, and no aim for content creation as part of the program.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Media Studies (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Survey of Media or Press & Society (3 credits)

Complete at least 1 of the following courses:

- COMM220 - Survey of Media
- JOUR250 - Journalism & Society

AND

COMM and Media Law or Journalism Ethics (3 credits)

Complete at least 1 of the following courses:

- COMM206 - Communication and Media Law
- JOUR328 - Ethics in Digital Media Journalism

AND

Electives for Media Studies (12 credits)

Earn at least 12 credits from the following:

- COMM203 - Small Group Communication
- COMM206 - Communication and Media Law
- COMM322 - Media Aesthetics & Criticism
- COMM326 - Media Writing: News
- COMM327 - Media Writing: Fiction
- COMM330 - Media and Women's Culture
- COMM337 - Documentary Film I: Concepts
- COMM401 - Critical-Cultural Studies in Communication
  OR COMM401H - Hnrs: Critical-Cultural Studies in Communication
- COMM403 - Persuasion & Social Media Infl
- COMM441 - Political Communication
- COMM480 - Topics in Media:
- JOUR328 - Ethics in Digital Media Journalism

Strategic Public Relations Minor

Overview

Millersville University's Strategic Public Relations minor balances study of the discipline in classroom and applied settings. The foundation of effective strategic communication and public relations consists of communication and public relations theory, social science research, media studies, digital communication, cultural studies and more.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Strategic Public Relations

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Intro to Communication or Communication Theory (3 credits)

Earn a minimum grade of C- in the following:

- COMM101 - Introduction to Communication
  OR COMM201 - Theory of Communication

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- COMM251 - Public Relations I: Intro to Principles & Theory
- COMM351 - Public Relations II: Public Relations Writing

AND

Electives (9 credits)

Fulfill ALL of the following requirements:

Group A Electives (3 credits)

Earn at least 3 credits from the following:

- COMM224 - Organizational Communication 1
- COMM225 - Nonprofit Sector Communication
- COMM335 - Comm & Emerging Technologies
- COMM461 - Health Communication

AND

Group B Electives (3 credits)

Earn at least 3 credits from the following:

- WRIT343 - Rhetorics of Marginalized Communities
- COMM371 - Crisis Emergency & Risk Comm
- COMM380 - Digital Media Writing
- COMM390 - Social Media Campaigns
- COMM403 - Persuasion & Social Media Infl
- COMM441 - Political Communication

AND

Open Elective (3 credits)

Earn at least 3 credits from the following:

- COMM224 - Organizational Communication 1
- COMM225 - Nonprofit Sector Communication
- COMM335 - Comm & Emerging Technologies
- COMM461 - Health Communication
- WRIT343 - Rhetorics of Marginalized Communities
- COMM371 - Crisis Emergency & Risk Comm
  OR COMM371H - Hon: Crisis Emergency & Risk Comm
- COMM380 - Digital Media Writing
- COMM390 - Social Media Campaigns
- COMM403 - Persuasion & Social Media Infl
- COMM441 - Political Communication

9 credits of elective are required, minimum of 6 credits at the 300/400 level, 3 credits from Group A and 3 credits from Group B.

Theatre Minor

Overview

The minor in Theatre combines traditional academic coursework in the classroom with practical experience through participation in productions on campus. Students receive academic preparation and training in theatre fundamentals, such as performance and production work including acting, directing, scenic design, costume, makeup, lighting and sound.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Theatre

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Stagecraft or Acting I (3 credits)

Complete at least 1 of the following courses:

- THEA120 - Stagecraft
- THEA130 - Acting 1

AND

Theatre Appreciation or Script Analysis (3 credits)

Complete at least 1 of the following courses:

- THEA217 - Theatre Appreciation
- THEA240 - Script Analysis

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- THEA340 - History of Theatre 1
- THEA341 - History of Theatre 2

AND

Theatre Elective (3 credits)

Complete at least 1 of the following courses:

- THEA120 - Stagecraft
- THEA130 - Acting 1
- THEA230 - Acting 2

AND

Additional Theatre Elective (3 credits)

Complete at least 1 of the following courses:

- THEA312 - Hist/Princpls of Stage Design
- THEA315 - Directing
- THEA317 - London Theatre Tour
- THEA350 - Theatre Management
- THEA412 - Topics in Theatre

Entertainment Technology & Theatre, B.A. - Entertainment Technology

Overview

The Entertainment Technology concentration, as part of the B.A. in Entertainment Technology and Theatre degree at Millersville University, offers a specialized curriculum designed to prepare students for the technical and innovative challenges of the live entertainment industry. This concentration emphasizes the intersection of technology and creativity, equipping students with a comprehensive understanding of the tools and methodologies used in contemporary entertainment production. Students will gain expertise in essential areas such as Vector Works, audio and lighting design, and the application of industry-standard safety protocols, ensuring a well-rounded foundation in both the technical aspects and creative applications of entertainment technology.

By sharing core degree requirements with the Theatre concentration, the Entertainment Technology program encourages a collaborative learning environment that bridges the gap between technical proficiency and artistic expression. This synergy enables students to explore a wide range of skills and principles, from the technical intricacies of stage and event production to the creative challenges of integrating technology with live performance. The concentration is designed to produce graduates who are not only adept at navigating the technological landscape of entertainment but also capable of contributing to its evolution through innovative design and problem-solving. This approach ensures that Millersville University students are well-prepared to enter a competitive and rapidly evolving industry, armed with the versatile skill set necessary to succeed in a variety of entertainment technology roles.

Curriculum

Simple Requirements

B.A. Entertainment Technology and Theatre

Type
Completion Requirement

Core Requirements (9 credits)

Complete ALL of the following Courses:

- THEA120 - Stagecraft
- ENTC208 - Production Practicum
- ENTC300 - Co-op Ed Experience in ENTC
  OR ENTC300H - Hon: Co-op Ed Experience in ENTC

ENTC and THEA 208 are repeatable @ 1, 2, or 3 credits; a total of 3 credits is required.

ENTC Requirements (15 credits)

Complete ALL of the following Courses:

- ENTC220 - Theatrical Lighting & Sound
- ENTC222 - Vectorworks
- THEA312 - Hist/Princpls of Stage Design
- ENTC313 - Adv Prod for Live Entertainmnt
- ENTC498 - Independent Study

Advanced Requirements - Electives (15 credits)

Earn at least 15 credits from the following:

- ENTC208 - Production Practicum
- ENTC320 - Scenic Painting
- ENTC400 - Co-op Ed Experience in ENTC
- ENTC495 - Topics in ENTC
- THEA208 - Theatre Practicum
- THEA217 - Theatre Appreciation
- THEA310 - Costume for Stage & Media
- THEA350 - Theatre Management
- THEA412 - Topics in Theatre
- THEA412 - Topics in Theatre
- COMM121 - Intro to Media Arts Production
- COMM320 - Radio Production
  OR COMM320H - H:Radio Production
- COMM321 - Television Production
  OR COMM321H - Hnrs: Television Production
- COMM323 - Producing for Digital Media
- COMM421 - Advanced Television Production
  OR COMM421H - Hnrs: Advanced Television Production
- COMM440 - Leadership and Media
- COMM422 - Adv Radio Prod: Podcasting
- AENG110 - Communication and Information Systems
- AENG241 - Drafting Communications
- AENG243 - Technical Sketching, Design & Rendering
- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems
- AENG351 - Digital Imaging
- ITAN120 - Integrated Information Technology Application Projects
- ITAN130 - Fundamentals of Information

Technology
- ITAN230 - Network Concepts, Security and Administration
- ITAN360 - IT Risk Management and Security

Entertainment Technology and Theatre, B.A. - Theatre Concentration

Overview

The Theatre concentration within the B.A. in Entertainment Technology and Theatre degree at Millersville University is an immersive program designed to provide students with a deep understanding of the theatrical arts while embracing the evolving dynamics of the entertainment industry. This concentration delves into the core elements of theatre, including stagecraft, acting, directing, script analysis, theatre history, and the innovative integration of technology into performance spaces. It is structured to foster a rich, interdisciplinary learning environment where students can explore the artistic and performative aspects of theatre alongside the technical advancements that are shaping modern live entertainment.

By sharing core degree requirements with the Entertainment Technology concentration, the Theatre concentration promotes a collaborative educational experience, encouraging students to engage with both the artistic and technical dimensions of live productions. This approach ensures that graduates are not only proficient in traditional theatre arts but also have the opportunity to be equipped with the skills necessary to navigate and contribute to the technical landscape of live entertainment. The concentration aims to cultivate versatile professionals who possess a strong artistic vision and the innovative problem-solving skills required in today's dynamic entertainment industry. Through a curriculum that emphasizes cross-disciplinary collaboration and hands-on learning opportunities, students are prepared to meet the challenges and opportunities of a rapidly changing field, positioning them for success in a variety of roles within the entertainment sector.

Curriculum

Simple Requirements

B.A. Entertainment Technology and Theatre

Type
Completion Requirement

Core Requirements (9 credits)

Complete ALL of the following Courses:
- THEA120 - Stagecraft
- THEA208 - Theatre Practicum
- THEA300 - Co-Op Ed Experience in Thea

THEA 208 is repeatable @ 1, 2, or 3 credits; a total of 3 credits is required.

THEA Requirements (18 credits)

Complete ALL of the following Courses:

- THEA130 - Acting 1
- THEA217 - Theatre Appreciation
- THEA240 - Script Analysis
- THEA340 - History of Theatre 1
- THEA341 - History of Theatre 2
- THEA412 - Topics in Theatre

THEA Requirements (15 credits)

Earn at least 15 credits from the following:

- THEA208 - Theatre Practicum
- THEA230 - Acting 2
- THEA310 - Costume for Stage & Media
- THEA312 - Hist/Princpls of Stage Design
- THEA315 - Directing
- THEA317 - London Theatre Tour
- THEA350 - Theatre Management
- THEA412 - Topics in Theatre
- THEA498 - Independent Study
- ENTC208 - Production Practicum
- ENTC220 - Theatrical Lighting & Sound
- ENTC320 - Scenic Painting
- ENTC495 - Topics in ENTC

Note: ENTC 495 can be used if taken with one of the following topics:

- Production and Stage Management
- Portfolios and Careers

Media Arts Production, B.S.

Overview

The B.S. in Media Arts Production focuses on creation of original content across genres to inform, entertain, persuade and enlighten audiences. Students learn industry specific skills and standards, managing projects, meeting tight deadlines, and collaborating in production teams. Persons considering the B.S. in Media Arts Production should consult with the department about requirements, as these programs undergo periodic revision.

Curriculum

Simple Requirements

Major in Media Arts Production (45 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Requirements (9 credits)

Earn a minimum grade of C- in the following:

- COMM101 - Introduction to Communication
- COMM201 - Theory of Communication
- COMM301 - Communication Research
  OR COMM301H - H:Communication Research

AND

Production Core

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- COMM121 - Intro to Media Arts Production
- COMM221 - Video Editing: Theory and Practice
- COMM320 - Radio Production
  OR COMM320H - H:Radio Production
- COMM321 - Television Production
  OR COMM321H - Hnrs: Television Production

AND

Survey of Mass Media (3 credits)

Complete ALL of the following Courses:

- COMM220 - Survey of Media

AND

Media Writing: News or Media Writing: Fiction (3 credits)

Complete at least 1 of the following courses:

- COMM326 - Media Writing: News
- COMM327 - Media Writing: Fiction

AND

Advanced Production Core (9 credits)

Earn at least 9 credits from the following:

- COMM421 - Advanced Television Production
  OR COMM421H - Hnrs: Advanced Television Production
- COMM422 - Adv Radio Prod: Podcasting
- COMM437 - Documentary Filmmaking II
- COMM323 - Producing for Digital Media
- COMM425 - Broadcast News Reporting

AND

Electives Group A (6-9 credits)

Earn at least 6 credits from the following:

- COMM300 - Co-Op Ed Experience in Comm
- COMM400 - Co-Op Ed Experience in Comm
  OR COMM400H - Co-Op Ed Experience in Comm
- COMM206 - Communication and Media Law
- COMM230 - International Broadcasting
- COMM322 - Media Aesthetics & Criticism
- COMM327 - Media Writing: Fiction
- COMM330 - Media and Women's Culture
- COMM335 - Comm & Emerging Technologies
- COMM337 - Documentary Film I: Concepts
- COMM380 - Digital Media Writing
- COMM390 - Social Media Campaigns
- COMM401 - Critical-Cultural Studies in Communication
  OR COMM401H - Hnrs: Critical-Cultural Studies in Communication
- COMM440 - Leadership and Media
- COMM480 - Topics in Media:

AND

Electives Group B (0-3 credits)

9 credits of elective are required to meet the minimum of 45 credits in the major. You may take all electives from group A or 6 credits from group A and 3 credits from Group B. Additional electives taken that are not required but would qualify for the major will count in Group B electives per the major GPA policy of the University.

Req Related for Media Arts Production (9 credits)

Type
Completion Requirement

Requirements

Complete at least 3 of the following:

Course Options

Complete ANY of the following Course Sets:

- Any ART course(s)
- Any DESN course(s)
- Any AENG course(s)

OR

Additional Course Options

Complete ANY of the following Courses:

- ANTH227 - Culture Through Film
- ECON305 - Economics in Film
- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL347 - Ethnicity in Film
- ENGL481 - History Of Film

- ENGL482 - Film and American Society
- ENGL483 - Politics, Film & Electronic Media
  OR ENGL483H - H:Politics, Film & Electronic Media
- PHIL327 - Philosophy in Film

Must total 9 credits minimum

Communication, B.S. - Digital Communication and Cultural Studies Concentration

Overview

Students who pursue the Digital Communication and Cultural Studies concentration will increase their understanding of communication theory and practice, the communicative processes that form meaning, and communication's involvement in sustaining society. Communication plays a pivotal role in every aspect of personal, social, and work life. Students will receive practical and theoretical preparation necessary for achieving their potential. Critical and analytical studies focus on the circulation of meaning, distributions of power, and everyday ethical practices. Courses include interpersonal and small group communication, organizational communication, persuasion and public advocacy, race and gender studies, and theory integrated with research.

Curriculum

Simple Requirements

Major in Communication (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Communication Courses (12 credits)

Earn a minimum grade of C- in the following:

- COMM101 - Introduction to Communication
- COMM201 - Theory of Communication
- COMM301 - Communication Research
- COMM401 - Critical-Cultural Studies in Communication

AND

Option in Digital Communication and Cultural Studies

See separate block

Option in Digital Communication & Cultural Studies

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Communication Courses (12-15 credits)

Complete at least 5 of the following courses:

- COMM203 - Small Group Communication
- COMM217 - Interpersonal Communication
- COMM227 - Movements & Digital Activism
- COMM317 - Intercultural Communication **OR** COMM317H - Hon: Intercultural Communication
- COMM335 - Comm & Emerging Technologies
- COMM380 - Digital Media Writing
- COMM403 - Persuasion & Social Media Infl
- COMM429 - Topics in Communication **OR** COMM429H - Hon: Topics in Communication
- COMM431 - The Body in Communication **OR** COMM431H - HNRS:The Body in Communication
- COMM441 - Political Communication

To meet the requirement for REQUIRED COMMUNICATION COURSES, classes must include at least 1 of: COMM317 Intercultural Communication, COMM335 Comm & Emerging Technologies, or COMM380 Digital Media Writing. In addition, classes must include at least 1 of: COMM403 Persuasion & Social Media Infl, COMM429 Topics in Communication, COMM431 The Body in Communication, or COMM441 Political Communication.

AND

Additional Requirements - No Declared Minor

Fulfill ALL of the following requirements:

4 Courses from those listed, minimum 1 at 300 level and 1 at 400 level

Complete at least 4 of the following courses:

- COMM203 - Small Group Communication
- COMM217 - Interpersonal Communication
- COMM224 - Organizational Communication 1
- COMM225 - Nonprofit Sector Communication
- COMM227 - Movements & Digital Activism
- COMM251 - Public Relations I: Intro to Principles & Theory
- COMM300 - Co-Op Ed Experience in Comm
- COMM305 - Business and Professional Communication
- COMM317 - Intercultural Communication **OR** COMM317H - Hon: Intercultural Communication
- COMM322 - Media Aesthetics & Criticism
- COMM330 - Media and Women's Culture
- COMM333 - Gender and Communication
- WRIT343 - Rhetorics of Marginalized Communities
- COMM351 - Public Relations II: Public Relations Writing
- COMM371 - Crisis Emergency & Risk Comm **OR** COMM371H - Hon: Crisis Emergency & Risk Comm
- COMM380 - Digital Media Writing
- COMM403 - Persuasion & Social Media Infl
- COMM431 - The Body in Communication **OR** COMM431H - HNRS:The Body in Communication
- COMM440 - Leadership and Media
- COMM441 - Political Communication
- COMM450 - Communication and Conflict **OR** COMM450H - Hnrs: Communication and Conflict
- COMM461 - Health Communication

4 Courses from those listed, minimum 1 at 300 level and 1 at 400 level (7-12 credits)

To meet the requirement for 4 Courses from those listed, minimum 1 at 300 level and 1 at 400 level, classes must include at least 1 of: COMM300

Co-Op Ed Experience in Comm, COMM305 Business Profess Communictn, COMM317 Intercultural Communication, COMM322 Media Aesthetics & Criticism, COMM330 Media and Women's Culture, COMM333 Gender and Communication, WRIT343 Rhet of Marg Communities, COMM351 Public Relations II: PR Writng, COMM371 Crisis Emergency & Risk Comm, or COMM380 Digital Media Writing. In addition, classes must include at least 1 of: COMM403 Persuasion & Social Media Infl, COMM431 The Body in Communication, COMM440 Leadership and Media, COMM441 Political Communication, COMM450 Communication and Conflict, or COMM461 Health Communication

AND

Additional electives from COMM

Complete at least 2 courses in the following course sets:

- Any COMM course(s)

AND

2 Courses in Digital Communication and Culture

Complete at least 2 courses in the following course sets:

- Any ENGL course(s)
- Any WRIT course(s)
- Any JOUR course(s)
- Any ART course(s)
- Any DESN course(s)
- Any AENG course(s)

Completing a minor or a second major will reduce the additional requirements for the Digital Communication and Culture concentration. Please discuss with your advisor.

Communication, B.S. - Journalism Concentration

Overview

The journalism concentration in the Department of Communication & Theatre has a five-point curricular approach. Students will master the craft of journalistic writing across all media platforms. Along with this skillset, they should be able to articulate the responsibilities journalism has to society at the local, state, national, and international levels. An essential part of that education is in ethics. All courses have elements to help students recognize the ethical challenges journalists face and articulate a range of solutions to those challenges. Student journalists are taught to employ thorough research methods, a basic understanding of statistical concepts, and the verification of facts, for accurate reporting. Finally, the concentration helps students gain professional experience through service in internships and student media.

Curriculum

Simple Requirements

Major in Communication (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Communication Courses (12 credits)

Earn a minimum grade of C- in the following:

- COMM101 - Introduction to Communication
- COMM201 - Theory of Communication
- COMM301 - Communication Research
- COMM401 - Critical-Cultural Studies in Communication

AND

Option in Journalism

See separate block

Option in Journalism (34 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations in Journalism (12 credits)

Complete ALL of the following Courses:

- JOUR250 - Journalism & Society
- JOUR313 - Fundamentals of Journalism
- JOUR315 - Advanced Reporting in a Diverse World
- JOUR430 - Investigative and Computer Assisted Reporting

AND

Professional Emphasis (10 credits)

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- COMM121 - Intro to Media Arts Production

AND

Editing, Desktop Publishing or Digital Media (3 credits)

Complete at least 1 of the following courses:

- WRIT317 - Editing for Publication
- AENG356 - Digital Publishing
- COMM380 - Digital Media Writing

AND

Ethics or Communication and Media Law (3 credits)

Complete at least 1 of the following courses:

- JOUR328 - Ethics in Digital Media Journalism
- COMM206 - Communication and Media Law

AND

Internship or Independent Study (1 credit)

Complete at least 1 of the following courses:

- COMM300 - Co-Op Ed Experience in Comm
- COMM498 - Independent Study

AND

Electives for Journalism (12 credits)

Earn at least 12 credits from the following:

- COMM251 - Public Relations I: Intro to Principles & Theory
- COMM320 - Radio Production
  OR COMM320H - H:Radio Production
- COMM321 - Television Production
  OR COMM321H - Hnrs: Television Production
- COMM322 - Media Aesthetics & Criticism
- COMM323 - Producing for Digital Media
- COMM326 - Media Writing: News
- COMM330 - Media and Women's Culture
- COMM333 - Gender and Communication
- COMM337 - Documentary Film I: Concepts
- COMM351 - Public Relations II: Public Relations Writing
- COMM380 - Digital Media Writing
- COMM390 - Social Media Campaigns
- COMM300 - Co-Op Ed Experience in Comm
- COMM400 - Co-Op Ed Experience in Comm
  OR COMM400H - Co-Op Ed Experience in Comm
- COMM421 - Advanced Television Production
  OR COMM421H - Hnrs: Advanced Television Production
- COMM425 - Broadcast News Reporting
- COMM429 - Topics in Communication
  OR COMM429H - Hon: Topics in Communication
- COMM437 - Documentary Filmmaking II
- COMM440 - Leadership and Media
- COMM441 - Political Communication
- WRIT318 - Web Writing
  OR WRIT318H - Hon: Web Writing
- WRIT340 - Rhetorical Analysis
- ENTR370 - Media Entrepreneurship

- JOUR327 - Feature Writing and Magazine Journalism

Communication, B.S. - Public Relations Concentration

Overview

The departmental major in communication is grounded in the liberal arts and allows students to concentrate in one of three options: digital communication studies, public relations, or journalism. Students take a common core of required courses in the major and in specific options, with electives chosen in consultation with an advisor.

The Public Relations concentration provides students with both a social science and humanistic approaches to this field. The relationship of organizations to their various publics is studied scientifically and as an art, with emphasis on writing and critical thinking as the basis for communicating. Students will study both the theory and practice of this major, while also having opportunities outside of the classroom to build their skills. Millersville's curriculum follows Public Relations Society of America (PRSA) guidelines, engages students in social media and prepares them to anticipate crisis communication situations.

Upon acceptance into the communication program, the following academic requirements must be maintained in order to graduate: a C or higher is required in each core course before taking the next higher core course; student progress in the major is reviewed no later than the semester following completion of 60 hours. Students in the major must attain a 2.5 GPA in the major in order to be retained in the major.

Curriculum

Simple Requirements

Major in Communication (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Communication Courses (12 credits)

Earn a minimum grade of C- in the following:

- COMM101 - Introduction to Communication
- COMM201 - Theory of Communication
- COMM301 - Communication Research

- COMM401 - Critical-Cultural Studies in Communication

AND

Option in Public Relations

See separate block

Option in Public Relations (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Public Relations Courses (12 credits)

Complete ALL of the following Courses:

- COMM251 - Public Relations I: Intro to Principles & Theory
- COMM351 - Public Relations II: Public Relations Writing
- COMM451 - Public Relations Issues
  OR COMM451H - H:Public Relations Issues
- COMM452 - Public Relations Campaigns

AND

Media Foundation Courses

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- COMM121 - Intro to Media Arts Production
- COMM206 - Communication and Media Law
- JOUR313 - Fundamentals of Journalism

AND

Survey of Mass Media (3 credits)

Complete ALL of the following Courses:

- COMM220 - Survey of Media

AND

Electives A: Professional Communication (3 credits)

Earn at least 3 credits from the following:

- COMM224 - Organizational Communication 1
- COMM225 - Nonprofit Sector Communication
- COMM305 - Business and Professional Communication
- COMM300 - Co-Op Ed Experience in Comm
- COMM400 - Co-Op Ed Experience in Comm
  OR COMM400H - Co-Op Ed Experience in Comm

AND

Electives B: Persuasive Messaging (3 credits)

Earn at least 3 credits from the following:

- COMM371 - Crisis Emergency & Risk Comm
  OR COMM371H - Hon: Crisis Emergency & Risk Comm
- COMM403 - Persuasion & Social Media Infl
- COMM441 - Political Communication
- COMM429 - Topics in Communication
  OR COMM429H - Hon: Topics in Communication
- COMM461 - Health Communication
- WRIT343 - Rhetorics of Marginalized Communities

AND

Electives C: Digital Messaging (6 credits)

Earn at least 6 credits from the following:

- COMM380 - Digital Media Writing
- COMM390 - Social Media Campaigns
- JOUR327 - Feature Writing and Magazine Journalism
- WRIT317 - Editing for Publication
- AENG356 - Digital Publishing

Students in the PR concentration are recommended

to take BUSN 101 or ENTR201 The Art of Entrepreneurship for G3 and WRIT316 Business Writing or WRIT318 Web Writing for Advanced Writing (AW) in General Education.

Courses

COMM100 - Fundamentals of Speech

Course Information

Course Title
Fundamentals of Speech

Subject code	Course Number	Academic Level
COMM	100	Undergraduate

Course Description
Required fundamentals course in general education. An introductory study of the principles of public speaking with particular emphasis upon the selection and organization of information for persuasive purposes. Satisfies competency requirement.

Cornerstone Stage Labels
Oral Communication (OC)

COMM100H - Hnrs:Fundamentals of Speech

Course Information

Course Title
Hnrs:Fundamentals of Speech

Subject code	Course Number	Academic Level
COMM	100H	Undergraduate

Course Description
Required fundamentals course in general education. An introductory study of the principles of public speaking with particular emphasis upon the selection and organization of information for persuasive purposes. Satisfies competency requirement. Offered in fall, spring

Cornerstone Stage Labels
Oral Communication (OC)

COMM101 - Introduction to Communication

Course Information

Course Title
Introduction to Communication

Subject code	Course Number	Academic Level
COMM	101	Undergraduate

Course Description
Focuses on the role of communication in everyday life. Emphasis on how communication shapes the construction of meaning, the maintenance of community and relationships, and various means of interconnection. Offered in fall, spring.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

COMM121 - Intro to Media Arts Production

Course Information

Course Title
Intro to Media Arts Production

Subject code	Course Number	Academic Level
COMM	121	Undergraduate

Course Description
Audio and video production fundamentals, techniques and uses. Includes study of the production process and hands-on production assignments in both audio and video. Laboratory work required.

COMM179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
COMM	179	Undergraduate

Course Description
Experimental

COMM201 - Theory of Communication

Course Information

Course Title
Theory of Communication

Subject code	Course Number	Academic Level
COMM	201	Undergraduate

Course Description
Focuses on the different approaches to the study of communication as a discipline. Emphasis on both historical and current scholarship in the field through diverse means of inquiry. Prereq: C- or better in COMM 100 and COMM 101

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 100 or COMM 100H and COMM 101

Earn a minimum grade of C- in the following:

- COMM100 - Fundamentals of Speech **OR** COMM100H - Hnrs:Fundamentals of Speech
- COMM101 - Introduction to Communication

COMM203 - Small Group Communication

Course Information

Course Title
Small Group Communication

Subject code	Course Number	Academic Level
COMM	203	Undergraduate

Course Description
Emphasis on the theory and practice of small group communication and problem solving. Group formation, teamwork, leadership, decision making in groups, group conflict, digital collaboration, and other concepts will be explored. A collaborative group service learning project and course activities will reinforce course concepts. Offered periodically. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

COMM206 - Communication and Media Law

Course Information

Course Title
Communication and Media Law

Subject code	Course Number	Academic Level
COMM	206	Undergraduate

Course Description
The legal parameters of freedom of expression under the U.S. legal system. Students explore legal and ethical issues related to media systems, organizational communication, public relations and theatre.

COMM217 - Interpersonal Communication

Course Information

Course Title
Interpersonal Communication

Subject code	Course Number	Academic Level
COMM	217	Undergraduate

Course Description
Combines theory and experiential application of interpersonal communication in face-to-face and digital contexts. Provide students with a means to analyze interpersonal relationships and skills to integrate more effective communication strategies in their lives both online and offline. Offered periodically. Prereq: COMM 100.

Gateway Stage Labels
Personal Wellness (PWEL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 100 or COMM 100H

Complete ANY of the following Courses:
- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech

COMM220 - Survey of Media

Course Information

Course Title
Survey of Media

Subject code	Course Number	Academic Level
COMM	220	Undergraduate

Course Description
A review of media in America and discussion of the historical, social, cultural, and technological forces that shape them and an evaluation of media criticisms.

Gateway Stage Labels
Information Literacies (IL)

COMM221 - Video Editing: Theory and Practice

Course Information

Course Title
Video Editing: Theory and Practice

Subject code	Course Number	Academic Level
COMM	221	Undergraduate

Course Description
Audio and video editing fundamentals, techniques and uses. Includes study of postproduction workflows and narrative structure. Students demonstrate their understanding through hands-on assignments across various genres. Laboratory work required.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete ALL of the following Courses:
- COMM121 - Intro to Media Arts Production

COMM224 - Organizational Communication 1

Course Information

Course Title
Organizational Communication 1

Subject code	Course Number	Academic Level
COMM	224	Undergraduate

Course Description
A survey of the major theoretical approaches to the field and applications to specific organizational issues. Explores the scope and history of organizational communication. Offered in fall. Prereq: COMM 201.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 201

Complete ALL of the following Courses:
- COMM201 - Theory of Communication

COMM225 - Nonprofit Sector Communication

Course Information

Course Title
Nonprofit Sector Communication

Subject code	Course Number	Academic Level
COMM	225	Undergraduate

Course Description
Explores the design, management and functioning of nonprofit/civil society organizations, with an emphasis on communication theories and processes. Highlights practices unique to these organizations, with an emphasis on enabling students to establish, run and support them. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

COMM227 - Movements & Digital Activism

Course Information

Course Title
Movements & Digital Activism

Subject code	Course Number	Academic Level
COMM	227	Undergraduate

Course Description
Focuses on the role of digital communication in understanding how commitment and participation, otherness and identity, conflict and cohesiveness intersect in social movement activism. This course surveys the major social movements of the 20th and 21st Century with special attention to their use of communication technologies. Students will research and/or participate in specific social movement organizations of their choosing.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

COMM230 - International Broadcasting

Course Information

Course Title
International Broadcasting

Subject code	Course Number	Academic Level
COMM	230	Undergraduate

Course Description
Devoted to the cross-cultural study of the World Broadcasting Systems as an introduction to international electronic media. The course compares the ways in which the media are organized in other countries with that of the United States of America. Offered periodically. Prereq: ENGL 110; COMM majors; INTL majors, minors; or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Degree/Major/Field of Study Restrictions

Type
Prerequisite

COMM Majors, INTL Majors and Minors

Restricted to COMM majors, INTL majors and minors.
Or must have permission of instructor.

COMM251 - Public Relations I: Intro to Principles & Theory

Course Information

Course Title
Public Relations I: Intro to Principles & Theory

Subject code	Course Number	Academic Level
COMM	251	Undergraduate

Course Description
This first of a 4-course sequence covers the history, principles and current practices of public relations. Series must be taken sequentially. Offered in fall, spring.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM100 or COMM100H

Complete ANY of the following Courses:

- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech

COMM279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
COMM	279	Undergraduate

Course Description
Experimental

COMM300 - Co-Op Ed Experience in Comm

Course Information

Course Title
Co-Op Ed Experience in Comm

Subject code	Course Number	Academic Level
COMM	300	Undergraduate

Course Description
Coop/ Internship in Communication

COMM301 - Communication Research

Course Information

Course Title
Communication Research

Subject code	Course Number	Academic Level
COMM	301	Undergraduate

Course Description
A survey of research methods for the study of problems in communication. Students define a research problem, survey and critique relevant literature, and design a research strategy using various research paradigms. Majors should take this course in the junior year. Prereq: ENGL 110, COMM 201. COMM 201 and COMM 301 may be taken concurrently. However, if COMM 301 is taken after taking COMM 201, a grade of C- or higher is required in COMM 201.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 201

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing
- COMM201 - Theory of Communication

COMM 201 and COMM 301 may be taken concurrently. However if COMM 301 is taken after taking COMM 201, a grade of C- or higher is required in COMM 201.

COMM301H - H:Communication Research

Course Information

Course Title
H:Communication Research

Subject code	Course Number	Academic Level
COMM	301H	Undergraduate

Course Description
H:Communction Research

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 201

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing
- COMM201 - Theory of Communication

COMM 201 and COMM 301 may be taken concurrently. However if COMM 301 is taken after taking COMM 201, a grade of C- or higher is required in COMM 201.

COMM305 - Business and Professional Communication

Course Information

Course Title
Business and Professional Communication

Subject code	Course Number	Academic Level
COMM	305	Undergraduate

Course Description
Advanced principles of public speaking in a professional setting. Covers organization and adaptation of speech materials, effective presentation styles, forms of proof. Offered periodically. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM317 - Intercultural Communication

Course Information

Course Title
Intercultural Communication

Subject code	Course Number	Academic Level
COMM	317	Undergraduate

Course Description
Explores the possibilities of communication between and among diverse cultures. Close study of cultural codes, symbolic interaction, nonverbal behavior and contexts of intercultural contact. Develops an understanding and appreciation of human diversity and competence in intercultural communication practices. Offered periodically. Prereq: COMM 100, ENGL 110 and junior standing.

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM317H - Hon: Intercultural Communication

Course Information

Course Title
Hon: Intercultural Communication

Subject code	Course Number	Academic Level
COMM	317H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM320 - Radio Production

Course Information

Course Title
Radio Production

Subject code	Course Number	Academic Level
COMM	320	Undergraduate

Course Description
Theory and production of various types of audio production using basic studio equipment. Laboratory work required. Offered in fall, spring. Prereq: COMM 121.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 121

Complete ALL of the following Courses:
- COMM121 - Intro to Media Arts Production

COMM320H - H:Radio Production

Course Information

Course Title
H:Radio Production

Subject code	Course Number	Academic Level
COMM	320H	Undergraduate

Course Description
H:Radio Production

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 121

Complete ALL of the following Courses:
- COMM121 - Intro to Media Arts Production

COMM321 - Television Production

Course Information

Course Title
Television Production

Subject code	Course Number	Academic Level
COMM	321	Undergraduate

Course Description
Theory and application of various phases of studio operation and editing in television production. Laboratory work required. Offered in fall, spring. Prereq: COMM 121.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 121

Complete ALL of the following Courses:
- COMM121 - Intro to Media Arts Production

COMM321H - Hnrs: Television Production

Course Information

Course Title
Hnrs: Television Production

Subject code	Course Number	Academic Level
COMM	321H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 121

Complete ALL of the following Courses:
- COMM121 - Intro to Media Arts Production

COMM322 - Media Aesthetics & Criticism

Course Information

Course Title
Media Aesthetics & Criticism

Subject code	Course Number	Academic Level
COMM	322	Undergraduate

Course Description
Examination and analysis of the processes and products of various media industries, theories, methodologies, and aesthetics, with a focus on understanding and learning to critique the ways in which the media, their texts, and audiences exist within a set of increasingly complex relationships. Prereq: COMM 220, COMM 101, or JOUR 250 (formerly ENGL 250).

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 220 or COMM 101 or JOUR 250

Complete ANY of the following Courses:
- COMM220 - Survey of Media
- COMM101 - Introduction to Communication
- JOUR250 - Journalism & Society

COMM323 - Producing for Digital Media

Course Information

Course Title
Producing for Digital Media

Subject code	Course Number	Academic Level
COMM	323	Undergraduate

Course Description
Producing For Digital Media is designed to provide career-ready digital media producing experiences, practicing the many facets of digital content creation for the converged environment including producing in the live television studio, shooting and editing on location, creating in the media production workspace, and publishing to the web. Prereqs: COMM 121 and COMM 321.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM121 and COMM321 or COMM321H

Complete ALL of the following Courses:
- COMM121 - Intro to Media Arts Production
- COMM321 - Television Production
  OR COMM321H - Hnrs: Television Production

COMM326 - Media Writing: News

Course Information

Course Title
Media Writing: News

Subject code	Course Number	Academic Level
COMM	326	Undergraduate

Course Description
Basic news writing and reporting, stressing electronic media. Prereq: ENGL 110 or permission of instructor.

Gateway Stage Labels
Creative Exploration (CE)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Or must have permission of instructor.

COMM327 - Media Writing: Fiction

Course Information

Course Title
Media Writing: Fiction

Subject code	Course Number	Academic Level
COMM	327	Undergraduate

Course Description
Emphasis on the writing of dramatic scripts with selective production. Prereq: ENGL 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

COMM330 - Media and Women's Culture

Course Information

Course Title
Media and Women's Culture

Subject code	Course Number	Academic Level
COMM	330	Undergraduate

Course Description
The course focuses on the role of the media in the creation and reproduction of culture. It examines how gender, race and class are constructed in media texts, and how women in various social and cultural positions negotiate their own meanings in relation to media portrayals. Offered periodically. Prereq: junior status, COMM 100, ENGL 110.

Gateway Stage Labels
Personal Wellness (PWEL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM333 - Gender and Communication

Course Information

Course Title
Gender and Communication

Subject code	Course Number	Academic Level
COMM	333	Undergraduate

Course Description
Examines theoretical explanations for the social construction of gendered identity. Considers everyday communication practices and contexts to identify how gender, communication and culture intersect to form the complex matrix of meaning which impacts individuals and society. Prereq: COMM 100, ENGL 110 and junior standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM335 - Comm & Emerging Technologies

Course Information

Course Title
Comm & Emerging Technologies

Subject code	Course Number	Academic Level
COMM	335	Undergraduate

Course Description
This course focuses on the implications, for individuals and for society as a whole, of the most important new information and communication technologies. Students will acquire an understanding of the role technologies have played in their lives and the impact they have in their future careers.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing
- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech

COMM337 - Documentary Film I: Concepts

Course Information

Course Title
Documentary Film I: Concepts

Subject code	Course Number	Academic Level
COMM	337	Undergraduate

Course Description
Focuses on the history and theory of documentary films. Through readings, screenings, and discussions, the course will provide students with a historical and theoretical understanding of documentary filmmaking and prepare them for more advanced production courses. The students will also explore their own documentary ideas and develop an outline and treatment.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM100 or COMM100H or ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

COMM351 - Public Relations II: Public Relations Writing

Course Information

Course Title
Public Relations II: Public Relations Writing

Subject code	Course Number	Academic Level
COMM	351	Undergraduate

Course Description
Hands-on practice in writing news releases for print and broadcast, brochure and newsletter copy, and pitching story ideas to trade editors. Offered in fall, spring. Prereq: COMM 251, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 251 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- COMM251 - Public Relations I: Intro to Principles & Theory
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

COMM371 - Crisis Emergency & Risk Comm

Course Information

Course Title
Crisis Emergency & Risk Comm

Subject code	Course Number	Academic Level
COMM	371	Undergraduate

Course Description
This course examines communication challenges faced by public relations practitioners, public information officers, first responders, public health officials, business, government and community benefit leaders, as well as others involved in local, state, and national crisis, emergency, disaster and risk situations. With a focus on appropriate communication message/response strategies and effective use of various communication channels, the course covers theoretical foundations helpful for developing communication plans for pre-, current-, and post-event communication.

COMM371H - Hon: Crisis Emergency & Risk Comm

Course Information

Course Title
Hon: Crisis Emergency & Risk Comm

Subject code	Course Number	Academic Level
COMM	371H	Undergraduate

COMM379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
COMM	379	Undergraduate

Course Description
Experimental

COMM380 - Digital Media Writing

Course Information

Course Title
Digital Media Writing

Subject code	Course Number	Academic Level
COMM	380	Undergraduate

Course Description
Writing and design course focusing on construction of promotional messages for digital media. Students will complete several projects, including critique of publication and web designs; planning and production of print and electronic publications; website writing and layout. Offered in fall, spring. Prereq: ENGL 110 and junior standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM390 - Social Media Campaigns

Course Information

Course Title
Social Media Campaigns

Subject code	Course Number	Academic Level
COMM	390	Undergraduate

Course Description
This course emphasizes theory and practice in the strategic planning, writing, communication design, management and analysis of social media campaigns for mobile communications, social media, and online social networking. Prereg: ENGL 110, COMM 100, Junior status (60 credits earned)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM400 - Co-Op Ed Experience in Comm

Course Information

Course Title
Co-Op Ed Experience in Comm

Subject code	Course Number	Academic Level
COMM	400	Undergraduate

Course Description
Coop/ Internship in Communication

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM300

Complete ALL of the following Courses:
- COMM300 - Co-Op Ed Experience in Comm

COMM400H - Co-Op Ed Experience in Comm

Course Information

Course Title
Co-Op Ed Experience in Comm

Subject code	Course Number	Academic Level
COMM	400H	Undergraduate

Course Description
Honors Co-op/Internship in Communication

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM300

Complete ALL of the following Courses:
- COMM300 - Co-Op Ed Experience in Comm

COMM401 - Critical-Cultural Studies in Communication

Course Information

Course Title
Critical-Cultural Studies in Communication

Subject code	Course Number	Academic Level
COMM	401	Undergraduate

Course Description
Reciprocal influences of communication on culture and culture on communication. Messages, meanings and culture are approached from several critical standpoints. Prereq: C- or higher in COMM 101, 201 and 301. C- or higher in COMM 401 to count toward fulfilling graduation requirements in the major.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 101 and COMM 201 and COMM 301 or COMM 301H

Earn a minimum grade of C- in the following:

- COMM101 - Introduction to Communication
- COMM201 - Theory of Communication
- COMM301 - Communication Research **OR** COMM301H - H:Communication Research

C- or higher in COMM 401 to count toward fulfilling graduation requirements in the major.

COMM401H - Hnrs: Critical-Cultural Studies in Communication

Course Information

Course Title
Hnrs: Critical-Cultural Studies in Communication

Subject code	Course Number	Academic Level
COMM	401H	Undergraduate

Course Description
Honors Critical-Cultural Studies in Communication

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 101 and COMM 201 and COMM 301 or COMM 301H

Earn a minimum grade of C- in the following:

- COMM101 - Introduction to Communication
- COMM201 - Theory of Communication
- COMM301 - Communication Research **OR** COMM301H - H:Communication Research

C- or higher in COMM 401 to count toward fulfilling graduation requirements in the major.

COMM403 - Persuasion & Social Media Infl

Course Information

Course Title
Persuasion & Social Media Infl

Subject code	Course Number	Academic Level
COMM	403	Undergraduate

Course Description
Persuasive speaking from both the modern and classical points of view. Introduces students to classic forms and elements of persuasion as well as the latest research in persuasive communication and social media influence, including such issues as digital communication and algorithmic persuasion, celebrity culture, and emotional labor. Examines the function of persuasion in a variety of contexts and analyzes a series of recent public communication events for both their persuasive efficacy and ethics. Offered in fall or spring. Prereq: COMM 301.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 301 or COMM 301H

Complete ANY of the following Courses:
- COMM301 - Communication Research
- COMM301H - H:Communication Research

COMM421 - Advanced Television Production

Course Information

Course Title
Advanced Television Production

Subject code	Course Number	Academic Level
COMM	421	Undergraduate

Course Description
An advanced lecture-demonstration-laboratory application of the various phases of electronic field production, with special attention to directing and advanced editing techniques. Prereq: COMM 321.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 321 or COMM 321H

Complete ANY of the following Courses:
- COMM321 - Television Production
- COMM321H - Hnrs: Television Production

COMM421H - Hnrs: Advanced Television Production

Course Information

Course Title
Hnrs: Advanced Television Production

Subject code	Course Number	Academic Level
COMM	421H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 321 or COMM 321H

Complete ANY of the following Courses:

- COMM321 - Television Production
- COMM321H - Hnrs: Television Production

COMM422 - Adv Radio Prod: Podcasting

Course Information

Course Title
Adv Radio Prod: Podcasting

Subject code	Course Number	Academic Level
COMM	422	Undergraduate

Course Description
Provides students with a comprehensive background in all aspects of podcast production. Promotes critical thinking/ listening skills and emphasizes advanced level storytelling mechanics. Analysis of best practices for distribution, marketing, monetization, and audience analytics. Lecture/lab course design. Offered periodically. Prereq: COMM 121

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 121

Complete ALL of the following Courses:

- COMM121 - Intro to Media Arts Production

COMM425 - Broadcast News Reporting

Course Information

Course Title
Broadcast News Reporting

Subject code	Course Number	Academic Level
COMM	425	Undergraduate

Course Description
Style and other basics of radio and television news. Includes collecting data, writing stories, editing and producing video for campus cable TV station. Laboratory work required. Offered in fall. Prereq: COMM 321

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 321 or COMM 321H

Complete ANY of the following Courses:

- COMM321 - Television Production
- COMM321H - Hnrs: Television Production

COMM429 - Topics in Communication

Course Information

Course Title
Topics in Communication

Subject code	Course Number	Academic Level
COMM	429	Undergraduate

Course Description
Content varies. Selected communication perspectives on relevant academic and professional topics examined in depth. Potential topics include: sports communication, argumentation and debate, media entrepreneurship, international public relations, philosophies of communication, new media and culture, power, ideology and discourse. Prereq: Junior status or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

COMM429H - Hon: Topics in Communication

Course Information

Course Title
Hon: Topics in Communication

Subject code	Course Number	Academic Level
COMM	429H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

COMM431 - The Body in Communication

Course Information

Course Title
The Body in Communication

Subject code	Course Number	Academic Level
COMM	431	Undergraduate

Course Description
Focuses on the ways that bodies communicate other than verbally, and how this process of embodied communication plays an active role in our sense of belonging and difference as well as gives shape to the ongoing negotiations between culture and nature. Offered periodically. Prereq: COMM 100, ENGL 110 and junior standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM431H - HNRS:The Body in Communication

Course Information

Course Title
HNRS:The Body in Communication

Subject code	Course Number	Academic Level
COMM	431H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM437 - Documentary Filmmaking II

Course Information

Course Title
Documentary Filmmaking II

Subject code	Course Number	Academic Level
COMM	437	Undergraduate

Course Description
This course focuses on the practical and technical aspects of documentary filmmaking. Students will produce their own documentaries that incorporate appropriate approaches ans styles as well as advanced storytelling techniques.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM337 and COMM321 or COMM321H

Complete ALL of the following Courses:
- COMM337 - Documentary Film I: Concepts
- COMM321 - Television Production
  OR COMM321H - Hnrs: Television Production

COMM440 - Leadership and Media

Course Information

Course Title
Leadership and Media

Subject code	Course Number	Academic Level
COMM	440	Undergraduate

Course Description
An introduction to the study and practice of leadership from a media perspective. Particular focus on the relationship between communicating and leading. Examination of leadership concepts and theories in organizational, group and public contexts. Students will analyze their personal leadership styles and develop leadership communication skills through team projects and classroom exercises. Offered periodically. Prereq: junior standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM441 - Political Communication

Course Information

Course Title
Political Communication

Subject code	Course Number	Academic Level
COMM	441	Undergraduate

Course Description
Contemporary American political rhetoric focusing on national politics. Content varies. During election years, content includes campaign rhetoric, advertising and debates. In other years, the focus is administrative rhetoric and the interaction of Congress with the President on domestic and foreign affairs. Offered periodically. Prereq: COMM 100, ENGL 110; junior status or permission of instructor.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

COMM450 - Communication and Conflict

Course Information

Course Title
Communication and Conflict

Subject code	Course Number	Academic Level
COMM	450	Undergraduate

Course Description
Explores the communicative processes inherent in the development and management of conflict at various social levels. Highlights the various influences on how people manage conflicts at the interpersonal, intercultural, organizational and societal levels with face-to-face and mediated modes of communication. Focuses on specific approaches to managing and resolving conflict, including mediation, negotiation, arbitration, facilitation, and peacebuilding. Offered infrequently. Prereq: COMM 100, ENGL 110, junior standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM450H - Hnrs: Communication and Conflict

Course Information

Course Title
Hnrs: Communication and Conflict

Subject code	Course Number	Academic Level
COMM	450H	Undergraduate

Course Description
Honors Communication and Conflict

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM451 - Public Relations Issues

Course Information

Course Title
Public Relations Issues

Subject code	Course Number	Academic Level
COMM	451	Undergraduate

Course Description
Analysis of various organizations' public relations problems and communicative responses. Third in a 4-course sequence. Offered in fall, spring. Prereq: C or higher in COMM 301, COMM 351 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 301 or COMM 301H

Earn a minimum grade of C in the following:
- COMM301 - Communication Research **OR** COMM301H - H:Communication Research

COMM 351

Complete ALL of the following Courses:
- COMM351 - Public Relations II: Public Relations Writing

Or must have permission of instructor.

COMM451H - H:Public Relations Issues

Course Information

Course Title
H:Public Relations Issues

Subject code	Course Number	Academic Level
COMM	451H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 301 or COMM 301H

Earn a minimum grade of C in the following:
- COMM301 - Communication Research **OR** COMM301H - H:Communication Research

COMM 351

Complete ALL of the following Courses:
- COMM351 - Public Relations II: Public Relations Writing

Or must have permission of instructor.

COMM452 - Public Relations Campaigns

Course Information

Course Title
Public Relations Campaigns

Subject code	Course Number	Academic Level
COMM	452	Undergraduate

Course Description
Hands-on practice in public relations problem solving. Involves work in student-run "agencies" to develop and implement a public relations campaign for a nonprofit organization. Capstone course in public relations. Offered in fall, spring. Prereq: COMM 451.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 451 or COMM 451H

Complete ANY of the following Courses:
- COMM451 - Public Relations Issues
- COMM451H - H:Public Relations Issues

COMM461 - Health Communication

Course Information

Course Title
Health Communication

Subject code	Course Number	Academic Level
COMM	461	Undergraduate

Course Description
Focuses on the forms and functions of human interaction in a variety of health care settings, and on the ways that mediated messages promote and reinforce certain health values, beliefs, practices and products. Emphasizes the role of cultural context on the construction and interpretation of health-related messages. Offered periodically. Prereq: COMM 100, ENGL 110, junior standing.

Gateway Stage Labels
Personal Wellness (PWEL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

COMM479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
COMM	479	Undergraduate

Course Description
Experimental

COMM480 - Topics in Media:

Course Information

Course Title
Topics in Media:

Subject code	Course Number	Academic Level
COMM	480	Undergraduate

Course Description
Advanced, innovative ore exploratory work in media production or a detailed investigation on a topic of current interest in digital media and broadcasting. Investigation of one or more topics that vary according to needs and interests of students and staff. Offered periodically. May be taken for credit more than once as the topics change. Prereq: COMM 121 and Junior Standing or Instructor Permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 121

Complete ALL of the following Courses:
- COMM121 - Intro to Media Arts Production

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

COMM489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
COMM	489	Undergraduate

Course Description
Honors Course

COMM498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
COMM	498	Undergraduate

Course Description
For the definition of independent study and student eligibility, refer to the Academic Policies section of this catalog.

COMM499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
COMM	499	Undergraduate

Course Description
Departmental Honors

COMM499H - Hon: Departmental Honors

Course Information

Course Title
Hon: Departmental Honors

Subject code	Course Number	Academic Level
COMM	499H	Undergraduate

COMM500 - Co-Op Ed Experience in Comm

Course Information

Course Title
Co-Op Ed Experience in Comm

Subject code	Course Number	Academic Level
COMM	500	Graduate

Course Description
Coop/ Internship in Communication

COMM605 - Comm Research Proseminar

Course Information

Course Title
Comm Research Proseminar

Subject code	Course Number	Academic Level
COMM	605	Graduate

Course Description
A survey and application of research methods for managers and communicators. Students will investigate appropriate literature, design and undertake a study to investigate a communication problem in their profession. Quantitative and qualitative analyses will be considered with a focus on multi-method approaches to research. Class participants will determine how best to measure and analyze data specific to their hypotheses and/or research questions.

COMM610 - Seminar in Organizational Comm

Course Information

Course Title
Seminar in Organizational Comm

Subject code	Course Number	Academic Level
COMM	610	Graduate

Course Description
The course introduces students to fundamental theories and issues associated with organizational communication, including organizational culture/climate as created by internal/external communication in interpersonal, small group, intercultural, and public communication contexts, exploring the impacts of communication in both face-to-face and mediated formats.

COMM625 - Intercultural Comm in Contexts

Course Information

Course Title
Intercultural Comm in Contexts

Subject code	Course Number	Academic Level
COMM	625	Graduate

Course Description
This course is designed to introduce major theories and research dealing with communication between people of different cultural backgrounds in crisis, emergency, risk, and disaster communication contexts. It examines theoretical issues and methodological concerns in studying intercultural conflicts, problem situations, and emergency management strategies. By examining the intersections of global and local in emergent and conflict situations, students will discover and investigate questions about intercultural communication phenomena, engaging with discussions of identity, culture, context, power, history, and relationships. Students will learn a range of research tools to conduct their independent research, sharing insights and participating in intercultural dialogues, with the goal of facilitating intercultural understanding and advocating for best practices during emergency management situations.

COMM627 - Digital Advocacy

Course Information

Course Title
Digital Advocacy

Subject code	Course Number	Academic Level
COMM	627	Graduate

Course Description
This course focuses on the ways that digital technologies and social media increasingly shape the contemporary impact of social movements and political activism. Bringing together cultural studies approaches to communication and social movement theories with historical attention to protest and social change, this course considers what it means to 'become-activist' and how to serve as an advocate for social-political change as an ongoing aspect of one's everyday life. Hence, the course will explore matters such as commitment and participation, place and identity, conflict and group cohesion, and the social justice issues that arise in regard to race, class, gender, ethnicity, disability rights, immigration and refugees, environmentalism, animal rights, and global activism. As part of the MS program in Emergency Management, the course will also consider the impact of digital advocacy in crisis, emergency, risk and disaster contexts.

COMM653 - Applied Comm Theory

Course Information

Course Title
Applied Comm Theory

Subject code	Course Number	Academic Level
COMM	653	Graduate

Course Description
This course is designed as an opportunity to apply communication theories, concepts, principles, pedagogies, and practices to address real-world problems in crisis, emergency, risk, and disaster contexts. Whether it is at the interpersonal, group, mediated, organizational, societal, or global level, communication theories can help postgraduate students understand and investigate important issues and concerns. While the main focus of the course is to introduce communication theories and apply them in students' experiences of crisis, risks, and emergency management, it also employs critical and practical perspectives in evaluating current theoretical trends and creating new currents of thoughts in research and paradigms. Postgraduate students will be able to apply their knowledge and skills to improve their practices during emergency management and provide valuable services to the community at large.

COMM661 - Health Communication

Course Information

Course Title
Health Communication

Subject code	Course Number	Academic Level
COMM	661	Graduate

Course Description
This course focuses on forms and functions of communication in a variety of health care settings and on messages in human and mediated communication contexts that promote and reinforce health values, beliefs, practices, policies, and products. This course prepares students to examine the specialized research in health communication in this growing area of scholarship that receives recognition at the national level. II works to advance theory, research, teaching, and practical applications of human and mediated communication to health care and health promotion. Students will also examine how cultures influence the construction and interpretation of health-related messages. As part of the Master of Science in Emergency Management, the course will include a focus on crisis, emergency, risk, and disaster contexts.

ENTC208 - Production Practicum

Course Information

Course Title
Production Practicum

Subject code	Course Number	Academic Level
ENTC	208	Undergraduate

Course Description
Experiential learning through production of entertainment and events. A practical course for live entertainment technicians and designers: Scenic/Carpentry, Costume/ Wardrobe, Properties, Lighting/Electric, Sound/Audio, Video, and other entertainment technology areas. Open to all majors. 1, 2, and 3 credit sections offered regularly. Pre/ Co-Req: THEA 120 - Stagecraft. Requires permission of instructor through application or interview.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Instructor Permission

Must have permission of instructor through application or interview.

Course Prerequisite or Corequisite

Type
Prerequisite

THEA 120

Complete ALL of the following Courses:

- THEA120 - Stagecraft

ENTC220 - Theatrical Lighting & Sound

Course Information

Course Title
Theatrical Lighting & Sound

Subject code	Course Number	Academic Level
ENTC	220	Undergraduate

Course Description
An introduction to the process of designing lighting and sound for theatre and live entertainment; develops intermediate knowledge, skills, and abilities in related entertainment technologies/equipment through practice. Students are expected to already have a foundational knowledge of entertainment/theatre technology. Prerequisite: THEA 120 - Stagecraft

Simple Requirements

Course Prerequisites

Type
Prerequisite

THEA120

Complete ALL of the following Courses:
- THEA120 - Stagecraft

ENTC222 - Vectorworks

Course Information

Course Title
Vectorworks

Subject code	Course Number	Academic Level
ENTC	222	Undergraduate

Course Description
An introduction to the use of Vectorworks software for entertainment and theatre drafting/modeling, and design documentation.

Simple Requirements

Course Prerequisites

Type
Prerequisite

THEA120

Complete ALL of the following Courses:
- THEA120 - Stagecraft

ENTC300 - Co-op Ed Experience in ENTC

Course Information

Course Title
Co-op Ed Experience in ENTC

Subject code	Course Number	Academic Level
ENTC	300	Undergraduate

Course Description
Co-op/Internship Experience in Entertainment Technology

ENTC300H - Hon: Co-op Ed Experience in ENTC

Course Information

Course Title
Hon: Co-op Ed Experience in ENTC

Subject code	Course Number	Academic Level
ENTC	300H	Undergraduate

Course Description
Honors Co-op/Internship Experience in Entertainment Technology

ENTC313 - Adv Prod for Live Entertainmnt

Course Information

Course Title
Adv Prod for Live Entertainmnt

Subject code	Course Number	Academic Level
ENTC	313	Undergraduate

Course Description
An advanced study of entertainment rigging, power/data distribution, and specialty systems in entertainment technology. Students develop an understanding of higher-level creative solutions to production in entertainment. Students are expected to have a strong knowledge of entertainment technology and technical theatre. Prerequisites: THEA 120 Stagecraft and THEA/ ENTC 220 Lighting & Sound.

Simple Requirements

Course Prerequisites

Type
Prerequisite

THEA120 and ENTC220

Complete ALL of the following Courses:
- THEA120 - Stagecraft
- ENTC220 - Theatrical Lighting & Sound

ENTC320 - Scenic Painting

Course Information

Course Title
Scenic Painting

Subject code	Course Number	Academic Level
ENTC	320	Undergraduate

Course Description
The study, exploration and practice of the materials and techniques of applying finishes, textures, decorative painting, and faux finishes as used in theatre, motion pictures, media, productions and architectural applications. Previous art experience is not required

Simple Requirements

Course Prerequisites

Type
Prerequisite

THEA120

Complete ALL of the following Courses:
- THEA120 - Stagecraft

ENTC400 - Co-op Ed Experience in ENTC

Course Information

Course Title
Co-op Ed Experience in ENTC

Subject code	Course Number	Academic Level
ENTC	400	Undergraduate

Course Description
Co-op/Internship Experience in Entertainment Technology

ENTC489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ENTC	489	Undergraduate

Course Description
Honors course for Entertainment Technology

ENTC495 - Topics in ENTC

Course Information

Course Title
Topics in ENTC

Subject code	Course Number	Academic Level
ENTC	495	Undergraduate

Course Description
Advanced and Special Topics in Entertainment Technologies. Topics vary, course may be repeated up to four times under different titles.

Simple Requirements

Course Prerequisites

Type
Prerequisite

THEA120

Complete ALL of the following Courses:
- THEA120 - Stagecraft

ENTC498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
ENTC	498	Undergraduate

Course Description
Independent Study

ENTC499 - Thesis Entertainment Technolog

Course Information

Course Title
Thesis Entertainment Technolog

Subject code	Course Number	Academic Level
ENTC	499	Undergraduate

Course Description
Thesis in Entertainment Technology

JOUR250 - Journalism & Society

Course Information

Course Title
Journalism & Society

Subject code	Course Number	Academic Level
JOUR	250	Undergraduate

Course Description
Explores journalisms role in American society by analyzing the problems facing journalists in the realms of politics, law, corporate power and ethics. Prereq: ENGL 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

JOUR313 - Fundamentals of Journalism

Course Information

Course Title
Fundamentals of Journalism

Subject code	Course Number	Academic Level
JOUR	313	Undergraduate

Course Description
Introduction to the craft of journalism and the nuts and bolts of news writing, including story structures, leads, nut graphs, kickers, finding sources and conducting interviews.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

JOUR315 - Advanced Reporting in a Diverse World

Course Information

Course Title
Advanced Reporting in a Diverse World

Subject code	Course Number	Academic Level
JOUR	315	Undergraduate

Course Description
Building on journalism fundamentals, this course calls for students to tackle more in-depth and lengthier reporting projects. The class delves into a wider range of reporting beats, and places an emphasis on the importance of representation of diverse groups both in stories and in the newsroom.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and JOUR313

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- JOUR313 - Fundamentals of Journalism

JOUR327 - Feature Writing and Magazine Journalism

Course Information

Course Title
Feature Writing and Magazine Journalism

Subject code	Course Number	Academic Level
JOUR	327	Undergraduate

Course Description
Writing long-form features and enterprise stories, including photography, video and audio content to enhance story presentation on the internet. All original work. Prereq: ENGL 313 or JOUR 313

Simple Requirements

Course Prerequisites

Type
Prerequisite

JOUR 313

Complete ALL of the following Courses:
- JOUR313 - Fundamentals of Journalism

JOUR328 - Ethics in Digital Media Journalism

Course Information

Course Title
Ethics in Digital Media Journalism

Subject code	Course Number	Academic Level
JOUR	328	Undergraduate

Course Description
Covers ethics of print-media publication. Focuses on the development of ethics in writing and changes in journalistic standards. May include case-study analysis.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

JOUR430 - Investigative and Computer Assisted Reporting

Course Information

Course Title
Investigative and Computer Assisted Reporting

Subject code	Course Number	Academic Level
JOUR	430	Undergraduate

Course Description
Data-driven journalism, looking at the collection of data, analysis in software such as SPSS and the writing of longer-form articles about research. Prereq: ENGL 313 or JOUR 313

Simple Requirements

Course Prerequisites

Type
Prerequisite

JOUR 313

Complete ALL of the following Courses:

- JOUR313 - Fundamentals of Journalism

THEA120 - Stagecraft

Course Information

Course Title
Stagecraft

Subject code	Course Number	Academic Level
THEA	120	Undergraduate

Course Description
An introduction to technical theatre. Topics include the construction and handling of scenery, scenic painting, stage lighting, and the proper, safe use of tools and equipment. Offered annually.

Gateway Stage Labels
Creative Exploration (CE)

THEA130 - Acting 1

Course Information

Course Title
Acting 1

Subject code	Course Number	Academic Level
THEA	130	Undergraduate

Course Description
Training in the art and craft of acting. Emphasis on developing basic skills and exploring the creative process. Elementary scene and monologue work. Offered in fall.

Gateway Stage Labels
Creative Exploration (CE)

THEA179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
THEA	179	Undergraduate

Course Description
Experimental

THEA208 - Theatre Practicum

Course Information

Course Title
Theatre Practicum

Subject code	Course Number	Academic Level
THEA	208	Undergraduate

Course Description
Experiential learning through performance and practice in a mainstage production. A practical course for student actors, performers, directors, choreographers, writers, and stage managers. Open to all majors. 1, 2, & 3 credit sections offered regularly. Pre-req: Permission of instructor through audition or interview.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Instructor Permission

Permission of instructor through audition or interview.

THEA230 - Acting 2

Course Information

Course Title
Acting 2

Subject code	Course Number	Academic Level
THEA	230	Undergraduate

Course Description
Further explores the purpose of acting and underlying principles, as well as training voice and body to project characterization. Offered biannually in spring. Prereq: THEA 130 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

THEA 130

Complete ALL of the following Courses:

- THEA130 - Acting 1

Or must have permission of instructor.

THEA217 - Theatre Appreciation

Course Information

Course Title
Theatre Appreciation

Subject code	Course Number	Academic Level
THEA	217	Undergraduate

Course Description
A discussion of the theatre experience for the student with an interest in theatre, including audience perspective, historical influences, and contemporary performance and technical theatre practices. Offered in annually.

THEA240 - Script Analysis

Course Information

Course Title
Script Analysis

Subject code	Course Number	Academic Level
THEA	240	Undergraduate

Course Description
The techniques and methodology of script analysis with an emphasis on those aspects useful to the production staff in preparation of plays for production. Offered biannually in the spring.

THEA279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
THEA	279	Undergraduate

Course Description
Experimental

THEA300 - Co-Op Ed Experience in Thea

Course Information

Course Title
Co-Op Ed Experience in Thea

Subject code	Course Number	Academic Level
THEA	300	Undergraduate

Course Description
Co-Op Experience in Theatre

THEA310 - Costume for Stage & Media

Course Information

Course Title
Costume for Stage & Media

Subject code	Course Number	Academic Level
THEA	310	Undergraduate

Course Description
A survey of the process and techniques of designing and accomplishing costuming for theatre and other media. Script and character analysis, costume period styles, and basic construction techniques will be studied. The course is valuable for Actors and Directors as well as Designers and Technicians. Previous experience in art and sewing are not required.

THEA312 - Hist/Princpls of Stage Design

Course Information

Course Title
Hist/Princpls of Stage Design

Subject code	Course Number	Academic Level
THEA	312	Undergraduate

Course Description
Scenic, costume and lighting design aesthetics throughout history and as they apply to todays theatre. Art experience is not required. Offered infrequently.

THEA315 - Directing

Course Information

Course Title
Directing

Subject code	Course Number	Academic Level
THEA	315	Undergraduate

Course Description
Practical experience in both directing and coaching actors. An overview of directing process and directing style. Offered biannually in spring. Prereq: THEA 130 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

THEA 130

Complete ALL of the following Courses:

- THEA130 - Acting 1

Or must have permission of instructor.

THEA317 - London Theatre Tour

Course Information

Course Title
London Theatre Tour

Subject code	Course Number	Academic Level
THEA	317	Undergraduate

Course Description
Theatre as it developed in London, England. The course, in conjunction with the London Metropolitan University, requires attendance at four contrasting professional theatre performances in London as well as backstage tours of the Globe Theatre, the National Theatre and the Royal Theatre Drury Lane. Offered in summer of even years. Prereq: junior status, COMM 100, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM100 or COMM100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

THEA340 - History of Theatre 1

Course Information

Course Title
History of Theatre 1

Subject code	Course Number	Academic Level
THEA	340	Undergraduate

Course Description
Detailed study of development of all phases of theatre art and dramatic literature from its origin to 1850. Offered in rotation with THEA 341. Prereq: ENGL 110, COMM 100.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM100 or COMM100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

THEA341 - History of Theatre 2

Course Information

Course Title
History of Theatre 2

Subject code	Course Number	Academic Level
THEA	341	Undergraduate

Course Description
Survey of European and American drama from the time of Ibsen to the present, tracing development of dramatic literature from the rise of realism to contemporary experimentalism; emphasis on plays illustrating significant trends and movements. Offered in rotation with THEA 340. Prereq: ENGL 110, COMM 100.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM100 or COMM100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

THEA350 - Theatre Management

Course Information

Course Title
Theatre Management

Subject code	Course Number	Academic Level
THEA	350	Undergraduate

Course Description
Introductory survey of theatre management, which addresses concerns related to theatre. An overview of the theatre manager's role, focus on strategic planning, organizational design, economics and the theatre, unions; and financial concerns which affect the success of theatre organizations. Offered infrequently. Prereq: COMM 100 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM100 or COMM100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

THEA400 - Co-Op Ed Experience in Thea

Course Information

Course Title
Co-Op Ed Experience in Thea

Subject code	Course Number	Academic Level
THEA	400	Undergraduate

Course Description
Co-Op Ed Experience in Thea

THEA412 - Topics in Theatre

Course Information

Course Title
Topics in Theatre

Subject code	Course Number	Academic Level
THEA	412	Undergraduate

Course Description
Advanced work in the area of theatre production. May be taken more than one semester for credit as topic varies. Topics include stage management, costume and make-up, scenic painting, stage voice, careers in theatre. Offered annually with different topics. Prereq: THEA 120.

Simple Requirements

Course Prerequisites

Type
Prerequisite

THEA 120

Complete ALL of the following Courses:

- THEA120 - Stagecraft

THEA479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
THEA	479	Undergraduate

Course Description
Experimental

THEA498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
THEA	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section.

THEA499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
THEA	499	Undergraduate

Course Description
Departmental Honors

THEA500 - Co-Op Ed Experience in Thea

Course Information

Course Title
Co-Op Ed Experience in Thea

Subject code	Course Number	Academic Level
THEA	500	Graduate

Course Description
Co-Op Ed Experience in Thea

Computer Science Department

The Department of Computer Science offers a baccalaureate degree in computer science and also offers minors in computer science and data science.

The Bachelor of Science degree program in computer science is accredited by the Computing Accreditation Commission of ABET, www.abet.org. The Bachelor of Science degree program in computer science has been recognized as a high-quality degree program that meets national standards for computer science education. Our B.S. degree program in computer science was the first computer science program in a Pennsylvania State System University to be accredited by ABET. The B.S. degree program in computer science is designed to provide students with a fundamental background in computer science as well as allow students to study advanced topics such as artificial intelligence, security, game development, computer

graphics, web development, data mining, algorithms, computer networks, large-scale data analytics and visualization, and parallel programming. Graduates are well prepared to pursue graduate study or a career in the computing field. Opportunities for student research are available.

For admission as a major in computer science, a student is expected to have a sound preparation in high school academic mathematics: algebra I and II, plane geometry, trigonometry and analytic geometry. Students who have completed an AP course in high school are encouraged to take the College Board Advanced Placement Computer Science A exam and have their scores sent to Millersville University for evaluation. University credit for freshman-level computer science major courses will be offered to students with grades of 3 or higher. For further information, see Advanced Placement Examinations in this catalog. Please note that a score of 3 or higher on the Computer Science Principles exam can be used for general University credit but will not replace any courses within the computer science major. The cooperative education program allows students to gain valuable experience in a full-time professional position related to their career goals, adding practical relevance to their program of study as well as financial remuneration. Students may elect one or more cooperative education experiences.

The cooperative education program allows students to gain valuable experience in a full-time professional position related to their career goals, adding practical relevance to their program of study as well as financial remuneration. Students may elect one or more cooperative education experiences.

Millersville University's Computer Science program consists of two components: required courses that every student must take and elective courses from which each student selects those most relevant to their interests and career goals. The required courses prepare students for an immediate career and for lifelong learning by providing a solid foundation of computer science principles. In particular, the required curriculum includes coverage of discrete mathematical structures, computer programming, data structures and algorithm analysis, computer architecture, programming languages, mathematical models of computation, database systems, design of operating systems, and contemporary software engineering practices. The electives cover a wide variety of important application areas and more advanced versions of the fundamental topics. Popular elective topics include artificial intelligence, computer graphics, computer networks, computer security, data mining, video game development, and web application development. Graduates of the Computer Science program are well qualified for careers such as software engineer/developer, web developer, systems analyst, data scientist, and system administrator, as well as for graduate studies in computer science and related fields.

Information about the degree programs offered by the Department of Computer Science can be found on the web at www.millersville.edu/computerscience.

FACULTY LIST
Hardy, Nazli; Associate Professor College of Science and Technology B.S., Clarkson University, 1996; M.B.A., Metropolitan College of New York, 1998; Ph.D., City University of New York, 2005
Hogg, Chad; Department Chairperson, Associate Professor College of Science and Technology B.S., Ursinus College, 2004; M.S., Lehigh University, 2007; Ph.D., Ibid., 2011
Schwartz, Stephanie; Professor College of Science and Technology B.S., Shippensburg University, 1991; M.S., University of Delaware, 1993; Ph.D., Ibid., 2006
Xie, Jingnan; Associate Professor College of Science and Technology B.A., Shandong Agricultural University, 2011; Ph.D., SUNY at Albany, 2017
Yang, Zhongxiu; Assistant Professor College of Science and Technology B.S., California State University, Fullerton 2016; M.S., California State University, East Bay, 2018; Ph.D., The University of Texas at San Antonio, 2024
Zoppetti, Gary; Associate Professor College of Science and Technology B.S., California University of Pennsylvania, 1992; M.S., University of Delaware, 1997; Ph.D., Ibid., 2001

Programs

Computer Science Minor

Overview

The Computer Science minor has an emphasis on the foundations of computational thinking, problem solving, and programming.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Computer Science (20 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Introductory Computer Science Courses (4 credits)

Complete ALL of the following Courses:

- CMSC140 - Discrete Structures

CMSC101 Problem Solving with Computers or CSCI121 Intro to Web Development may only be used if it is the first CMSC course taken. Otherwise, CMSC140 Discrete Structures will be required.

AND

Required Courses (12 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1
- CMSC162 - Introduction to Programming 2
- CMSC362 - Data Structures

AND

Computer Science Electives (4 credits)

Earn at least 4 credits from the following:

- Any 3-level CMSC course(s)
- Any 4-level CMSC course(s)

Data Science Minor

Overview

The Data Science minor has an emphasis on the foundations of computational thinking, problem solving, and how to represent, store, access, and modify data. Students can take a strict subset of Computer Science major courses to fulfill the minor requirements. Completion of 20 credit-hours (all four-credit courses) is required for the minor.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Data Science (20 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (16 credits)

Complete ALL of the following Courses:

- CMSC140 - Discrete Structures
- CMSC151 - Intro to Programming for Data Science I
- CMSC152 - Intro to Programming for Data Science II
- CMSC366 - Database Systems

AND

Data Mining or Lg-Scale Data Analytics & Viz (4 credits)

Complete at least 1 of the following courses:

- CMSC452 - Data Mining
  OR CMSC452H - Data Mining
- CMSC453 - Large-Scale Data Analytics and Visualization

Computer Science, B.S.

Overview

MU's Computer Science program consists of two components, which explore topics such as computer graphics, artificial intelligence, networks, software engineering, databases, human-computer interaction, game programming and parallel processing. All Computer Science majors start with the core component to gain skills that are considered fundamental to the study of computer science. This includes grounding in various aspects of programming, computer architecture, discrete mathematical structures, computational models and data structures. The second component is an elective section in which students select courses based on personal interest and career goals from various advanced topics in computer science. This allows students to tailor their coursework to their own needs, while ensuring that every student receives the same fundamental background in the canonical areas of computer science.

Curriculum

Simple Requirements

Major in Computer Science, BS (52 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major Courses

AND

Required Courses (40 credits)

Complete ALL of the following Courses:

- CMSC140 - Discrete Structures
- CMSC161 - Introduction to Programming 1
- CMSC162 - Introduction to Programming 2
- CMSC330 - Programming Languages
- CMSC340 - Computational Models
- CMSC362 - Data Structures
- CMSC366 - Database Systems
- CMSC370 - Computer Architecture
- CMSC380 - Operating Systems
  OR CMSC380H - Operating Systems (Inactive)
- CMCS420 - Software Engineering

AND

Electives (12 credits)

Earn at least 12 credits from the following:

- Any CMSC 375-499 course(s)

May also take CMSC300 Co-Op Ed Experience in CSCI.

Note: This requirement may not be satisfied with CMSC380 Operating Systems or CMSC420 Software Engineering.

Up to 4 credits of Co-op (CMSC300 Co-Op Ed Experience in CSCI, CMSC400 Co-Op Ed Experience in CSCI, CMSC500 are allowed. CMSC406 Topics in Computer Science Topics courses may be selected if it is 4 credits.

Req Related for Computer Science, BS (20-21 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (14-15 credits)

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (7 credits)

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics
- MATH304 - Matrix Algebra & Applications

AND

Directed Math Elective (3 credits)

Earn at least 3 credits from the following:

- MATH211 - Calculus 2
- MATH236 - Elements of Statistics 2
- PHIL312 - Mathematical Logic

AND

Natural/Physical Sciences (6 credits)

Earn at least 6 credits from the following:

- BIOL100 - General Biology
- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ESSC222 - Historical Geology
  OR ESSC222H - H:Historical Geology
- ESSC241 - Meteorology
- ESSC245 - Environmental Meteorology
- ESSC261 - Introduction to Oceanography
- PHYS131 - Physics 1 with Algebra
- PHYS231 - Physics 1 with Calculus
- PHYS132 - Physics 2 with Algebra
- PHYS232 - Physics 2 with Calculus

At least 6 credits of Natural/Physical Science courses. If selecting Physics choose PHYS131 Physics 1 with Algebra OR PHYS231 Physics 1 with Calculus, PHYS132 Physics 2 with Algebra OR PHYS232 Physics 2 with Calculus.

Courses

CMCS420 - Software Engineering

Course Information

Course Title
Software Engineering

Subject code	Course Number	Academic Level
CMSC	420	Undergraduate

Course Description
Overview of software engineering concentrating on phases of the software development life cycle including agile software development processes, management, stories and features, specifications, architecture design (APIs, scalability, microservices), specification-based testing, coverage-based testing, and formal verification. Software management topics covered include source control, issue tracking, continuous integration, test automation, quality assurance, and code reviews. Pre-req: C- or higher in CSCI 330, 362 and 366

Capstone Stage Label
Yes

Simple Requirements

Course Prerequisites

Type
Prerequisite

CSCI 330 and CSCI 362 and CSCI 366

Earn a minimum grade of C- in the following:

- CMSC330 - Programming Languages
- CMSC362 - Data Structures
- CMSC366 - Database Systems

CMSC101 - Problem Solving with Computers

Course Information

Course Title
Problem Solving with Computers

Subject code	Course Number	Academic Level
CMSC	101	Undergraduate

Course Description
Designed to introduce concepts, techniques and history of computing to students who are not computer science majors. Emphasis on problem solving using the computer, including making calculations and presenting reports, tables and graphs based on those calculations. Collecting, storing, updating and retrieving data. Display and interpretation of information using the Internet. No credit toward computer science major.

CMSC140 - Discrete Structures

Course Information

Course Title
Discrete Structures

Subject code	Course Number	Academic Level
CMSC	140	Undergraduate

Course Description
Discrete mathematical structures and their application to computer science including formal mathematical notation and proofs, algorithms, computer related arithmetic, propositional logic, predicate logic, set theory, graphics, relations and databases, functions, matrices and combinatorics. Prereq: C- or better in MATH 101 or higher or Placement in MATH 151 or higher.

Simple Requirements

Course Prerequisites: Complete 1 of the following

Type
Prerequisite

MATH101

Earn a minimum grade of C- in the following:

- Any MATH 101 or Higher

Or MPT of 151 or higher.

CMSC151 - Intro to Programming for Data Science I

Course Information

Course Title
Intro to Programming for Data Science I

Subject code	Course Number	Academic Level
CMSC	151	Undergraduate

Course Description
Introduction to computer programming for the student not intending to major in computer science or related fields. Emphasis on learning to develop programs in an appropriate programming language (currently Python) to manipulate and analyze data from domains such as science, business, engineering, and the humanities. Pre-req of MPT of MATH 101 or above or C- or better in MATH 100 or above.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 100

Earn a minimum grade of C- in the following:

- MATH100 - Survey of Mathematical Ideas

Or MPT of MATH 101 or above.

CMSC152 - Intro to Programming for Data Science II

Course Information

Course Title
Intro to Programming for Data Science II

Subject code	Course Number	Academic Level
CMSC	152	Undergraduate

Course Description
Continuation of CMSC 151 covering more advanced computer programming techniques with an emphasis on developing programs to manipulate and analyze real-world data from various domains including business, science, and the humanities. Topics include creating appropriate data visualizations, acquiring data from numerous sources, analyzing and cleaning data sets, drawing advanced conclusions from data and the ethics of data collection and analysis. Current language used is Python. Pre-req: (C or higher in CMSC 151 or B or higher in CMSC 161) and (MPT of MATH 160 or above or C- or higher in MATH 101 or MATH 120 or MATH 130). 4 s.h.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

Earn a minimum grade of C- in the following:
- MATH101 - College Algebra
  OR MATH120 - Logic for Information Technology
  OR MATH130 - Elements of Statistics 1

Or must have a MPT of MATH 160 or above.

Additional Course Prerequisites: Complete 1 of the following

Type
Prerequisite

CMSC 151

Earn a minimum grade of C in the following:
- CMSC151 - Intro to Programming for Data Science I

CMSC 161

Earn a minimum grade of B in the following:
- CMSC161 - Introduction to Programming 1

CMSC161 - Introduction to Programming 1

Course Information

Course Title
Introduction to Programming 1

Subject code	Course Number	Academic Level
CMSC	161	Undergraduate

Course Description
Introduction to computer programming for the student intending to major in computer science or related fields. Emphasis on developing ability to apply problem-solving strategies to design and implement algorithms in a modern programming language. Prereq: Placement in MATH 151 or higher.

Gateway Stage Labels
Technological Competency (TC)

Simple Requirements

Course Prerequisites: Complete 1 of the following

Type
Prerequisite

MATH101

Complete ANY of the following Courses:
- MATH101 - College Algebra

MATH 151 or Higher

Complete ANY of the following Course Sets:
- Any MATH 151 or higher course(s)

CMSC162 - Introduction to Programming 2

Course Information

Course Title
Introduction to Programming 2

Subject code	Course Number	Academic Level
CMSC	162	Undergraduate

Course Description
Continuation of CMSC 161 covering advanced computer programming techniques. Emphasis on object-oriented programming, specification, design, elementary data structures, and proper use of programming language and development tools. Abstract data types, classes and objects, recursion, linked lists, queues, stacks and binary trees. Prereq: C or higher in CMSC 161 or B or higher in CMSC 151.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites: Complete 1 of the following

Type
Prerequisite

CMSC 161

Earn a minimum grade of C in the following:
- CMSC161 - Introduction to Programming 1

CMSC 151

Earn a minimum grade of B in the following:
- CMSC151 - Intro to Programming for Data Science I

CMSC179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
CMSC	179	Undergraduate

Course Description
Experimental

CMSC279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
CMSC	279	Undergraduate

Course Description
Experimental

CMSC300 - Co-Op Ed Experience in CSCI

Course Information

Course Title
Co-Op Ed Experience in CSCI

Subject code	Course Number	Academic Level
CMSC	300	Undergraduate

Course Description
Co-Op Ed Experience in CMSC

CMSC330 - Programming Languages

Course Information

Course Title
Programming Languages

Subject code	Course Number	Academic Level
CMSC	330	Undergraduate

Course Description
Introduction to the fundamental principles of programming language design, semantics, and implementation. Structure and vocabulary of modern programming languages. Programming language topics include formal semantics of programming, name binding, scope, data types, type systems, control flow, object orientation, scripting languages, functional languages, polymorphism, and concurrency. Labs and assignments will include experience in writing programs in a nonprocedural programming paradigm. Pre- or co-requisite: CMSC 362

Simple Requirements

Course Prerequisite or Corequisite

Type
Prerequisite

CMSC 362

Complete ALL of the following Courses:
- CMSC362 - Data Structures

CMSC340 - Computational Models

Course Information

Course Title
Computational Models

Subject code	Course Number	Academic Level
CMSC	340	Undergraduate

Course Description
Introduction to theory of computation. Topics include finite state automata, regular languages and grammars, pushdown automata, context-free languages and grammars, Turing machines, limits on algorithmic computation. Offered in spring. Prereq: C- or higher in CMSC 140, 162.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 140 and CMSC 162

Earn a minimum grade of C- in the following:
- CMSC140 - Discrete Structures
- CMSC162 - Introduction to Programming 2

CMSC350 - Cognitive Science

Course Information

Course Title
Cognitive Science

Subject code	Course Number	Academic Level
CMSC	350	Undergraduate

Course Description
Basic introduction to cognitive science. Reviews attempts to understand cognition using insights from psychology, artificial intelligence, philosophy, linguistics and the neurosciences. Examines the synthesis of those attempts in the emergent field of cognitive science. Offered periodically. Prereq: COMM 100, ENGL 110, junior status. No credit given if credit earned in PSYC/CMSC 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

CMSC362 - Data Structures

Course Information

Course Title
Data Structures

Subject code	Course Number	Academic Level
CMSC	362	Undergraduate

Course Description
Abstract data types, objects, algorithm design and analysis, trees, graphs, sorting and searching. Emphasis on ADT-based and object-oriented design, incremental development and testing, and comparison of data structure implementations. Offered in fall, spring. Prereq: C- or higher in CMSC 140 and CMSC 162.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 140 and CMSC 162

Earn a minimum grade of C- in the following:
- CMSC140 - Discrete Structures
- CMSC162 - Introduction to Programming 2

CMSC366 - Database Systems

Course Information

Course Title
Database Systems

Subject code	Course Number	Academic Level
CMSC	366	Undergraduate

Course Description
Introduction to building database-driven applications. Topics include data modeling, building databases, database queries, basic data management, Model View Controller design paradigm, basic database-driven application development, and non-relational database systems. Pre-req: C- or higher in CMSC 152 or 162 and CMSC 140 or MATH 120.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 152 or CMSC 162

Earn a minimum grade of C- in the following:
- CMSC152 - Intro to Programming for Data Science II
  OR CMSC162 - Introduction to Programming 2

CMSC 140 or MATH 120

Complete ANY of the following Courses:
- CMSC140 - Discrete Structures
- MATH120 - Logic for Information Technology

CMSC370 - Computer Architecture

Course Information

Course Title
Computer Architecture

Subject code	Course Number	Academic Level
CMSC	370	Undergraduate

Course Description
Structure of digital computers including register transfer notation, instruction set architecture, computer arithmetic, pipelining and parallel processors. Offered in fall. Prereq: C- or higher in CMSC 140, 162.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 140 and CMSC 162

Earn a minimum grade of C- in the following:
- CMSC140 - Discrete Structures
- CMSC162 - Introduction to Programming 2

CMSC375 - Computer Graphics

Course Information

Course Title
Computer Graphics

Subject code	Course Number	Academic Level
CMSC	375	Undergraduate

Course Description
Theory and implementation of computer graphics. Explores each stage of the graphics pipeline through topics such as mathematical representations of positions and transformations, graphics primitives, 3D modeling, cameras, clipping, lighting, texturing, animation, and rasterization. Students build a graphics engine by iteratively replacing library code with their own work. Pre-req: MATH 304 and C- or higher in CMSC 362.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 304

Complete ALL of the following Courses:
- MATH304 - Matrix Algebra & Applications

CMSC 362

Earn a minimum grade of C- in the following:
- CMSC362 - Data Structures

CMSC380 - Operating Systems

Course Information

Course Title
Operating Systems

Subject code	Course Number	Academic Level
CMSC	380	Undergraduate

Course Description
Design and implementation of operating systems including types of operating systems, file systems, resource management, concurrent processes, deadlocks, memory management techniques, processor scheduling, disk scheduling, operating system security and system administration. Students expected to develop significant operating systems programming projects. Offered in fall, spring. Prereq: C- or higher in CMSC 362, 370.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 362 and CMSC 370

Earn a minimum grade of C- in the following:
- CMSC362 - Data Structures
- CMSC370 - Computer Architecture

CMSC379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
CMSC	379	Undergraduate

Course Description
Experimental

CMSC395 - Computer Networks

Course Information

Course Title
Computer Networks

Subject code	Course Number	Academic Level
CMSC	395	Undergraduate

Course Description
Introduction to computer networks. Topics include network media, architecture and topology, protocols and layering, client-server models, Ethernet media and hardware, TCP/IP and other protocols, setup and system administration, application protocols and communication, network servers and services, security, data integrity, encryption, and firewalls. Offered periodically. Prereq: C- or higher in CMSC 362, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 362 and ENGL 110 or ENGL 110H

Earn a minimum grade of C- in the following:

- CMSC362 - Data Structures
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

CMSC400 - Co-Op Ed Experience in CSCI

Course Information

Course Title
Co-Op Ed Experience in CSCI

Subject code	Course Number	Academic Level
CMSC	400	Undergraduate

Course Description
Co-Op Ed Experience in CMSC

CMSC406 - Topics in Computer Science

Course Information

Course Title
Topics in Computer Science

Subject code	Course Number	Academic Level
CMSC	406	Undergraduate

Course Description
This course allows students and faculty to explore various topics in computer science that are not included in other course offerings. CMSC 406 may be taken more than once for cedit with departmental approval. Offered periodically. Prereq: depends on topic to be studied.

CMSC415 - Computer and Network Security

Course Information

Course Title
Computer and Network Security

Subject code	Course Number	Academic Level
CMSC	415	Undergraduate

Course Description
This course is designed to introduce students to topics which include attacks, standards, data integrity, symmetric key encryption, public key encryption, authentication, electronic mail security, IP security, Web security, database security, secure electronic transactions, network manage- ment security, malicious software and firewalls. Offered periodically. Prereq: C- or higher in CMSC 362.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 362

Earn a minimum grade of C- in the following:

- CMSC362 - Data Structures

CMSC419 - Mobile Device App Development

Course Information

Course Title
Mobile Device App Development

Subject code	Course Number	Academic Level
CMSC	419	Undergraduate

Course Description
This course will provide students with the skills necessary to design, develop, and deploy mobile device applications technology. Emphasis is placed on introducing students to the development environments, software and hardware limitations, and GUI development and event handling concepts when developing code to be executed on hand held devices. This course includes a laboratory component for example using Android/Java and IOS/iPhone/iPad Apps development environments. The successful student will learn the fundamental techniques for building mobile device apps including skills to write networked mobile apps that interact with remote services such as GPS, Bluetooth services, wireless hubs and devices, and web based client/server data systems. Pre-req: C- or higher in CMSC 362

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 362

Earn a minimum grade of C- in the following:
- CMSC362 - Data Structures

CMSC421 - Web Application Development

Course Information

Course Title
Web Application Development

Subject code	Course Number	Academic Level
CMSC	421	Undergraduate

Course Description
Introduction to building advanced web applications using modern approaches and technologies. Course covers development of responsive web applications using current industry-leading technology stacks and cloud-based services. Topics include asynchronous programming, an overview and use of cloud services, review of full stack technology, and development of real data-driven web applications. Pre-req: C- or higher in CMSC 362 and 366

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 362 and CMSC 366

Earn a minimum grade of C- in the following:
- CMSC362 - Data Structures
- CMSC366 - Database Systems

CMSC425 - Human-Computer Interaction

Course Information

Course Title
Human-Computer Interaction

Subject code	Course Number	Academic Level
CMSC	425	Undergraduate

Course Description
Design, evaluation and implementation of interactive computing systems for human use including study of the major phenomena surrounding them. Presents a broad overview of the field with an emphasis on interface development and evaluation. Offered periodically. Prereq: C- or higher in CMSC 362 required; CMSC 380 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 362

Earn a minimum grade of C- in the following:
- CMSC362 - Data Structures

CMSC 380 recommended.

CMSC435 - Compiler Construction

Course Information

Course Title
Compiler Construction

Subject code	Course Number	Academic Level
CMSC	435	Undergraduate

Course Description
Students implement a compiler for a simplified modern programming language. Theory of compiler construction, including finite-state automata, LL(1) grammars and top-down parsing. Project includes lexical and syntax analysis, name storage, scope and type analysis, error recovery and code generation. Advanced topics covered as time permits, including LR(k) grammars, bottom-up parsing, compiler generators (e.g., LEX and YACC) and code optimization. Offered periodically. Prereq: C- or higher in CMSC 330, 340, 362.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 330 and CMSC 340 and CMSC 362

Earn a minimum grade of C- in the following:
- CMSC330 - Programming Languages
- CMSC340 - Computational Models
- CMSC362 - Data Structures

CMSC450 - Artificial Intelligence

Course Information

Course Title
Artificial Intelligence

Subject code	Course Number	Academic Level
CMSC	450	Undergraduate

Course Description
Introduction to artificial intelligence including problem solving, search, heuristic methods, machine learning, knowledge representation, natural language processing, computer vision, expert systems, theorem proving and current applications. Concepts illustrated through programs developed in LISP or Prolog. Offered periodically. Prereq: C- or higher in CMSC 362 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 362 and ENGL 110 or ENGL 110H

Earn a minimum grade of C- in the following:

- CMSC362 - Data Structures
- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

CMSC452 - Data Mining

Course Information

Course Title
Data Mining

Subject code	Course Number	Academic Level
CMSC	452	Undergraduate

Course Description
An introduction to data mining, including data cleaning, the application of statistical and machine learning techniques to discover patterns in data, and the analysis of the quality and meaning of results. Machine learning topics may include algorithms for discovering association rules, classification, prediction, and clustering. Lab assignments provide practice applying specific techniques and analyzing results. An independent project provides students with the opportunity to guide a project from data selection and cleaning through to presentation of results. Pre-req: C- or higher in CMSC 366 and MATH 235 or 333 or 335.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 366 and MATH 235 or MATH 333 or MATH 335

Earn a minimum grade of C- in the following:

- CMSC366 - Database Systems
- MATH235 - Survey of Statistics
  OR MATH333 - Probablity and Statistics
  OR MATH335 - Mathematical Statistics 1

CMSC452H - Data Mining

Course Information

Course Title
Data Mining

Subject code	Course Number	Academic Level
CMSC	452H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 366 and MATH 235 or MATH 333 or MATH 335

Earn a minimum grade of C- in the following:

- CMSC366 - Database Systems
- MATH235 - Survey of Statistics
  OR MATH333 - Probablity and Statistics
  OR MATH335 - Mathematical Statistics 1

CMSC453 - Large-Scale Data Analytics and Visualization

Course Information

Course Title
Large-Scale Data Analytics and Visualization

Subject code	Course Number	Academic Level
CMSC	453	Undergraduate

Course Description
A practical introduction to data analytics, visualization, and blending theory. Students will learn about and apply various clustering algorithms and techniques for dealing with noisy data, use a distributed data analytics framework, complete laboratory assignments using version control, and enforce reproducibility by having all science easily sharable. Students will become familiar with modern data analytics methods and explore real-world data sets. Visualization of results will be a large component of the course through interactive and static frameworks. Pre-req: C- or higher in CMSC 366 and MATH 235 or 333 or 335.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 366 and MATH 235 or MATH 333 or MATH 335

Earn a minimum grade of C- in the following:

- CMSC366 - Database Systems
- MATH235 - Survey of Statistics
  OR MATH333 - Probablity and Statistics
  OR MATH335 - Mathematical Statistics 1

CMSC456 - Robotics and Computer Vision

Course Information

Course Title
Robotics and Computer Vision

Subject code	Course Number	Academic Level
CMSC	456	Undergraduate

Course Description
Intelligent robotic systems that deal with the physical world through visual, acoustic or tactile sensing. Fundamentals of robot vision, including image acquisition and camera geometry, pattern recognition, representation and analysis of shape, pixel neighborhoods, connectivity, distance measures, arithmetic operations on pixels and images, computations of area, centroid, moments, axis of least inertia, correlation techniques, histogram computation, manipulation of robot end effectors, robot task coordination and simple Cartesian robot manipulation. Offered periodically. C- or higher in CMSC 362.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC362

Earn a minimum grade of C- in the following:
- CMSC362 - Data Structures

CMSC467 - Analysis of Algorithms

Course Information

Course Title
Analysis of Algorithms

Subject code	Course Number	Academic Level
CMSC	467	Undergraduate

Course Description
Theory and techniques of algorithm design and analysis. For design, students will study a variety of algorithmic solutions to problems from application areas including searching, selecting, sorting, graph theory, number theory and encryption. Design paradigms, including greedy method, divide and conquer, dynamic programming, backtracking and branch-and-bound. For analysis, students will use formal techniques to classify execution time of an algorithm. Software tools are used to measure resources used by a program during execution. Offered infrequently. Prereq: C- or higher in CMSC 340.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 340

Earn a minimum grade of C- in the following:
- CMSC340 - Computational Models

CMSC476 - Parallel Programming

Course Information

Course Title
Parallel Programming

Subject code	Course Number	Academic Level
CMSC	476	Undergraduate

Course Description
Overview of parallel computing through study of parallel programming. Topics include message-passing, highly parallel computations, partitioning and divide-and-conquer strategies, pipelined and synchronous computations, load balancing and termination detection, programming with shared memory systems, parallel sorting algorithms, numerical algorithms, image processing, searching and optimization, and parallel programming using current technology. Offered periodically. Prereq: C- or higher in CMSC 362, 370.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 362 and CMSC 370

Earn a minimum grade of C- in the following:

- CMSC362 - Data Structures
- CMSC370 - Computer Architecture

CMSC479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
CMSC	479	Undergraduate

Course Description
Experimental

CMSC489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
CMSC	489	Undergraduate

Course Description
Honors Course

CMSC498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
CMSC	498	Undergraduate

Course Description
Independent study is available for well-qualified students. Students who receive approval for independent study are expected to complete a significant study or project in some area of computer science. A written report is required. Prereq: departmental permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Departmental Permission

Must have permission from the department.

CMSC499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
CMSC	499	Undergraduate

Course Description
Departmental Honors

CMSC501 - Coding for Educators

Course Information

Course Title
Coding for Educators

Subject code	Course Number	Academic Level
CMSC	501	Graduate

Course Description
This course is designed for k-12 teachers who have either little or no exposure to coding. Teachers will be guided to incorporate basic coding into their curriculum. This will include, introduction to computational thinking; hands-on HTML; hands-on/ unplugged coding activities; exposure and application to Scratch, Java, Python; and introduction to digital footprinting. Each teacher will create a take-home product that includes tools and coding activities that they can apply directly to their classes.

CMSC579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
CMSC	579	Graduate

Course Description
Experimental Graduate Course in Computer Science

CMSC697 - Topics in Computer Science

Course Information

Course Title
Topics in Computer Science

Subject code	Course Number	Academic Level
CMSC	697	Graduate

Course Description
Topics in Computer Science

CSCI121 - Introduction to Web Development

Course Information

Course Title
Introduction to Web Development

Subject code	Course Number	Academic Level
CSCI	121	Undergraduate

Course Description
Designed to introduce web development to students who are not computer science majors. Topics include web page content creation, styling, and scripting, as well as effective utilization of educational resources in service of web development. At the end of the course, students will be able to develop their own web pages to accomplish their individual personal and professional goals. No credit toward computer science major. Offered periodically.

Gateway Stage Labels
Technological Competency (TC)

CSCI475 - Video Game Design & Development

Course Information

Course Title
Video Game Design & Development

Subject code	Course Number	Academic Level
CSCI	475	Undergraduate

Course Description
Introduction to the knowledge and skills needed to create video games. Techniques for and important issues in game design, analysis, and implementation. Creation and use of media assets. Social, ethical, and professional issues. Students expected to build significant game projects using a modern engine. Offered periodically. Prereq: C- or higher in CSCI 362.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CSCI 362

Earn a minimum grade of C- in the following:

- CMSC362 - Data Structures

FYEX100K - First Year Experience: Exploring Computer Science

Course Information

Course Title
First Year Experience: Exploring Computer Science

Subject code	Course Number	Academic Level
FYEX	100K	Undergraduate

Course Description
Each First Year Seminar (FYEX) section features an academic centerpiece (a question, topic, or theme) that will ground the process of intellectual inquiry through a free exchange of ideas during and outside of class. FYEX instructors mentor and assist students in developing meaningful and purposeful goals. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

Criminology, Sociology and Anthropology Department

The Department of Criminology, Sociology and Anthropology offers both a major and minor in sociology, a major and minor in anthropology, an option and a minor in archaeology, and an option and a minor in criminology. Many departmental faculty teach in the women's, gender and sexuality studies, African-American studies and Latina(o) studies programs.

DEPARTMENT OPTIONS AND MINORS

For sociology majors wishing to concentrate their studies in the areas of criminal behavior and criminal justice, the department has a criminology option within the sociology major. This program provides the student not only with a thorough knowledge of the American criminal justice system, but combines that knowledge with a broad understanding of American society and the principles of sociological method and theory.

The archaeology option within the anthropology major offers students a broad view of contemporary archaeology, with emphasis on contract archaeology, artifact analysis, current method and theory, field experience and independent research.

The department strongly encourages all of its majors to acquire practical experience as part of their degree program. This experience may take a variety of forms, depending on the student's major or minor. Along with other activities, the department recommends participating in faculty-supervised research (ongoing research projects are conducted out of both the archaeology and social research labs), internships (see Internships in the Special Academic Opportunities section), studying abroad for a semester or summer term, or becoming a departmental tutor.

There is an honors program for academically motivated students. Further information may be obtained from the department or the departmental honors section of this catalog.

The department offers three minors: one in criminology, one in sociology and one in anthropology. These minors provide the student with insight into the principles governing human interaction and social organization. The criminology minor is the most specific of the three, focusing exclusively on the American criminal justice system. The sociology minor, in broad terms, examines American society, while the student minoring in anthropology can focus on either archaeology or cultural anthropology. All minors facilitate career advancement and intellectual breadth, regardless of the student's major field of study.

For the most recent career information, students should consult the criminology, sociology and anthropology department website.

Departmental Policies

Policies for Admission to the Anthropology Major

New students (freshmen and transfers) must be admitted to the anthropology major by the Office of Admissions upon admission to the university.

Admission into the Anthropology major from other departments is upon approval of the chairperson of the criminology, sociology, and anthropology department.

Non-degree and continuing education students must be admitted to the anthropology major by the office of admissions.

Policies for Retention to the Anthropology Major

University requirements for retention.

The Departmental Academic Review is a mandatory, non-graded activity designed primarily to enhance our departmental advising. Students cannot "fail" the review, and no student will be dismissed from the department based on a poor performance. The review will take place after the completion of 45 semester hours but no later than the semester following the completion of 60 semester hours. For students transferring into the major with more than 45 semester hours, the review will normally take place during the semester following their admission into the department. The review consists of a half-hour interview with the student, the student's adviser, and the department chairperson. The student is required to submit and essay and resume to the interview committee one week prior to the scheduled conference. If the student fails to participate in the review, they will be placed on probation-in-the-major for one semester, during which time they will be given a final opportunity to complete the review process. Failure to complete the review during the probationary period may result in the student being removed from the major. Students may appeal their dismissals to the department through either their adviser or the department chairperson.

Policies for Admission to the Sociology Major

New freshmen students must have the required SAT I scores or class rank as determined by the University administration.

Internal transfer students must:

- complete SOCY 101 (or an equivalent course) with a C or better,
- complete MATH 130 (or an equivalent course) with a C- or better,
- obtain a minimum CQPA of 2.0 and a QPA of at least 2.0 in courses required for the major,
- complete the Department Academic & Professional Review,
- complete 15 semester hours at Millersville University.

External transfer students must:

- complete SOCY 101 (or equivalent course) with a C or better,
- obtain a minimum CQPA of 2.0 and a QPA of at least 2.0 in courses required for the major,
- complete the Department Academic & Professional Planning Review.

Students who meet the above criteria may apply for admission to the Sociology major and will be admitted if space is available.

Policies for Retention in the Sociology Major

University requirements for retention.

Majors must maintain a minimum GPA of 2.0 overall and in the major. If either GPA falls below 2.0, the student has one semester to reestablish a 2.0, after which time the student will be dismissed from the major if either GPA remains below 2.0. A student who has been dismissed may petition the department to be readmitted after they have satisfied the minimum retention requirements. Students will be readmitted on a space-available basis.

A student must earn a minimum grade of C in SOCY 101 Introduction to Sociology; a minimum grade of C- in MATH 130 Elements of Statistics 1; a minimum grade of C in SOCY 230 Criminology; and a minimum grade of C- in SOCY 302 Social Statistics before taking courses for which these are prerequisites. A student who does not earn the necessary grade in these prerequisite courses by the second attempt will be dismissed from the sociology or sociology major. In addition, a minimum grade of C in SOCY 230: Criminology must be earned prior to taking SOCY 331 or 332. A student who does not earn the necessary grade in SOCY 230 by the second attempt will be dismissed from the Criminology option. Students will be readmitted on a space available basis upon successful completion of the course.

The Departmental Academic & Professional Planning Review is a mandatory, non-graded activity designed primarily to enhance our departmental advising. Students cannot "fail" the review, and no student will be dismissed from the department based on a poor performance. The review will take place after the completion of 45 semester hours but no later than the semester following the completion of 60 semester hours. It is the student's responsibility to contact their advisor to schedule the Academic Review after the completion of 45 semester hours. The review consists of a half-hour interview with the student's advisor and possibly the department chair. The student is required to submit an essay on their career goals and a resumé to the advisor one week prior to the scheduled conference. If the student fails to participate in the review, they will be placed on probation-in-the-major for one semester, during which time they will be given a final opportunity to complete the Academic Review. Failure to complete the review during the probationary period will result in the student being dismissed from the major. The Department Academic & Professional Planning Review is a graduation requirement.

FACULTY LIST
Garcia, Justin; Associate Professor College of Arts, Humanities and Social Sciences B.A., Millersville University, 2001; M.A., Temple University, 2008; Ph.D., Ibid., 2011
Jerstad, Stephanie; Assistant Professor College of Arts, Humanities and Social Sciences A.A.S., Harrison College, 2012; B.S., Ibid., 2014; M.S., University of Cincinnati, 2016; Ph.D., Southern Illinois University Carbondale, 2021
Orr, Ryan; Associate Professor College of Arts, Humanities and Social Sciences B.G.S., University of Kansas, 2001; M.A., DePaul University, 2004; Ph.D., Iowa State University, 2009
Porter, Aaron; Assistant Professor College of Arts, Humanities and Social Sciences B.A., Bloomsburg University, 1985; M.A., University of Pennsylvania, 1987; Ph.D., Ibid., 1993
Schmitt, Frederika; Department Chairperson, Associate Professor College of Arts, Humanities and Social Sciences B.A., Bucknell University, 1990; M.A., University of Delaware, 1994; Ph.D., Ibid., 1998
Smith, Carrie; Associate Professor College of Arts, Humanities and Social Sciences B.S., University of California, 1996; M.A., Vanderbilt University, 1998; Ph.D., Ibid., 2004
Trussell, Timothy; Associate Professor College of Arts, Humanities and Social Sciences B.S., Oregon State University, 1991; M.S., Ibid., 1997; Ph.D., Texas A&M University, 2004

Programs

Anthropology Minor

Overview

The minor in anthropology fits well with social science and humanities majors. Graduates are employed in the area of human services, entry-level work with local or federal government agencies and employment in the business community. Our program also prepares students for more advanced study which leads to careers in teaching and research at colleges, universities or museums or other not-for-profit organizations.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Anthropology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ANTH121 - Cultural Anthropology
- ANTH122 - Physical Anthropology

AND

Intro to Archeology (3 credits)

Complete ALL of the following Courses:

- ANTH123 - Introduction To Archaeology

AND

Ethnographic Methods or History of Anthropological Theory (3 credits)

Complete at least 1 of the following courses:

- ANTH220 - Ethnographic Methods
- ANTH422 - History of Anthropological Theory

AND

Anthropology Electives (300-400 level) (3 credits)

Earn at least 3 credits from the following:

- Any 3-level ANTH course(s)
- Any 4-level ANTH course(s)

Choose Anthropology electives at the 300 or 400 level in consultation with your adviser. If you select ANTH422 History of Anthropolgical Thry above, you may take 3 credits of elective at a lower level.

Archaeology Minor

Overview

The Archaeology option, housed within the Anthropology program at Millersville University, is dedicated to learning and understanding the role that Lancaster County and Colonial Pennsylvania played in the context of the larger colonial Atlantic World by way of ethical archaeological excavation, historical analysis and documentary research. Students may complete either a major or a minor in this field.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Archaeology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- ANTH121 - Cultural Anthropology
- ANTH123 - Introduction To Archaeology
- ANTH320 - Archeological Method and Theory

AND

Field Study (6 credits)

Earn at least 6 credits from the following:

- ANTH425 - Field Study

AND

Anthropology Elective (3 credits)

Choose one 3 credit hour Anthropology elective in consultation with your adviser.

Cultural Anthropology Minor

Overview

Millersville University's minor in Cultural Anthropology is a valuable complement to a major in any social science or humanities discipline. With a broad perspective on issues and problems regarding the human race, students are able to pair this minor with the major of their choosing in order to prepare for employment in fields such as not-for-profit organizations, entry-level work with local, state or federal government agencies, and employment in the business community. Students can also move into advanced study, which leads to careers in teaching and research at colleges, universities or museums, and careers within local, national or international business.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Cultural Anthropology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ANTH121 - Cultural Anthropology
- ANTH220 - Ethnographic Methods

AND

Anthropological Theory or Seminar in Anthropology (3 credits)

Complete at least 1 of the following courses:

- ANTH422 - History of Anthropological Theory
- ANTH458 - Seminar In Anthropology

AND

Anthropology Electives (9 credits)

Choose 9 credits of Anthropology electives in consultation with your adviser. At least 3 credits must be at the 300 level or higher, and no more than 3 credits may be at the 100 level.

Criminology Minor

Overview

The Millersville University criminology program provides students with an opportunity to study criminal behavior and the operation of the criminal justice system within a broad sociological context. The combination of a criminology focus with the development of sociological research skills provides excellent preparation for a wide range of criminal justice careers as well as for graduate and professional school. The minor courses cover theories of criminal behavior, policing, the courts, corrections, and other crime related topics. Students who minor in Criminology may also complete an internship in a criminal justice setting as part of their course work for the minor.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Criminology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology
- SOCI331 - Sociology of Policing & Courts
- SOCI332 - Modern Corrections
  OR SOCI332H - H:Modern Corrections

AND

Electives (6 credits)

Earn at least 6 credits from the following:

- Any 33-level SOCI course(s)

May also take a Co-Op course: SOCI300 Co-Op Ed Experience in Soc, SOCI400 Co-Op Ed Experience in Soc or SOCI500 Co-Op Ed Experience in Soc.

Note: A maximum of 3 credits in Co-op can be applied toward the minor.

Sociology Minor

Overview

The Millersville University Sociology minor enables students to develop a sociological imagination with which they can understand their place in and responsibility for the world around them. The Sociology minor can be combined with any major area of study to give students an important sociological context to their chosen careers. These 18 credit minors offer enough flexibility to be tailored to the individual student's interests.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Sociology

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology

AND

200-Level Sociology Elective

Complete at least 1 of the following:

Option 1. 200-Level Sociology Elective

Complete at least 1 of the following courses:

- SOCI210 - Sociology of the Family
- SOCI211 - Social Problems
  OR SOCI211H - H:Social Problems
- SOCI216 - Human Population
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

OR

Option 2. 200-Level Sociology Elective

Complete ALL of the following Course Sets:

- Any 2-level SOCI course(s)

AND

300-400 Level Sociology Electives

Complete at least 4 courses in the following course sets:

- Any 3-level SOCI course(s)
- Any 4-level SOCI course(s)

Anthropology, B.A.

Overview

The departmental major in anthropology emphasizes a holistic approach to the study of humans, located in all parts of the world, through all periods of time. Anthropology consists of four separate but interrelated subdisciplines:

- cultural anthropology
- physical anthropology
- archaeology
- anthropological linguistics

This program focuses primarily on the subdisciplines of archaeology and cultural anthropology. The department encourages its majors to undertake field study in one or more of the subdisciplines of anthropology. A major in anthropology provides the student with a holistic and comparative perspective on problems and situations, which employers find very valuable. An undergraduate degree prepares the student for employment in the area of human services, entry-level work with local or federal government agencies, and employment in the business community. Our program also prepares students for more advanced study leading to careers in teaching and research at colleges, universities or museums, or research/consultative careers with local, national or international organizations.

Curriculum

Simple Requirements

Major in Anthropology (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundation Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ANTH121 - Cultural Anthropology
- ANTH122 - Physical Anthropology

AND

Introduction to Archeology (3 credits)

Complete ALL of the following Courses:

- ANTH123 - Introduction To Archaeology

AND

Ethnographic Courses

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ANTH220 - Ethnographic Methods

AND

Ethnographic Elective (3 credits)

Complete at least 1 of the following courses:

- ANTH222 - American Indian
- ANTH223 - People and Cultures Of Mediter
- ANTH226 - Compar Societs:
- ANTH227 - Culture Through Film

AND

Comparative Course (3 credits)

Complete at least 1 of the following courses:

- ANTH325 - Medical Anthropology
- ANTH326 - Anthropology of Religion
- ANTH327 - Urban Anthropology
- ANTH336 - Language & Communication
- ANTH344 - Gender, Race, and Class

AND

Theoretical and Methodological Courses

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ANTH422 - History of Anthropological Theory

AND

Additional Theoretical and Methodological Course (3 credits)

3 credits of Anthropology coursework at the 300-level or above, in consultation with your advisor. No single course may be counted twice as both the Comparative Course requirement and the Theoretical & Methodological Course requirement.

AND

Anthropology Electives (6 credits)

Complete at least 2 of the following:

Course Options

Complete ANY of the following Courses:

- ANTH235 - Historical Archaeology
- ANTH320 - Archeological Method and Theory
- ENGL462 - Dialects of American English **OR** ENGL462H - Hnrs:Dialects of American English
- SOCI216 - Human Population
- SOCI302 - Social Statistics
- SOCI303 - Sociological Theory
- SOCI305 - Social Research Methods
- SOCI315 - Race and Ethnic Relations

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any ANTH course(s)

Note: This requirement may not be satisfied with ANTH 148.

Choose electives in consultation with your advisor. Sociology courses may be counted here toward the Anthropology degree if they are not used to meet requirements in the G3 block of General Education.

AND

Departmental Academic Review

After completion of 45 credits and no more than 60 credits students will complete this mandatory non-graded activity designed to enhance dept. advising.

Req Related for Anthropology, BA (6-9 credits)

Type
Completion Requirement

Requirements

Complete at least 1 of the following:

Option 1. Foreign Language Courses

Complete at least 6 credits in one Foreign Language at the University level. See advisor for options.

OR

Option 2. 9-12 Credits in Related Area Approved by Faculty

Please have your advisor submit a list of approved courses to degreeaudit@millersville.edu for inclusion.

Additional Comments:
Required Related for this degree may be fulfilled by completing a second major or a minor. To declare a second major or a minor, you must submit the paperwork through Academic Advisement. Otherwise, one of the options below must be chosen.

Anthropology, B.A. - Archaeology Option

Overview

The Archaeology option, housed within the Anthropology department, at Millersville University is dedicated to learning and understanding the role that Lancaster County and Colonial Pennsylvania played in the context of the larger colonial Atlantic World by way of ethical archaeological excavation, historical analysis and documentary research. Students may complete either a major or a minor in this field.

Curriculum

Simple Requirements

Major in Anthropology, Archaeology Option (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Anthropology Courses (15 credits)

Complete ALL of the following Courses:

- ANTH121 - Cultural Anthropology
- ANTH122 - Physical Anthropology
- ANTH123 - Introduction To Archaeology
- ANTH220 - Ethnographic Methods
- ANTH422 - History of Anthropological Theory

AND

Required Archaeology Courses (9 credits)

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ANTH233 - Topics In Archaeology
- ANTH320 - Archeological Method and Theory

AND

Field Study (3 credits)

Earn at least 3 credits from the following:

- ANTH425 - Field Study

AND

Anthropology Electives (6 credits)

Complete at least 2 of the following:

Course Options

Complete ANY of the following Courses:

- ANTH222 - American Indian
- ANTH227 - Culture Through Film
- ANTH235 - Historical Archaeology
- ANTH489 - Honors Course
- ANTH498 - Independent Study
- ANTH499 - Departmental Honors

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 2-level ANTH course(s)
- Any 3-level ANTH course(s)
- Any 4-level ANTH course(s)

Note: This requirement may not be satisfied with ANTH 201.

AND

Departmental Academic Review

After completion of 45 credits and no more than 60 credits students will complete this mandatory non-graded activity designed to enhance dept. advising.

Req Related for Anthropology, BA (6-9 credits)

Type
Completion Requirement

Requirements

Complete at least 1 of the following:

Option 1. Foreign Language Courses

Complete at least 6 credits in one Foreign Language at the University level. See advisor for options.

OR

Option 2. 9-12 Credits in Related Area Approved by Faculty

Please have your advisor submit a list of approved courses to degreeaudit@millersville.edu for inclusion.

Additional Comments:
Required Related for this degree may be fulfilled by completing a second major or a minor. To declare a second major or a minor, you must submit the paperwork through Academic Advisement. Otherwise, one of the options below must be chosen.

Sociology, B.A.

Overview

Sociology is the scientific study of human interaction and social organization. The sociologist is primarily interested in discovering the social patterns affecting and resulting from human group behavior. Sociologists focus on the influences of the social as well as the physical and biological environment on individual behavior and personality formation, on group interaction and on social organization and institutions. Within this general framework, sociological interests are extremely varied. The subject matter of sociology includes crime and its causation, family problems and interaction patterns, variations in the aging process, the impact of social class on life chances, the influence of mass media on human behavior, the social construction of gender and the transition from adolescence to adulthood. The sociology major is selected by those students primarily interested in pursuing careers in the following areas:

- college/university teaching and research
- research in a public or private organization or business
- employment in community agencies or in local, state or federal government

Curriculum

Simple Requirements

Major in Sociology, BA (31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Departmental Academic Review

After completion of 45 credits and no more than 60 credits students will complete this mandatory non-graded activity designed to enhance dept. advising

AND

Required Sociology Courses

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Earn a minimum grade of C in the following:

- SOCI101 - Introduction to Sociology

AND

Required Courses (10 credits)

Complete ALL of the following Courses:

- SOCI302 - Social Statistics
- SOCI303 - Sociological Theory
- SOCI305 - Social Research Methods

AND

Capstone Experience (3 credits)

Earn at least 3 credits from the following:

- SOCI300 - Co-Op Ed Experience in Soc
- SOCI448 - Seminar In Sociology
- SOCI499 - Departmental Honors

AND

Institutions and Social Life Block (6 credits)

Earn at least 6 credits from the following:

- SOCI317 - Medical Sociology
- SOCI318 - Soc Of Complex Organizations
- SOCI319 - Social Stratification
- SOCI320 - Sociology of Education
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology

AND

Individual and Society Block (6 credits)

Earn at least 6 credits from the following:

- SOCI210 - Sociology of the Family
- SOCI211 - Social Problems
  OR SOCI211H - H:Social Problems
- SOCI216 - Human Population
- SOCI313 - Sociology of Disaster
  OR SOCI313H - H: Sociology of Disaster
- SOCI316 - Social Psychology
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology
- SOCI441 - Urban Society
  OR SOCI441H - Hnrs: Urban Society

AND

Inequality and Difference Block (3 credits)

Earn at least 3 credits from the following:

- SOCI307 - African-Americn Social Thought
- SOCI308 - Soc of Afr-Amer and Lat Educ
- SOCI315 - Race and Ethnic Relations
- SOCI319 - Social Stratification
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology

Req Related for Sociology (3 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Elements of Statistics I (3 credits)

Earn a minimum grade of C- in the following:

- MATH130 - Elements of Statistics 1

MATH130 Elements of Statistics 1 or another advanced mathematical statistics course is a prerequisite for SOCI302 Social Statistics, Social Statistics.

Additional Comments:
The department encourages our majors to explore a minor in a related field of interest, including, but not limited to: African American Studies, Environmental Hazards and Emergency Management, Government and Political Affairs. Latino(a) Studies Pre-Law, Psychology, Social Justice (Social Work), Women's, Gender, and Sexuality Studies.

Sociology, B.A. - Criminology Option

Overview

The Millersville University Sociology program enables students to develop a sociological imagination with which they can understand their place in and responsibility for the world around them. Students seeking a Bachelor of Arts (B.A.) in Sociology develop a specialized skill set that allows them to investigate and comprehend the social world, in addition to acquiring knowledge on various sociological topics such as families, social class, gender and race. This skill set includes theoretical understandings, statistical techniques, data analysis and research methods. Students who select the Criminology option within the Sociology major also develop a specialized skill set with which they can investigate and comprehend the social world. This option encourages students to focus specifically on criminological topics, which include courts and policing, corrections, ethics in criminal justice, and juvenile delinquency.

Curriculum

Simple Requirements

Major in Sociology, BA (37 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Departmental Academic Review

After completion of 45 credits and no more than 60 credits students will complete this mandatory non-graded activity designed to enhance dept. advising

AND

Required Sociology Courses

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Earn a minimum grade of C in the following:

- SOCI101 - Introduction to Sociology

AND

Required Courses (10 credits)

Complete ALL of the following Courses:

- SOCI302 - Social Statistics
- SOCI303 - Sociological Theory
- SOCI305 - Social Research Methods

AND

Capstone Experience (3 credits)

Earn at least 3 credits from the following:

- SOCI300 - Co-Op Ed Experience in Soc
- SOCI448 - Seminar In Sociology
- SOCI499 - Departmental Honors

AND

Required Criminology Core (12 credits)

Complete ALL of the following Courses:

- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology
- SOCI331 - Sociology of Policing & Courts
- SOCI332 - Modern Corrections
- SOCI335 - Ethics in Criminal Justice

AND

Criminology Electives (3 credits)

Complete at least 1 of the following courses:

- SOCI334 - Juvenile Delinquency
- SOCI337 - Gender and the Law
  OR SOCI337H - Hon: Gender and the Law
- SOCI338 - Sociology of Deviance
  OR SOCI338H - H:Sociology of Deviance
- SOCI339 - Topics In Criminology
  OR SOCI339H - Hon: Topics In Criminology

If SOCI337 Gender and the Law or SOCI338 Sociology of Deviance is selected and it will also meet the Inequality & Difference credit required below.

AND

Inequality and Difference Block (3 credits)

Earn at least 3 credits from the following:

- SOCI211 - Social Problems
  OR SOCI211H - H:Social Problems
- SOCI307 - African-Americn Social Thought
- SOCI308 - Soc of Afr-Amer and Lat Educ
- SOCI315 - Race and Ethnic Relations
- SOCI319 - Social Stratification
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology
- SOCI337 - Gender and the Law
  OR SOCI337H - Hon: Gender and the Law
- SOCI338 - Sociology of Deviance
  OR SOCI338H - H:Sociology of Deviance

AND

Required Sociology Elective (3 credits)

Fulfill ANY of the following requirements:

Option 1

Earn at least 3 credits from the following:

- ANTH121 - Cultural Anthropology
- ANTH220 - Ethnographic Methods
- ANTH344 - Gender, Race, and Class
- ANTH422 - History of Anthropological Theory

OR

Option 2

Earn at least 3 credits from the following:

- Any SOCI course(s)

Note: This requirement may not be satisfied with SOCI 148.

Choose 3.0 credit hours of Sociology courses selected to complement a specific area within the field of Criminology. Note: An Anthropology course may be used if it has been approved by the department and is not used in th G3 block of the Gen Ed Requirements. Consult the department's Student Handbook for the list of approved courses. Additional Sociology courses taken, which could be applied to the major, but are in addition to minimum requirements, will appear here and be calculated into major GPA.

Req Related for Sociology/Criminology Option (3 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Elements of Statistics I

Earn a minimum grade of C- in the following:

- MATH130 - Elements of Statistics 1

The department encourages our majors to explore a minor in a related field of interest, including, but not limited to: African American Studies, Environmental Hazards and Emergency Management, Government and Political Affairs. Latino(a) Studies Pre-Law, Psychology, Social Justice (Social Work), Women's, Gender, and Sexuality Studies.

Courses

ANTH121 - Cultural Anthropology

Course Information

Course Title
Cultural Anthropology

Subject code	Course Number	Academic Level
ANTH	121	Undergraduate

Course Description
Introduces basic concepts and topics: culture, fieldwork, communication, sex roles, social organization, politics, economics, belief systems, culture change and applied anthropology.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

ANTH121H - Hnrs:Cultural Anthropology

Course Information

Course Title
Hnrs:Cultural Anthropology

Subject code	Course Number	Academic Level
ANTH	121H	Undergraduate

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

ANTH122 - Physical Anthropology

Course Information

Course Title
Physical Anthropology

Subject code	Course Number	Academic Level
ANTH	122	Undergraduate

Course Description
The anthropological study of human evolution: paleoanthropology, primatology and human population genetics, and the study of human variation the ways humans adapt biologically to their environments. Offered annually.

ANTH123 - Introduction To Archaeology

Course Information

Course Title
Introduction To Archaeology

Subject code	Course Number	Academic Level
ANTH	123	Undergraduate

Course Description
Introduces methods and theory of contemporary archaeology using examples from Old and New World prehistory. The relationship of archaeology to anthropology is emphasized. Offered annually.

Gateway Stage Labels
Information Literacies (IL)

ANTH179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ANTH	179	Undergraduate

Course Description
Experimental

ANTH220 - Ethnographic Methods

Course Information

Course Title
Ethnographic Methods

Subject code	Course Number	Academic Level
ANTH	220	Undergraduate

Course Description
Introduces ethnographic research methods through individual or group fieldwork, emphasizing the ethnographic interview and participant observation. Prereq: ENGL 110 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110H - Hnrs:Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Or must have permission of instructor.

ANTH222 - American Indian

Course Information

Course Title
American Indian

Subject code	Course Number	Academic Level
ANTH	222	Undergraduate

Course Description
Examination of past and present cultures of the native peoples of North America. Offered periodically. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ANTH223 - People and Cultures Of Mediter

Course Information

Course Title
People and Cultures Of Mediter

Subject code	Course Number	Academic Level
ANTH	223	Undergraduate

Course Description
Comparison and contrast of the history and culture of rural and urban society in the Mediterranean region. Focus is on topics and themes of importance to the circum-Mediterranean culture area. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ANTH121

Complete ALL of the following Courses:
- ANTH121 - Cultural Anthropology

ANTH226 - Compar Societs:

Course Information

Course Title
Compar Societs:

Subject code	Course Number	Academic Level
ANTH	226	Undergraduate

Course Description
Comparative investigations of a topic or region of current interest in the field of anthropology. Offered annually. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ANTH227 - Culture Through Film

Course Information

Course Title
Culture Through Film

Subject code	Course Number	Academic Level
ANTH	227	Undergraduate

Course Description
Comparative study of cultures through the medium of film using anthropological theories, perspectives and texts. Offered annually. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ANTH227H - Culture Through Film

Course Information

Course Title
Culture Through Film

Subject code	Course Number	Academic Level
ANTH	227H	Undergraduate

Course Description
Comparative study of cultures through the medium of film using anthropological theories, perspectives and texts. Offered annually. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ANTH233 - Topics In Archaeology

Course Information

Course Title
Topics In Archaeology

Subject code	Course Number	Academic Level
ANTH	233	Undergraduate

Course Description
Examines human cultural evolution before and after the advent of writing, using archaeological and related records. Topics vary from the rise of civilization to the decline of local communities. Offered annually.

ANTH233H - Hon: Topics In Archaeology

Course Information

Course Title
Hon: Topics In Archaeology

Subject code	Course Number	Academic Level
ANTH	233H	Undergraduate

ANTH235 - Historical Archaeology

Course Information

Course Title
Historical Archaeology

Subject code	Course Number	Academic Level
ANTH	235	Undergraduate

Course Description
A comparative study of methods and aims in the discipline of historical archaeology (the excavation of sites dating post-1500), including excavation and analysis techniques, approaches to archaeological research, and case studies of specific excavations.

Gateway Stage Labels
Problem Solving (PS)

ANTH279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ANTH	279	Undergraduate

Course Description
Experimental

ANTH300 - Co-Op Ed Experience in Anthro

Course Information

Course Title
Co-Op Ed Experience in Anthro

Subject code	Course Number	Academic Level
ANTH	300	Undergraduate

Course Description
Co-Op Ed Experience in Anthro

ANTH320 - Archeological Method and Theory

Course Information

Course Title
Archeological Method and Theory

Subject code	Course Number	Academic Level
ANTH	320	Undergraduate

Course Description
Focus on current developments in archaeological method and theory, with specific emphasis on contract archaeology, survey methods, artifact analysis and contemporary theoretical approaches. Offered annually. Prereq: ANTH 123 plus 3 additional hours of anthropology or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ANTH 123

Complete ALL of the following Courses:
- ANTH123 - Introduction To Archaeology

Additional Hours of Anthropology

Earn at least 3 credits
Or must have permission of instructor.

ANTH320H - Hon: Archeological Method and Theory

Course Information

Course Title
Hon: Archeological Method and Theory

Subject code	Course Number	Academic Level
ANTH	320H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ANTH 123

Complete ALL of the following Courses:
- ANTH123 - Introduction To Archaeology

Additional Hours of Anthropology

Earn at least 3 credits
Or must have permission of instructor.

ANTH325 - Medical Anthropology

Course Information

Course Title
Medical Anthropology

Subject code	Course Number	Academic Level
ANTH	325	Undergraduate

Course Description
Cross-cultural study of health and healing, including comparative medical systems, theories of disease, patients/healers in the context of culture, mental health, bioethics, interaction of culture, biology and environment, and the effects of cultural change. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ANTH121

Complete ALL of the following Courses:
- ANTH121 - Cultural Anthropology

ANTH326 - Anthropology of Religion

Course Information

Course Title
Anthropology of Religion

Subject code	Course Number	Academic Level
ANTH	326	Undergraduate

Course Description
A cross-cultural examination of religious diversity. Primary emphasis will be placed on the five major world religions, although other religious traditions may also be considered. The course examines religion as a form of cultural practice, how people utilize religion to orient themselves to the social worlds in which they live, and the ways in which religion shapes peoples' lives. Pre-req: C- or higher in ANTH 121, restricted to Juniors and Seniors, Majors and Minors in the Sociology/Anthropology department, or instructor permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ANTH 121

Earn a minimum grade of C- in the following:
- ANTH121 - Cultural Anthropology

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Majors and Minors in the Sociology/Anthropology Department

Must be a major or minor in the Sociology/ Anthropology department.
Or must have permission of instructor.

ANTH327 - Urban Anthropology

Course Information

Course Title
Urban Anthropology

Subject code	Course Number	Academic Level
ANTH	327	Undergraduate

Course Description
This course focuses on urbanism (the social and cultural dynamics of humans living within a large, dense city environment). Various topics to be examined in this course include the rise of urbanism, globalization, the dynamic nature of ethnic and class relations within urban communities, social and political activism among urban populations, migration, and settlement. 3 credits.
Pre-requisite: ANTH 121

Simple Requirements

Course Prerequisites

Type
Prerequisite

ANTH121

Complete ALL of the following Courses:
- ANTH121 - Cultural Anthropology

ANTH336 - Language & Communication

Course Information

Course Title
Language & Communication

Subject code	Course Number	Academic Level
ANTH	336	Undergraduate

Course Description
Examines language as humans' primary means of communication, from an anthropological sociolinguistic framework. A systemic approach towards language study investigates the structural components of language (phonemes, morphemes, syntax, grammar, etc), while a performance approach towards language study the art and styles of linguistic use (regional accents and dialects, code switching, slang, etc). Both approaches are utilized, although primary emphasis is placed on language as performance.

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ANTH 121

Complete ALL of the following Courses:
- ANTH121 - Cultural Anthropology

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ANTH344 - Gender, Race, and Class

Course Information

Course Title
Gender, Race, and Class

Subject code	Course Number	Academic Level
ANTH	344	Undergraduate

Course Description
The intersecting role of gender, race and class on human social life in the U.S. and other cultures. An interdisciplinary and comparative examination of the ways social categories define, limit and liberate human potential. Offered annually. Prereq: COMM 100, ENGL 110, junior status and at least two social science courses.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Two Social Sciences Courses

At least two social sciences courses

ANTH344H - Hnrs:Gender, Race, and Class

Course Information

Course Title
Hnrs:Gender, Race, and Class

Subject code	Course Number	Academic Level
ANTH	344H	Undergraduate

Course Description
Hnrs:Gender, Race, and Class

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Two Social Sciences Courses

At least two social sciences courses

ANTH379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ANTH	379	Undergraduate

Course Description
Experimental

ANTH400 - Co-Op Ed Experience in Anthro

Course Information

Course Title
Co-Op Ed Experience in Anthro

Subject code	Course Number	Academic Level
ANTH	400	Undergraduate

Course Description
Co-Op Ed Experience in Anthro

ANTH422 - History of Anthropological Theory

Course Information

Course Title
History of Anthropological Theory

Subject code	Course Number	Academic Level
ANTH	422	Undergraduate

Course Description
Examines, in a developmental fashion, the attempts made by anthropologists to explain human similarities and differences, and the dynamics of culture change. Offered annually. Prereq: junior/senior status and a minimum of 9 s.h. in anthropology.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Minimum Anthropology Credits

Earn at least 9 credits

ANTH425 - Field Study

Course Information

Course Title
Field Study

Subject code	Course Number	Academic Level
ANTH	425	Undergraduate

Course Description
Individual or group research in any of the subdisciplines of anthropology, including archaeological field school and ethnographic field projects. Offered periodically. Prereq: permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Instructor Permission

Must have permission of the instructor.

ANTH458 - Seminar In Anthropology

Course Information

Course Title
Seminar In Anthropology

Subject code	Course Number	Academic Level
ANTH	458	Undergraduate

Course Description
Research and group discussions for advanced students on various topics of interest. A total of 6 s.h. may be taken. Offered in alternate years. Prereq: permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Instructor Permission

Must have permission of the instructor.

ANTH479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ANTH	479	Undergraduate

Course Description
Experimental

ANTH489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ANTH	489	Undergraduate

Course Description
Two to four semesters of supervised research by highly motivated students capable of conducting independent research projects. Prereq: 3.0 GPA and recommendation by faculty mentor. For further information, see the Special Academic Opportunities section.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Minimum GPA and Faculty Mentor Recommendation

Must have a 3.0 GPA and recommendation by a faculty mentor.

ANTH498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
ANTH	498	Undergraduate

Course Description
For further information, see the Special Academic Opportunities section.

ANTH499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
ANTH	499	Undergraduate

Course Description
Two to four semesters of supervised research by highly motivated students capable of conducting independent research projects. Prereq: 3.0 GPA and recommendation by faculty mentor. For further information, see the Special Academic Opportunities section.

ANTH500 - Co-Op Ed Experience in Anthro

Course Information

Course Title
Co-Op Ed Experience in Anthro

Subject code	Course Number	Academic Level
ANTH	500	Graduate

Course Description
Co-Op Ed Experience in Anthro

FYEX100AC - First-Year Experience: Sports in U.S. History/Culture

Course Information

Course Title
First-Year Experience: Sports in U.S. History/Culture

Subject code	Course Number	Academic Level
FYEX	100AC	Undergraduate

Course Description
Throughout history, sports have played an important role in the cultures of many societies around the world – and the United States is no exception. Although often overlooked, events in (and aspects of) sports have far deeper meanings and consequences than simply the final outcome of a match. We will examine various sports (including baseball, basketball, football, boxing, pro wrestling, etc.) and their impact on American society over the nation's history. We will investigate the relationship between sports and larger issues such as gender, social class, ethnicity, and nationalism in order to explore how developments in sports have influenced, and have been influenced by, the larger society/culture and vice-versa. You do not necessarily have to be a sports fan to understand or enjoy this course because our focus is not so much on just the game itself, but rather what happened off the field and its impact on the broader society. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

SOCI101 - Introduction to Sociology

Course Information

Course Title
Introduction to Sociology

Subject code	Course Number	Academic Level
SOCI	101	Undergraduate

Course Description
Introduction to the scientific study of human groups, organizations and societies. Examination of major sociological questions and approaches to studying them.

SOCI101H - Introduction to Sociology

Course Information

Course Title
Introduction to Sociology

Subject code	Course Number	Academic Level
SOCI	101H	Undergraduate

Course Description
Introduction to the scientific study of human groups, organizations and societies. Examination of major sociological questions and approaches to studying them.

SOCI179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SOCI	179	Undergraduate

Course Description
Experimental

SOCI210 - Sociology of the Family

Course Information

Course Title
Sociology of the Family

Subject code	Course Number	Academic Level
SOCI	210	Undergraduate

Course Description
The family as a social institution. Topics include the family in mass society, diverse family forms, human sexuality, typologies of love, mate selection, husband-wife interaction, parent-child interaction, family disorganization and American ethnic families. Specific topics may vary.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

SOCI210H - Sociology of the Family

Course Information

Course Title
Sociology of the Family

Subject code	Course Number	Academic Level
SOCI	210H	Undergraduate

Course Description
The family as a social institution. Topics include the family in mass society, diverse family forms, human sexuality, typologies of love, mate selection, husband-wife interaction, parent-child interaction, family disorganization and American ethnic families. Specific topics may vary.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

SOCI211 - Social Problems

Course Information

Course Title
Social Problems

Subject code	Course Number	Academic Level
SOCI	211	Undergraduate

Course Description
A sociological examination of problem areas or human concerns such as poverty, labor issues, substance abuse, domestic violence, crime and justice, health, the environment, discrimination and globalization. Topics may vary. Prereq: ENGL 110.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

SOCI211H - H:Social Problems

Course Information

Course Title
H:Social Problems

Subject code	Course Number	Academic Level
SOCI	211H	Undergraduate

Course Description
H:Social Problems

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

SOCI216 - Human Population

Course Information

Course Title
Human Population

Subject code	Course Number	Academic Level
SOCI	216	Undergraduate

Course Description
Analysis of population processes such as fertility, mortality, composition, distribution and migration patterns; relationship of population processes to social, economic and political development; effects of status differences; trends in population change. Offered periodically.

SOCI230 - Criminology

Course Information

Course Title
Criminology

Subject code	Course Number	Academic Level
SOCI	230	Undergraduate

Course Description
The nature and causes of criminal behavior and the types of social response to law violation. Offered in fall, spring. Prereq: SOCI 101, ENGL 110.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

SOCI 101

Complete ALL of the following Courses:
- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology

SOCI230H - Hon: Criminology

Course Information

Course Title
Hon: Criminology

Subject code	Course Number	Academic Level
SOCI	230H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:

- ENGL 110 and COMM 100

SOCI300 - Co-Op Ed Experience in Soc

Course Information

Course Title
Co-Op Ed Experience in Soc

Subject code	Course Number	Academic Level
SOCI	300	Undergraduate

Course Description
Co-Op Ed Experience in Soc

SOCI302 - Social Statistics

Course Information

Course Title
Social Statistics

Subject code	Course Number	Academic Level
SOCI	302	Undergraduate

Course Description
Emphasis on learning and presenting findings from applied statistical techniques, including frequency tables and graphs, contingency tables, measures of central tendency and dispersion, hypothesis testing, confidence intervals, analysis of variance, correlation, and linear regression (bivariate and multiple). SPSS software package used. Prereq: C- or higher in Math 130 and 9 s.h. in sociology/anthropology.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 130 or MATH 235

Earn a minimum grade of C- in the following:

- MATH130 - Elements of Statistics 1
  OR ECON235 - Mathematical Economics

Minimum Sociology/Anthropology Credits

Earn at least 9 credits

SOCI303 - Sociological Theory

Course Information

Course Title
Sociological Theory

Subject code	Course Number	Academic Level
SOCI	303	Undergraduate

Course Description
Examination of classical and contemporary theoretical traditions; relevance of sociology to everyday life; works of selected theorists such as Durkheim, Marx, Weber, Merton. Offered fall, spring. Prereq: SOCI 101 and 9 s.h. of sociology at the 200 level or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H

Complete ANY of the following Courses:
- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology

Minimum Sociology Credits at SOCI 200 Level or Higher

Earn at least 9 credits

SOCI305 - Social Research Methods

Course Information

Course Title
Social Research Methods

Subject code	Course Number	Academic Level
SOCI	305	Undergraduate

Course Description
Introduction to research design, sampling, data collection, measurement, and analysis in sociology; exploration of quantitative, qualitative, and mixed-methods approaches; evaluation of existing research; presentation of data and findings. Offered in spring only. Prereq C- or higher, in ENGL 110, SOCI 302 and SOCI 303.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and SOCI 301 and SOCI 302 and SOCI 303

Earn a minimum grade of C- in the following:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- SOCI302 - Social Statistics
- SOCI303 - Sociological Theory

SOCI307 - African-Americn Social Thought

Course Information

Course Title
African-Americn Social Thought

Subject code	Course Number	Academic Level
SOCI	307	Undergraduate

Course Description
Examination of the development of African-American social theory through the history of the American republic. Looks at the relationship between African-American social thought, civil rights movements and the larger Afro-Caribbean diaspora. Offered infrequently. Prereq: 9 s.h. in African-American Studies or SOCI 101 and 9 s.h. in sociology (SOCI 303 recommended) or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Minimum Sociology Credits

Earn at least 9 credits
Or permission of instructor. SOCI 303 Recommended.

Additional Course Prerequisites: Complete 1 of the following

Type
Prerequisite

SOCI 101 or SOCI 101H

Complete ANY of the following Courses:
- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology

Minimum African American Studies Credits

Earn at least 9 credits

SOCI308 - Soc of Afr-Amer and Lat Educ

Course Information

Course Title
Soc of Afr-Amer and Lat Educ

Subject code	Course Number	Academic Level
SOCI	308	Undergraduate

Course Description
Social and historical analysis of the secondary and postsecondary experiences of African-American and Latino/a youth in the U.S. informed by critical race, feminist and stratification theories. Offered periodically. Prereq: SOCI 101 or LAAS 201.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H or LAAS 201

Complete ANY of the following Courses:
- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology
- LAAS201 - Introduction to Latino Studies

SOCI310 - Sociology of Religion

Course Information

Course Title
Sociology of Religion

Subject code	Course Number	Academic Level
SOCI	310	Undergraduate

Course Description
Sociological understanding and interpreting religious phenomena including insight regarding the place of religion in society; the functional and conflict orientation to religion; religion and the individual; institutionalization of religion; religion and social change; and the secularization of religion. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI101 or SOCI101H

Complete ANY of the following Courses:
- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology

SOCI313 - Sociology of Disaster

Course Information

Course Title
Sociology of Disaster

Subject code	Course Number	Academic Level
SOCI	313	Undergraduate

Course Description
Behavioral and organizational response to environmental hazards and disasters. Case studies of major natural disasters and hazardous-materials incidents illustrate individual, group and societal challenges faced in such events. Issues include building a disaster-resistant community, the impact of the media, and governmental successes and failures. Offered annually. Prereq: SOCI 101 or SOCI 211. A required course for the EHEM minor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H or SOCI 211 or SOCI 211H

Complete ANY of the following Courses:
- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology
- SOCI211 - Social Problems
- SOCI211H - H:Social Problems

SOCI313H - H: Sociology of Disaster

Course Information

Course Title
H: Sociology of Disaster

Subject code	Course Number	Academic Level
SOCI	313H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H or SOCI 211 or SOCI 211H

Complete ANY of the following Courses:

- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology
- SOCI211 - Social Problems
- SOCI211H - H:Social Problems

SOCI315 - Race and Ethnic Relations

Course Information

Course Title
Race and Ethnic Relations

Subject code	Course Number	Academic Level
SOCI	315	Undergraduate

Course Description
Study of racial and ethnic relations, modes of adaptation of minorities and cross-cultural examinations of dominant-minority relations. Offered annually. Prereq: 3 s.h. of sociology or junior/senior status.

Simple Requirements

Course Prerequisites: Complete 1 of the following

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Sociology Credit Hours

Earn at least 3 credits

SOCI316 - Social Psychology

Course Information

Course Title
Social Psychology

Subject code	Course Number	Academic Level
SOCI	316	Undergraduate

Course Description
Introduction to sociological social psychology; how social interactions are created, become patterned and susceptible to change; how society is structured through social interaction; and how social identities are formed. Specific topics may vary. Offered periodically. Prereq: ENGL 110, 3 s.h. of sociology or junior/senior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Additional Course Prerequisites: Complete 1 of the following

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Sociology Credit Hours

Earn at least 3 credits

SOCI317 - Medical Sociology

Course Information

Course Title
Medical Sociology

Subject code	Course Number	Academic Level
SOCI	317	Undergraduate

Course Description
Social and cultural factors in health and illness; social organization of the medical care system; structural and interactional aspects of healthcare. Prereq: 3 s.h. sociology or junior/senior status. Offered periodically.

Simple Requirements

Course Prerequisites: Complete 1 of the following

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Sociology Credit Hours

Earn at least 3 credits

SOCI318 - Soc Of Complex Organizations

Course Information

Course Title
Soc Of Complex Organizations

Subject code	Course Number	Academic Level
SOCI	318	Undergraduate

Course Description
Social-interaction processes in business and industry; nature and effects of complex industrial organization; interrelationships among industry and other social subsystems. Offered periodically. Prereq: 3 s.h. sociology or junior/senior status.

Simple Requirements

Course Prerequisites: Complete 1 of the following

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Sociology Credit Hours

Earn at least 3 credits

SOCI319 - Social Stratification

Course Information

Course Title
Social Stratification

Subject code	Course Number	Academic Level
SOCI	319	Undergraduate

Course Description
The development of social inequality by race, ethnicity, class, gender and nationality. The social construction of race and gender; various theories of class distribution. Inequality in education, housing and the workplace are discussed. Global instances of inequalities are also discussed. Offered periodically. Prereq: 3 s.h. of sociology and junior/senior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Minimum Sociology Credits

Earn at least 3 credits

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

SOCI320 - Sociology of Education

Course Information

Course Title
Sociology of Education

Subject code	Course Number	Academic Level
SOCI	320	Undergraduate

Course Description
Analysis of education as a social institution and its relationship to other institutions; the roles of educator, administrator, student and parent; implications of subcultures, social stratification and social change. Offered infrequently.

SOCI329 - Topics in Sociology

Course Information

Course Title
Topics in Sociology

Subject code	Course Number	Academic Level
SOCI	329	Undergraduate

Course Description
Offered periodically.

SOCI329H - Hnrs: Topics in Sociology

Course Information

Course Title
Hnrs: Topics in Sociology

Subject code	Course Number	Academic Level
SOCI	329H	Undergraduate

SOCI331 - Sociology of Policing & Courts

Course Information

Course Title
Sociology of Policing & Courts

Subject code	Course Number	Academic Level
SOCI	331	Undergraduate

Course Description
Overview of the American system for the administration of justice focused on the apprehension, prosecution and adjudication of criminal defendants. Offered in fall. Prereq: SOCI 101, 230.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and SOCI 101 or SOCI 101H and SOCI 230 or SOCI 230H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI332 - Modern Corrections

Course Information

Course Title
Modern Corrections

Subject code	Course Number	Academic Level
SOCI	332	Undergraduate

Course Description
Contemporary American responses to crime. Concentrates on the origins, nature, functions and limitations of American correctional modalities. Offered in spring. Prereq: SOCI 101, 230.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H and SOCI 230 or SOCI 230H

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI332H - H:Modern Corrections

Course Information

Course Title
H:Modern Corrections

Subject code	Course Number	Academic Level
SOCI	332H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H and SOCI 230 or SOCI 230H

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI334 - Juvenile Delinquency

Course Information

Course Title
Juvenile Delinquency

Subject code	Course Number	Academic Level
SOCI	334	Undergraduate

Course Description
Nature and extent of juvenile crime; theories of causation; techniques of control and prevention. Offered annually. Prereq: SOCI 101, 230.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H and SOCI 230 or SOCI 230H

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI335 - Ethics in Criminal Justice

Course Information

Course Title
Ethics in Criminal Justice

Subject code	Course Number	Academic Level
SOCI	335	Undergraduate

Course Description
Examines numerous ethical theories and their application to policing, courts and corrections in the United States. A global analysis of current research, theories and case studies on human trafficking will also be a focus. Prerequisites: SOCI 101 and SOCI 230.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI101 or SOCI101H and SOCI230 or SOCI230H

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI335H - Hon: Ethics in Criminal Justice

Course Information

Course Title
Hon: Ethics in Criminal Justice

Subject code	Course Number	Academic Level
SOCI	335H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI101 or SOCI101H and SOCI230 or SOCI230H

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI337 - Gender and the Law

Course Information

Course Title
Gender and the Law

Subject code	Course Number	Academic Level
SOCI	337	Undergraduate

Course Description
Analyze how the courts and the law construct gender and how these social constructions of gender in the law impact individuals, families, groups, and institutions. Examine the lives of women & girls as offenders, prisoners, victims/ survivors and workers in the criminal justice system from a variety of perspectives and disciplines. Analyze how the intersections of sexism, racism, heterosexism, and classism impact the lives of individuals and communities in regard to criminality.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI101 or SOCI101H and SOCI230 or SOCI230H

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI337H - Hon: Gender and the Law

Course Information

Course Title
Hon: Gender and the Law

Subject code	Course Number	Academic Level
SOCI	337H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI101 or SOCI101H and SOCI230 or SOCI230H

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI338 - Sociology of Deviance

Course Information

Course Title
Sociology of Deviance

Subject code	Course Number	Academic Level
SOCI	338	Undergraduate

Course Description
Deviance as a social phenomenon. Discusses how definitions of deviance have changed over time, how people become labeled deviant and the utility of various theories of deviance. Offered annually. Prereq: SOCI 101.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H

Complete ANY of the following Courses:

- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology

SOCI338H - H:Sociology of Deviance

Course Information

Course Title
H:Sociology of Deviance

Subject code	Course Number	Academic Level
SOCI	338H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H

Complete ANY of the following Courses:

- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology

SOCI339 - Topics In Criminology

Course Information

Course Title
Topics In Criminology

Subject code	Course Number	Academic Level
SOCI	339	Undergraduate

Course Description
The nature, extent, origins and possible solutions to select problems in contemporary criminology. Offered periodically. Prereq: SOCI 101 and 230 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H and SOCI 230 or SOCI 230H or permission of instructor

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI339H - Hon: Topics In Criminology

Course Information

Course Title
Hon: Topics In Criminology

Subject code	Course Number	Academic Level
SOCI	339H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H and SOCI 230 or SOCI 230H or permission of instructor

Complete ALL of the following Courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology

SOCI379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SOCI	379	Undergraduate

Course Description
Experimental

SOCI400 - Co-Op Ed Experience in Soc

Course Information

Course Title
Co-Op Ed Experience in Soc

Subject code	Course Number	Academic Level
SOCI	400	Undergraduate

Course Description
Co-Op Ed Experience in Soc

SOCI441 - Urban Society

Course Information

Course Title
Urban Society

Subject code	Course Number	Academic Level
SOCI	441	Undergraduate

Course Description
Historical and postmodern analysis of urban development, in particular the impact of demographic, political and socioeconomic structural changes on the social fabric of U.S. metropolitan cities. Topics include inner-city life and culture, race, gender, class relations and policy implications. Offered periodically. Prereq: SOCI 101.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H

Complete ANY of the following Courses:
- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology

SOCI441H - Hnrs: Urban Society

Course Information

Course Title
Hnrs: Urban Society

Subject code	Course Number	Academic Level
SOCI	441H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOCI 101 or SOCI 101H

Complete ANY of the following Courses:
- SOCI101 - Introduction to Sociology
- SOCI101H - Introduction to Sociology

SOCI448 - Seminar In Sociology

Course Information

Course Title
Seminar In Sociology

Subject code	Course Number	Academic Level
SOCI	448	Undergraduate

Course Description
Research and group discussion for advanced students on various topics of interest. A total of 6 s.h. may be taken.

SOCI479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SOCI	479	Undergraduate

Course Description
Experimental

SOCI489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
SOCI	489	Undergraduate

Course Description
Two to four semesters of supervised research through independent projects. Prereq: 3.0 GPA and recommendation by a faculty mentor. For further information, see the Special Academic Opportunities section.

Simple Requirements

Course Prerequisites

Type
Prerequisite

3.0 GPA Required

Must have a 3.0 GPA.

Faculty Mentor Recommendation

Must have a recommendation by a faculty mentor.

SOCI498 - Independent Study in Sociology

Course Information

Course Title
Independent Study in Sociology

Subject code	Course Number	Academic Level
SOCI	498	Undergraduate

Course Description
For further information, see the Special Academic Opportunities section. Prereq: 3.0 GPA and permission of faculty member.

Simple Requirements

Course Prerequisites

Type
Prerequisite

3.0 GPA Required

Must have a 3.0 GPA.

Faculty Mentor Recommendation

Must have a recommendation by a faculty mentor.

SOCI499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
SOCI	499	Undergraduate

Course Description
Two to four semesters of supervised research through independent projects. Prereq: 3.0 GPA and recommendation by a faculty mentor. For further information, see the Special Academic Opportunities section.

Simple Requirements

Course Prerequisites

Type
Prerequisite

3.0 GPA Required

Must have a 3.0 GPA.

Faculty Mentor Recommendation

Must have a recommendation by a faculty mentor.

SOCI500 - Co-Op Ed Experience in Soc

Course Information

Course Title
Co-Op Ed Experience in Soc

Subject code	Course Number	Academic Level
SOCI	500	Graduate

Course Description
Co-Op Ed Experience in Soc

Early, Middle & Elementary Education Department

We welcome you as participants in the Early Childhood, Middle Level, and Elementary Education programs. Many rewarding experiences and challenges await you. We are looking forward to working with you to make this a successful and memorable learning endeavor.

FACULTY LIST
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Wolfgang, Charlton; Professor College of Education and Human Services B.S., Messiah College, 1993; M.S.Ed., Lebanon Valley College, 2002; Ph.D., Drexel University, 2013

Programs

Early Childhood Education Post-Baccalaureate Certification

Overview

A post-baccalaureate certification program in early childhood education helps people with a bachelor's degree earn a teaching certificate. This program prepares teachers to meet the needs of students in early childhood education grades PreK-4th grade.

Program details

Admission requirements
Includes a bachelor's degree in any field.

Coursework
Includes classes on early childhood development, literacy, and teaching methods

Benefits

- Our program is recognized and certified by Pennsylvania Department of Education (PDE), and the Council for the Accreditation of Educator Preparation (CAEP), Middle States Commission on Higher Education (MSCHE)
- Allows people to earn a teaching certificate without pursuing a second degree
- Helps teachers learn how to create engaging learning environments
- Prepares teachers to address changing demands in early childhood education
- Students can complete the certification program in as little as 15 months and both certification and Master’s degree in under two years.
- Classes focus on curriculum, assessment, early childhood development, early intervention, teaching English Language Learners, advanced educational courses in content, pedagogy and instruction.

Admission Requirements:
• A **bachelor’s degree in any field**
• Passion for working with young learners

At Millersville University, we are committed to developing **highly skilled, compassionate educators** ready to make a lasting impact in early childhood education. Join us and take the next step toward your teaching career today!

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Education Core for Early Childhood (PK-4) (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- EDUC580 - Methods for Teaching English Language Learners
- EDUC535 - Children's Literature and Creative Experiences for Young Children and Adolescents
- SPED618 - Advanced Topics in Early Intervention
- ECED613 - Home, School, and Community

AND

Curriculum, Instruction, & Assessment: Engaging Young Children (3 credits)

Complete ALL of the following Courses:

- ECED610 - Advanced Curriculum, Instruction and Assessment: Engaging Young Learners

You MUST contact your Early Childhood Education Advisor and schedule an appointment to map out your program prior to registration for ANY coursework. Failure to meet with your advisor may cause you to take unnecessary coursework or extend your program

due to timing or courses offered.

Professional Education- Early Childhood Cert (18 credits)

Type
Completion Requirement

Professional Education

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- EDUC651 - Math in the School Program
- EDUC643 - Curriculum Trends in Social Studies
- EDUC661 - Science in the School Program
- READ620 - Current Practices in Literacy Education

Student Teaching (6 credits)

Earn at least 6 credits from the following:

- ECED690 - Graduate Student Teaching

Literacy Coaching Endorsement

Overview

The fundamental goal of the Literacy Coaching Endorsement is to prepare teachers who will be effective in helping improve the knowledge, skills, and practices of teachers, thus enhancing student achievement. A literacy coach is one who helps teachers to recognize what they know and can do, assists teachers as they strengthen their ability to make more effective use of what they know and do, and supports teachers as they learn more and do more. The Instructional Coaching Endorsement is available for reading specialists who desire to strengthen their professional knowledge, build skills in instructional coaching, and stand out in their field.

This is an endorsement to be added to an existing reading specialist certification.

Curriculum

Simple Requirements

PDE Endorsement

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Endorsement in Literacy/Instructional Coaching PK-12

See separate block

Concentration in Literacy/Instructional Coaching (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- READ626 - Literacy Leadership
- EDSU703 - Curriculum and Supervision
- READ798 - Advanced Theories Pedagogy

of Reading
- READ799 - Applied Supervision: Clinical Practicum

ESL Program Specialist Certificate

Overview

Millersville University is an approved provider of an English as a Second Language Program Specialist certificate program. Persons who have a valid Pennsylvania Instructional I or Instructional II certificate and have enrolled in and completed the Millersville University ESL coursework are eligible to receive ESL add-on certification from the Pennsylvania Department of Education.

ESL Certification Required Clearances:

- ACT 114 - FBI Fingerprint Needed
  - You must submit your FBI Fingerprint Clearance
- ACT 34 - Criminal Record Check Needed
  - You must submit your Criminal Record Check
- ACT 151 - Child Abuse Clearance Needed
  - You must submit your Child Abuse Clearance
- Negative TB Test of Chest X-ray Needed
  - You must submit your Negative TB Test or Chest X-ray

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training (If applying to APS AFTER Jan 15, 2020)

AND

Minimum GPA

Earn a minimum GPA of 3.0
If you are given the 2.8 GPA Exception for graduation and you graduate with a GPA lower than 3.0, you must have higher certification test scores in order to meet PA state certification requirements.

AND

No dispositions-related holds

Registration for APS courses is permitted when all APS requirements have been met. If it is incomplete, you have a hold and APS registration will not be allowed.

English as a Second Language - Certification

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (18 credits)

Complete ALL of the following Courses:

- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment
- EDUC562 - Methods for Teaching English Language Learners
- EDUC563 - Linguistic and Cultural Diversity in the Classroom
- EDUC564 - Assessment, Policies & Practice in Teaching of English Language Learners
- EDUC565 - Language & Literacy Interventions: Clinical Practicum

Reading Specialist Certification

Overview

Millersville University is an approved provider of a Reading Specialist Certification. Persons who have a valid Pennsylvania Instructional I or Instructional II certificate and have enrolled in and completed the Millersville University Reading Specialist courses are eligible to receive reading specialist certification from the Pennsylvania Department of Education.
Required Clearances:

- ACT 114 - FBI Fingerprint Needed
- ACT 34 - Criminal Record Check Needed
- ACT 151 - Child Abuse Clearance Needed
- Negative TB Test or Chest X-ray Needed

Curriculum

Simple Requirements

Reading Specialist, Post-Bacc Certification

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Clearances

Fulfill ALL of the following requirements:

ACT 114 - FBI Fingerprint Needed

You must submit your FBI Fingerprint Clearance

AND

ACT 34 - Criminal Record Check Needed

You must submit your Criminal Record Check

AND

ACT 151 - Child Abuse Clearance Needed

You must submit your Child Abuse Clearance

AND

Negative TB Test or Chest X-ray Needed

You must submit your Negative TB Test or Chest X-ray

AND

Required Courses (27 credits)

Complete ALL of the following Courses:

- EDUC562 - Methods for Teaching English Language Learners
- EDUC636 - Literature and Response **OR** EDUC533 - Nonfiction Lit and Literacy
- READ621 - Foundations of Reading and Writing
- READ622 - Reading and Writing in the Content Areas
- READ623 - Diag. of Reading & Writing Disabilities: Practicum
- READ624 - Diag and Correction of Reading and Writing Diff
- READ625 - Psych & Social Factors in Reading & Writing Ability
- READ626 - Literacy Leadership

AND

Literacy Course or Summer Institute

Complete at least 1 of the following:

Literacy Course or Summer Institute (3 credits)

Earn at least 3 credits from the following:

- READ627 - Sp Top:
- READ628 - Sp Topics:
- READ629 - Special Topics in Reading
- READ630 - Sp Top:

OR

ADVAPPROVED Course(s)

Any ADVAPPROVED course(s)

If READ627 Sp Top:, READ628 Sp Topics:, READ629 Special Topics in Reading or READ630 Sp Top: is not taken as your Literacy Course or Summer Institute, your advisor will need to email goffasst@millersville.edu with the approved course. In addition to the required credits above, students may choose to complete an optional thesis, READ699 Thesis.

Early Childhood & Elementary Education, M.Ed.

Overview

The Master of Education degree program in early childhood & elementary education prepares professionals for teaching and administrative positions in child-care and preschool settings, elementary schools, early-intervention special education programs, and colleges. The program is based on knowledge and developmentally appropriate practices for the teaching and learning of young children (birth through 8 years of age). An interdisciplinary program, it focuses on the connections of children, family, educational settings and community so essential to a young child's total development and individual, diverse needs. The program addresses early-childhood issues using sound research practices and principles, and includes a focus on the graduate student's individual professional needs. Courses are taught by graduate faculty members from the following departments:

1. Early, Middle and Exceptional Education
2. Educational Foundations
3. Psychology

Students may also take electives in a variety of related disciplines including but not limited to Art. Applied Engineering, History, Safety and Technology, Social Work, etc. Students may elect to pursue an endorsement or certificate to fulfill elective requirements (I.E. ESL Online Learning, STEM, etc.).

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Professional Core: Required Courses (3 credits)

Complete ALL of the following Courses:

- EDFN601 - Research Methods

AND

MED Core Option

Complete at least 2 of the following:

Option 1. Psychological Core

Earn at least 3 credits from the following:

- PSYC540 - Applied Behavior Analysis in a MTSS
- PSYC526 - Advanced Adolescent Psychology
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Social Foundations Core (3 credits)

Earn at least 3 credits from the following:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education

OR

Option 3. Specialty Area Core (3 credits)

Earn at least 3 credits from the following:

- ACTE630 - Current Technology for Online Instruction
- EDTE690 - Integrtve Lrning Exprntl Strgy
- EDSU701 - Administrative Supervision
- EDLD610 - Theory and Organizatnl Behavr
- EDUC563 - Linguistic and Cultural Diversity in the Classroom

Major-Early Childhood & Elementary Education - MED

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Thesis Option or ECED 699

MED Early Childhood students may elect to complete a Thesis option or Non-Thesis Option. The Non-Thesis requirements appear until you have registered for ECED699 Thesis:, at which time the thesis option will be noted.

AND

Affective & Psychomotor Emphasis (3 credits)

Complete ALL of the following Courses:

- ECED611 - Affectve and Psychmtr Emphasis

AND

Cognitive Emphasis in ECED Or Seminar: Diverse Learners (3 credits)

Complete at least 1 of the following courses:

- ECED519 - Seminar in Early Childhood Education

AND

Required Courses

Complete ALL of the following Courses:

- ECED613 - Home, School, and Community
- ECED614 - Advanced Curriculum in ECHD

AND

Early Intervention for Developmental Delays (3 credits)

Complete ALL of the following Courses:

- SPED618 - Advanced Topics in Early Intervention

AND

Non-Thesis Electives Option

Electives approved in cooperation with your graduate coordinator may be applied by emailing Lucie Lehr. Please have your graduate coordinator email approved courses to lucie.lehr@millersville.edu

AND

Written Comprehensive Exam

Must complete a written comprehensive exam.

Gifted Education, M.Ed.

Overview

The Master of Education degree in gifted education is designed to provide the specialized knowledge needed by teachers and other educational personnel who work with gifted and talented students (K-12). The curriculum is appropriate for teachers and other education professionals whether they provide instruction in special programs for the gifted or teach in inclusive settings. The M.Ed. degree in gifted education does not confer teacher certification.

The Department of Early, Middle and Elementary Education (EMEE) is responsible for the gifted education program, although the program itself is multidisciplinary. Courses in the gifted education program are taught by graduate faculty members from the EMEE, Educational Foundations and Psychology departments.

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- EDFN601 - Research Methods

AND

Psychological Core Requirement (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- PSYC525 - Advanced Child Psychology
- PSYC526 - Advanced Adolescent Psychology
- PSYC625 - Human Growth and Development

AND

Philosophical Core Requirement (3 credits)

Complete at least 1 of the following courses:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education
- EDFN604 - Education and Public Policy

Major in Gifted Education - MED (27 credits)

Type
Completion Requirement

Required Courses (3 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- GFED670 - Psychology of the Gifted
- GFED674 - Program for the Gifted
- GFED675 - Evaluating Instruct. Effectiveness: App for the Gifted
- GFED690 - Clinical Practicum

AND

Teaching Gifted Learners: Inst. Strat. or Topics (3 credits)

Complete at least 1 of the following courses:

- GFED676 - Teaching Gifted Learners Instructional Strategies
- GFED686 - Topics in Gifted Education
- GFED687 - Topics in Gifted Education
- GFED688 - Topics in Gifted Education

Advisor Approved Area of Specialization

Additional Comments:
A minimum of 9 credits in an area of specialization must be selected with the approval of your advisor. The specialization areas can include, but are not limited to, AI, Elementary Ed, Early Childhood Ed, Language and Literacy, English as as Second Language, English, Educational Leadership, Online Teaching, Psychology, Special Education, STEM, or Technology Education.

Language & Literacy, M.Ed. - English as a Second Language

Overview

The Department of Early, Middle and Exceptional Education offers a master's in language and literacy education with an ESL concentration leading to an ESL certification. This pathway is available for elementary and secondary teachers who possess an Instructional I Certificate in Pennsylvania. A Master of Education in language and literacy education offers the student the opportunity to participate in original research and experiential programs in this field, with a practicum at the end of the coursework. All courses and learnings are aligned with knowledge and practice standards for English as a Second Language (ESL) Teachers - PDE Chapter 49 Structured Literacy Competencies.

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Professional Core: Required Courses (3 credits)

Complete ALL of the following Courses:

- EDFN601 - Research Methods

AND

MED Core Option (6 credits)

Complete at least 2 of the following:

Option 1. Psychological Core

Earn at least 3 credits from the following:

- PSYC540 - Applied Behavior Analysis in a MTSS
- PSYC526 - Advanced Adolescent Psychology
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Social Foundations Core

Earn at least 3 credits from the following:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education

OR

Option 3. Specialty Area Core

Earn at least 3 credits from the following:

- ACTE630 - Current Technology for Online Instruction
- EDTE690 - Integrtve Lrning Exprntl Strgy
- EDSU701 - Administrative Supervision
- EDLD610 - Theory and Organizatnl Behavr
- EDUC563 - Linguistic and Cultural Diversity in the Classroom

EDFN601 Research Methods is required. Choose 2 courses from two of the three Core Option areas.

Major in Language and Literacy ESL Conc - MED (27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Language and Literacy Requirements: Required Courses (6 credits)

Complete ALL of the following Courses:

- READ621 - Foundations of Reading and Writing
- READ622 - Reading and Writing in the Content Areas

AND

Language and Literacy Requirements: Language or Literature Requirement (3 credits)

Complete at least 1 of the following courses:

- EDUC535 - Children's Literature and Creative Experiences for Young Children and Adolescents
- EDUC636 - Literature and Response
- ENGL661 - Semnr in Transformational Ling
- ENGL663 - Applied Linguistics

AND

ESL Requirements: Second Language Acq: Theory, Programs & Assessment (3 credits)

Complete ALL of the following Courses:

- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment

AND

ESL Requirements: Methods for Teaching English Lang Learners (3 credits)

Complete ALL of the following Courses:

- EDUC562 - Methods for Teaching English Language Learners

AND

ESL Requirements: Required Courses (3 credits)

Complete ALL of the following Courses:

- EDUC563 - Linguistic and Cultural Diversity in the Classroom

AND

ESL Requirements: Assess, Policies & Pract in Teach of Eng Lang Learners (3 credits)

Complete ALL of the following Courses:

- EDUC564 - Assessment, Policies & Practice in Teaching of English Language Learners

AND

ESL Requirements: Lang & Literacy Interventions: Clinical Practicum (6 credits)

Complete ALL of the following Courses:

- EDUC565 - Language & Literacy Interventions: Clinical Practicum

Language and Literacy Education, M.Ed. - Reading Specialist

Overview

The Department of Early, Middle and Exceptional Education offers a master's in language and literacy education leading to reading specialist certification. This concentration is available for PK-4 teachers, and middle level and secondary teachers (with a prerequisite course to address the PK-4 portion of this PK-12 certification) who possess an Instructional I Certificate in Pennsylvania. A Master of Education in language and literacy education offers the student the opportunity to participate in original research and experiential programs in this field, with a practicum at the end of the coursework. All courses and learnings are aligned with knowledge and practice standards for PK-12 Reading Specialist - PDE Chapter 49 Structured Literacy Competencies.

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Professional Core: Required Courses (3 credits)

Complete ALL of the following Courses:

- EDFN601 - Research Methods
- EDUC563 - Linguistic and Cultural Diversity in the Classroom

AND

MED Core Option (3 credits)

Complete at least 1 of the following:

Option 1. Psychological Core (3 credits)

Earn at least 3 credits from the following:

- PSYC540 - Applied Behavior Analysis in a MTSS
- PSYC526 - Advanced Adolescent Psychology

- EDFN545 - Advanced Educational Psychology

OR

Option 2. Social Foundations Core (3 credits)

Earn at least 3 credits from the following:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education

EDFN601 Research Methods and EDUC 563 are required. Choose 1 courses from the two remaining Core Option areas.

Major in Language & Literacy - Reading Specialist (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (24 credits)

Complete ALL of the following Courses:

- EDUC562 - Methods for Teaching English Language Learners
- EDUC636 - Literature and Response
- READ621 - Foundations of Reading and Writing
- READ622 - Reading and Writing in the Content Areas
- READ623 - Diag. of Reading & Writing Disabilities: Practicum
- READ625 - Psych & Social Factors in Reading & Writing Ability
- READ626 - Literacy Leadership

AND

Diag. and Correction of Reading and Writing Diff

Complete ALL of the following Courses:

- READ624 - Diag and Correction of Reading and Writing Diff

AND

Literacy Course or Summer Institute (3 credits)

Complete at least 1 of the following:

Option 1. Literacy Course or Summer Institute (3 credits)

Earn at least 3 credits from the following:

- READ627 - Sp Top:
- READ628 - Sp Topics:
- READ629 - Special Topics in Reading
- READ630 - Sp Top:

OR

Option 2. Literacy Course or Summer Institute (3 credits)

Any ADVAPPROVED course(s)

If READ627 Sp Top:, READ628 Sp Topics:, READ629 Special Topics in Reading or READ630 Sp Top: is not taken as your Literacy Course or Summer Institute, your advisor will need to email goffasst@millersville.edu with the approved course. In addition to the required credits above, students may choose to complete an optional thesis, READ699 Thesis.

Special Education, M.Ed.

Overview

The Master of Education in special education provides experienced educators an opportunity to advance their careers in knowledge and skills needed to be teacher-leaders. This program that recognizes experience has been designed to improve the practice of educators through a robust program of study designed to emphasize evidence-based practice, advocacy, collaboration, and reflection. The M.Ed. in special education does not lead to level 1 certification.

Curriculum

Simple Requirements

MED Professional Core Requirements (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN601 - Research Methods
- EDFN545 - Advanced Educational Psychology

AND

Psychological Core Requirement (3 credits)

Complete at least 1 of the following courses:

- PSYC525 - Advanced Child Psychology
- PSYC526 - Advanced Adolescent Psychology
- PSYC625 - Human Growth and Development

AND

Philosophical Core Requirement (3 credits)

Complete at least 1 of the following courses:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education
- EDFN604 - Education and Public Policy

Major in Special Education (22 credits)

Type
Completion Requirement

Professional Core (15 credits)

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- SPED651 - Advocacy and Leadership in Special Education
- SPED652 - Issues of Diversity in Special Education
- SPED653 - Consultation & Collaboration
- SPED654 - Advance Pedagogy in Special Education
- SPED689 - Research Seminar in Special Education

AND

Comprehensive Exam in Special Education

Comprehensive Exam must be passed after all five special education knowledge core are completed and before enrolling in SPED695 Accomplished SPED Captone Capstone.

Specialization Area

Complete at least 1 of the following:

Option 1. English Language Learners (ELL)

Complete ALL of the following Courses:

- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment
- EDUC562 - Methods for Teaching English Language Learners

OR

Option 2. Reading & Literacy

Complete ALL of the following Courses:

- READ622 - Reading and Writing in the

Content Areas
- READ623 - Diag. of Reading & Writing Disabilities: Practicum

OR

Option 3. Educational Aspects of Social Work

Complete at least 2 of the following courses:
- SOWK602 - Behavioral Health
- SOWK606 - School Social Work
- SOWK611 - Children and Youth At-Risk

OR

Option 4. Gifted Education

Complete ALL of the following Courses:
- GFED670 - Psychology of the Gifted
- GFED676 - Teaching Gifted Learners Instructional Strategies

Capstone Learning Project (1 credit)

Complete ALL of the following Courses:
- SPED695 - Accomplished SPED Capstone

Gifted Education, Post-Baccalaureate Certificate

Overview

The certificate program can be completed in four semesters, with offerings year-round (fall, winter, spring and summer). The completed certificate (18 s.h.) can be applied in its entirety towards the requirements for the Master of Education degree in Gifted Education.

Curriculum

Simple Requirements

Post-Baccalaureate Gifted Education Certificate (18 credits)

Type
Completion Requirement

Requirement

Credits Required for Major

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:
- GFED670 - Psychology of the Gifted
- GFED674 - Program for the Gifted
- GFED675 - Evaluating Instruct. Effectiveness: App for the Gifted
- GFED676 - Teaching Gifted Learners Instructional Strategies

Upon completion of the first four courses students are eligible to apply for the Gifted Education Endorsement through the PA Dept of Education.

AND

Clinical Practicum (6 credits)

Earn at least 6 credits from the following:
- GFED690 - Clinical Practicum

English as a Second Language Minor (EDUC)

Overview

Millersville University offers undergraduate students the opportunity to add English as a Second Language specialization to their degree with the ESL minor. The scope of this ESL minor is to provide interested students with a background in effective teaching strategies, second language acquisition theory, programming and assessment, awareness of linguistic and cultural diversity in the classroom, and policies and practices in teaching English learners.

Learning Objectives

- Structured Literacy Knowledge and Practice Standards of English as a Second Language (ESL) teachers.
- Background in effective teaching strategies, acquisition theory, programming and assessment
- Awareness of linguistic and cultural diversity in the classroom
- Practices in teaching English learners
- ESL Program Specialist Certificate

  Students will have a practicum/student-teaching experience at the culmination of this program. This minor will allow education majors in the EMEE Department who obtain their Level I certification to concurrently obtain an ESL Program Specialist Certificate.

  * Only one course which counts towards the major may be counted towards the minor.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in English as a Second Language

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- EDUC461 - Second Language Acquisition: Theory, Programs, and Assessment
- EDUC462 - Methods for Teaching English Language Learners
- EDUC463 - Linguistic and Cultural Diversity in the Classroom
- EDUC464 - Assessment, Policies and Practices in Teaching English Language Learners

AND

Teaching English Learners (3 credits)

Complete at least 1 of the following courses:

- ECPK485 - Teaching Young English Language Learners
- MDED486 - Teaching English Language Learners in the Middle Level
  OR MDED486H - Hon: Teaching English Language Learners in the Middle Level
- EDUC487 - Teaching English Learners

AND

Student Teaching

Complete at least 1 of the following courses:

- EDUC465 - Language & Literacy Interventions: Clinical Practicum

OR EDSL461 - Student Teaching in ESL
OR EDSL462 - ESL Student Teaching

Or any ADVAPPROVED course(s)

Early Childhood Education - PreK - Grade 4, B.S.Ed.

Overview

The student may elect to earn Pennsylvania licensure (certification) in early childhood education (PreK–Grade 4). The program in early childhood education is designed to provide the student with an in-depth knowledge of subject matter and pedagogy appropriate for all students, including those for whom English is a second language. The program also provides extensive and varied field experiences.

The student who completes the early childhood program at Millersville University receives a Bachelor of Science in Education degree and may apply for a Pennsylvania Instructional I teaching certificate after successfully passing the Pennsylvania Educator Certification Test (PECT). Each student is strongly urged to complete an academic minor from the University's list of approved academic minors, which includes a minor in Integrative STEM Education Methods and an ESL certification minor.

Curriculum

Simple Requirements

Major in Early Childhood Education, BSE (54 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Education Courses (27 credits)

Earn a minimum grade of C in the following:

- ECPK110 - Introduction to Early Childhood Education
- SPED101 - Orientation to Special Educ
- ECPK316 - Creative Experiences for the Young Child
- ECPK315 - Family & Community: Aspects of Diversity
- ECPK435 - Literature for the Young Child
- ECPK485 - Teaching Young English Language Learners
- EDFN320 - Instructional Technology in Elementary Education
  OR EDFN320H - H:Instructional

Technology in Elementary Education
OR EDUC324 - Diagnosis of Reading and Writing Disabilities
OR GFED370 - Teaching Gifted Learners
- SPED311 - Assessment for Designing & Implementing Instruction
  OR SPED311H - Hon: Assessment for Designing & Implementing Instruction
- SPED331 - Positive Learning Environments for all Students
  OR SPED331H - Hon: Positive Learning Environments for all Students

AND

Foundation Block (3 credits)

Earn a minimum grade of C in the following:
- ECPK225 - Foundations of Reading

See Foundation Block in Professional Education section for additional courses in Foundations.

AND

Professional Block I - Birth-Kindergarten (9 credits)

Earn a minimum grade of C in the following:
- ECPK496 - Curric, Instr & Assesss: Engaging the Young Child
- ECPK421 - Language Development & Emergent Literacy

AND

Professional Block II - Grades 1-4 (15 credits)

Earn a minimum grade of C in the following:
- ECPK345 - Social Studies for the Young Learner
- ECPK422 - Tching of Literacy, PreK-4: Process, Skills & Strategies
- ECPK455 - Teaching Mathematics to Young Children
- ECPK465 - Science for the Young Learner

Professional Education- Early Childhood Education (21 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundation Block (9 credits)

Earn a minimum grade of C in the following:
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading

AND

Student Teaching (12 credits)

Earn a minimum grade of S in the following:
- EDEL461 - Eled Stu Teaching
- EDEL462 - Eled Stu Teaching

Additional Comments:
The Department will be reducing the number of credits these two courses (EDEL 461 & 462) to be worth to 4.5 each to add in a Student Teaching Seminar as the Capstone for the program, worth 3 credits.

Req Related for Early Childhood Education, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Literature (3 credits)

Earn a minimum grade of C in the following:
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Required Courses (12 credits)

Earn a minimum grade of C in the following:

- ART128 - Art Integration
  OR THEA130 - Acting 1
- MATH104 - Fundamentals of Math 1
- MATH105 - Fundamentals of Math 2
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent

The department would like to add a MUSI option to this list, but none have CE labels to date that would be appropriate for our students.

AND

Health, Safety & Nutrition for the Developing Child (3 credits)

Earn a minimum grade of C in the following:

- WELL240 - Health, Safety, Nutr for Child

Advanced Professional Studies, BSE

Type
Completion Requirement

Formal Entry (APS) Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Earn a minimum grade of C in the following:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Earn a minimum grade of C in the following:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take MATH 104 & MATH 105. Search for MATH courses on the current web schedule.

AND

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

Formal Entry (APS)

Must have Formal Entry (APS) status. View information on applying for Formal Entry (APS).

General Education Requirements

Type
Completion Requirement

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- ERCH290 - Children's Engineering
  OR EDTE290 - Children's Engineering
- BIOL100 - General Biology
  OR ESSC104 - The World Ocean
  OR ESSC104H - Hnrs:The World Ocean (Inactive)
  OR CHEM105 - Culinary Chemistry
- HIST200 - Reimagining Holidays & Heroes
  OR GOVT111 - Introduction to American Government

OR GOVT228 - Democracy and Its Challenges
OR GEOG141 - World Regional Geography

Middle Level Education Grade 4-8, B.S.Ed.

Overview

The student may elect to earn Pennsylvania licensure (certification) in middle-level education (Grade 4–Grade 8). The program in middle-level education is designed to provide the student with an in-depth knowledge of subject matter and pedagogy appropriate for all students, including those for whom English is a second language. The program also provides extensive and varied field experiences.

The student will complete a minimum of 30 credit hours in one of the four content areas of English language arts, mathematics, science, or social studies. In addition, the student will complete a minimum of 12 credit hours in each of the three remaining content areas, a minimum of 27 credit hours in the Professional Core and 12 credit hours in student teaching.

The student who completes the middle-level program at Millersville University receives a Bachelor of Science in Education degree and may apply for a Pennsylvania Instructional I teaching certificate after successfully passing the MDLV Praxis requirements. Each student is strongly urged to complete an academic minor from the University's list of approved minors.

Curriculum

Simple Requirements

Major in Middle Level Education, BSE (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Core Courses (15 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Earn a minimum grade of C in the following:

- MDED335 - Literature for Children & Young Adolescents
  OR MDED335H - Hnrs: Literature for Children & Young Adolescents

- SPED101 - Orientation to Special Educ
- SPED311 - Assessment for Designing & Implementing Instruction
  OR SPED311H - Hon: Assessment for Designing & Implementing Instruction
- SPED331 - Positive Learning Environments for all Students
  OR SPED331H - Hon: Positive Learning Environments for all Students

AND

Development Children and Adolescents (3 credits)

Earn a minimum grade of C in the following:

- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent

AND

Professional Block I

Fulfill ALL of the following requirements:

Tching of Literacy, Gr 4-8: Processes, Skills & Strateg (3 credits)

Earn a minimum grade of C in the following:

- MDED425 - Teaching of Literacy, Gr 4-8: Processes, Skills & Strategies

AND

Required Courses (3 credits)

Earn a minimum grade of C in the following:

- MDED486 - Teaching English Language Learners in the Middle Level
  OR MDED486H - Hon: Teaching English Language Learners in the Middle Level

AND

Professional Block II (12 credits)

Earn a minimum grade of C in the following:

- MDED323 - Content Area Literacy
- MDED446 - Teaching of Social Studies
- MDED456 - Teaching Middle Level Mathematics
- MDED466 - Teaching of Science: An Inquiry Approach

AND

A Concentration Is Required

Students must declare a concentration in English Language Arts, Mathematics, Science, or Social Studies. Please consult your advisor.

Professional Education- Middle Level (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Block (6 credits)

Earn a minimum grade of C in the following:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Professional Block III - Student Teaching (12 credits)

Complete ALL of the following Courses:

- EDEL461 - Eled Stu Teaching
- EDEL462 - Eled Stu Teaching
- EDUC488 - EMEE Student Teaching Seminar (Capstone Experience)

The Department will be reducing the number of credits these two courses (EDEL 461 & 462) to be worth to 4.5 each to add in a Student Teaching Seminar as the Capstone for the program, worth 3 credits.

Required Related for Middle Level Education (42-43 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required ELA Courses (6 credits)

Earn a minimum grade of C in the following:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL220 - Introduction to Language Study

AND

Required Math Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- MATH104 - Fundamentals of Math 1
- MATH205 - Geometry for the Middle-Level Teacher

AND

Algebraic Foundations for the Middle-Level Teacher (3 credits)

Earn a minimum grade of C in the following:

- MATH204 - Algebraic Foundations for Mid-Level Teacher

AND

Data Analysis and Probability for Middle-Level Teacher (3 credits)

Earn a minimum grade of C in the following:

- MATH230 - Probability and Stats for Mid-Level Teacher

AND

Required Science Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- BIOL100 - General Biology
- PHYS101 - Survey of Physics

AND

Environmental Course (3 credits)

Earn a minimum grade of C in the following:

- GEOG130 - Intro to Environmental Science
  OR GEOG130H - Hon: Intro to Environmental Science (Inactive)
  OR ESSC120 - Environmental Geology
  OR BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness

AND

Gen Organic and Biochemistry 1 or Introductory Chemistry 1 (3-4 credits)

Earn a minimum grade of C in the following:

- CHEM103 - Gen Organic and Biochemistry 1
  OR CHEM111 - Introductory Chemistry 1

CHEM 103 for non-science concentration; CHEM 111 for science concentration.

AND

Required Social Studies Courses

Earn a minimum grade of C in the following:

- ECON100 - Introductory Economics
- GOVT111 - Introduction to American Government
- GEOG141 - World Regional Geography
- HIST200 - Reimagining Holidays & Heroes

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

General Education Requirement

Type
Completion Requirement

Complete ALL of the following Courses:

- WELL175 - Wellness

Middle Level Education Grade 4-8, B.S.Ed. - English Language Arts

Overview

The program in middle level education is designed to provide the student with an in-depth knowledge of subject matter (30 credit hours) in a content area to teach 4th through 8th grades. In addition to the concentration area, candidates are expected to complete 12 credit hours in each of the remaining content areas and in social studies, a minimum of 27 credit hours in the Professional Core, and 12 credits in student teaching. Students who complete the middle level education program at Millersville University receive a Bachelor of Science in Education degree and may apply for a Pennsylvania Instructional I teaching certificate. This program can be completed in eight (8) semesters.

Curriculum

Simple Requirements

Major in Middle Level Education, BSE (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Core Courses (15 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Earn a minimum grade of C in the following:

- MDED335 - Literature for Children & Young Adolescents
  OR MDED335H - Hnrs: Literature for Children & Young Adolescents
- SPED101 - Orientation to Special Educ
- SPED311 - Assessment for Designing & Implementing Instruction
  OR SPED311H - Hon: Assessment for Designing & Implementing Instruction
- SPED331 - Positive Learning Environments for all Students
  OR SPED331H - Hon: Positive Learning Environments for all Students

AND

Development Children and Adolescents (3 credits)

Earn a minimum grade of C in the following:

- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent

AND

Professional Block I

Fulfill ALL of the following requirements:

Tching of Literacy, Gr 4-8: Processes, Skills & Strateg (3 credits)

Earn a minimum grade of C in the following:

- MDED425 - Teaching of Literacy, Gr 4-8: Processes, Skills & Strategies

AND

Required Courses (3 credits)

Earn a minimum grade of C in the following:

- MDED486 - Teaching English Language Learners in the Middle Level
  OR MDED486H - Hon: Teaching English Language Learners in the Middle Level

AND

Professional Block II (12 credits)

Earn a minimum grade of C in the following:

- MDED323 - Content Area Literacy
- MDED446 - Teaching of Social Studies
- MDED456 - Teaching Middle Level Mathematics
- MDED466 - Teaching of Science: An Inquiry Approach

Professional Education- Middle Level (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Block (6 credits)

Earn a minimum grade of C in the following:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Professional Block III - Student Teaching (12 credits)

Complete ALL of the following Courses:

- EDEL461 - Eled Stu Teaching
- EDEL462 - Eled Stu Teaching
- EDUC488 - EMEE Student Teaching Seminar (Capstone Experience)

The Department will be reducing the number of credits these two courses (EDEL 461 & 462) to be worth to 4.5 each to add in a Student Teaching Seminar as the Capstone for the program, worth 3 credits.

MDED Major Concentration - English/Language Arts (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Studies in Ethnic American Literature Since 1945 (3 credits)

Earn a minimum grade of C in the following:

- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945

AND

Required Courses (3 credits)

Earn a minimum grade of C in the following:

- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing

AND

Electives (6 credits)

Complete at least 2 of the following:

Option 1

Earn a minimum grade of C in the following:

- HUMN202 - Classical Mythology

OR

Option 2

Earn a minimum grade of C in the following:

- ENGL231 - World Literature 1

OR

Option 3

Earn a minimum grade of C in the following:

- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1

OR

Option 4

Earn a minimum grade of C in the following:

- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2

OR

Option 5

Earn a minimum grade of C in the following:

- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature

OR

Option 6

Earn a minimum grade of C in the following:

- WRIT342 - Reading/Writing for Civic Chng

OR

Option 7

Earn a minimum grade of C in the following:

- WRIT471 - Creative Writing

OR

Option 8

Earn a minimum grade of C in the following:

- ENGL486 - Teaching Reading & Literature to Young Adults

Required Related for Middle Level Education (42-43 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required ELA Courses (6 credits)

Earn a minimum grade of C in the following:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL220 - Introduction to Language Study

AND

Required Math Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- MATH104 - Fundamentals of Math 1
- MATH205 - Geometry for the Middle-Level Teacher

AND

Algebraic Foundations for the Middle-Level Teacher (3 credits)

Earn a minimum grade of C in the following:

- MATH204 - Algebraic Foundations for Mid-Level Teacher

AND

Data Analysis and Probability for Middle-Level Teacher (3 credits)

Earn a minimum grade of C in the following:

- MATH230 - Probability and Stats for Mid-Level Teacher

AND

Required Science Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- BIOL100 - General Biology
- PHYS101 - Survey of Physics

AND

Environmental Course (3 credits)

Earn a minimum grade of C in the following:

- GEOG130 - Intro to Environmental Science
  OR GEOG130H - Hon: Intro to Environmental Science (Inactive)
  OR ESSC120 - Environmental Geology
  OR BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness

AND

Gen Organic and Biochemistry 1 or Introductory Chemistry 1 (3-4 credits)

Earn a minimum grade of C in the following:

- CHEM103 - Gen Organic and Biochemistry 1
  OR CHEM111 - Introductory Chemistry 1

CHEM 103 for non-science concentration; CHEM 111 for science concentration.

AND

Required Social Studies Courses

Earn a minimum grade of C in the following:

- ECON100 - Introductory Economics
- GOVT111 - Introduction to American Government
- GEOG141 - World Regional Geography
- HIST200 - Reimagining Holidays & Heroes

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

General Education Requirement

Type
Completion Requirement

Complete ALL of the following Courses:

- WELL175 - Wellness

Middle Level Education Grade 4-8, B.S.Ed. - Mathematics

Overview

The program in middle level education is designed to provide the student with an in-depth knowledge of subject matter (30 credit hours) in a content area to teach 4th through 8th grades. In addition to the concentration area, candidates are expected to complete 12 credit hours in each of the remaining content areas and in social studies, a minimum of 27 credit hours in the Professional Core, and 12 credits in student teaching. Students who complete the middle level education program at Millersville University receive a Bachelor of Science in Education degree and may apply for a Pennsylvania Instructional I teaching certificate. This program can be completed in eight (8) semesters.

Curriculum

Simple Requirements

Major in Middle Level Education, BSE (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Core Courses (15 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Earn a minimum grade of C in the following:

- MDED335 - Literature for Children & Young Adolescents
  OR MDED335H - Hnrs: Literature for Children & Young Adolescents
- SPED101 - Orientation to Special Educ
- SPED311 - Assessment for Designing & Implementing Instruction
  OR SPED311H - Hon: Assessment for Designing & Implementing Instruction
- SPED331 - Positive Learning Environments for all Students
  OR SPED331H - Hon: Positive Learning Environments for all Students

AND

Development Children and Adolescents (3 credits)

Earn a minimum grade of C in the following:

- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent

AND

Professional Block I

Fulfill ALL of the following requirements:

Tching of Literacy, Gr 4-8: Processes, Skills & Strateg (3 credits)

Earn a minimum grade of C in the following:

- MDED425 - Teaching of Literacy, Gr 4-8: Processes, Skills & Strategies

AND

Required Courses (3 credits)

Earn a minimum grade of C in the following:

- MDED486 - Teaching English Language Learners in the Middle Level
  OR MDED486H - Hon: Teaching English Language Learners in the Middle Level

AND

Professional Block II (12 credits)

Earn a minimum grade of C in the following:

- MDED323 - Content Area Literacy
- MDED446 - Teaching of Social Studies
- MDED456 - Teaching Middle Level Mathematics
- MDED466 - Teaching of Science: An Inquiry Approach

AND

A Concentration Is Required

Students must declare a concentration in English Language Arts, Mathematics, Science, or Social Studies. Please consult your advisor.

Professional Education- Middle Level (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Block (6 credits)

Earn a minimum grade of C in the following:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Professional Block III - Student Teaching (12 credits)

Complete ALL of the following Courses:

- EDEL461 - Eled Stu Teaching
- EDEL462 - Eled Stu Teaching
- EDUC488 - EMEE Student Teaching Seminar (Capstone Experience)

The Department will be reducing the number of credits these two courses (EDEL 461 & 462) to be worth to 4.5 each to add in a Student Teaching Seminar as the Capstone for the program, worth 3 credits.

MDED Major Concentration - Mathematics (14 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (8 credits)

Earn a minimum grade of C in the following:

- MATH161 - Calculus 1
- MATH211 - Calculus 2

AND

Mathematics Electives (6 credits)

Complete at least 2 of the following:

Option 1

Earn a minimum grade of C in the following:

- MATH301 - History of Mathematics

OR

Option 2

Earn a minimum grade of C in the following:

- MATH310 - Intro to Mathematical Proof

OR

Option 3

Earn a minimum grade of C in the following:

- MATH325 - Mathematical Connections

OR

Option 4

Earn a minimum grade of C in the following:

- MATH393 - Number Theory

Required Related for Middle Level Education (42-43 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required ELA Courses (6 credits)

Earn a minimum grade of C in the following:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL220 - Introduction to Language Study

AND

Required Math Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- MATH104 - Fundamentals of Math 1
- MATH205 - Geometry for the Middle-Level Teacher

AND

Algebraic Foundations for the Middle-Level Teacher (3 credits)

Earn a minimum grade of C in the following:

- MATH204 - Algebraic Foundations for Mid-Level Teacher

AND

Data Analysis and Probability for Middle-Level Teacher (3 credits)

Earn a minimum grade of C in the following:

- MATH230 - Probability and Stats for Mid-Level Teacher

AND

Required Science Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- BIOL100 - General Biology
- PHYS101 - Survey of Physics

AND

Environmental Course (3 credits)

Earn a minimum grade of C in the following:

- GEOG130 - Intro to Environmental Science
  OR GEOG130H - Hon: Intro to Environmental Science (Inactive)

OR ESSC120 - Environmental Geology
OR BIOL340 - Prspctv in Environm Awareness
OR BIOL340H - HNRS:Prspctv in Environm Awareness

AND

Gen Organic and Biochemistry 1 or Introductory Chemistry 1 (3-4 credits)

Earn a minimum grade of C in the following:

- CHEM103 - Gen Organic and Biochemistry 1
  OR CHEM111 - Introductory Chemistry 1

CHEM 103 for non-science concentration; CHEM 111 for science concentration.

AND

Required Social Studies Courses

Earn a minimum grade of C in the following:

- ECON100 - Introductory Economics
- GOVT111 - Introduction to American Government
- GEOG141 - World Regional Geography
- HIST200 - Reimagining Holidays & Heroes

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

General Education Requirement

Type
Completion Requirement

Complete ALL of the following Courses:

- WELL175 - Wellness

Middle Level Education Grade 4-8, B.S.Ed. - Science

Overview

The program in middle level education is designed to provide the student with an in-depth knowledge of subject matter (30 credit hours) in a content area to teach 4th through 8th grades. In addition to the concentration area, candidates are expected to complete 12 credit hours in each of the remaining content areas and in social studies, a minimum of 27 credit hours in the Professional Core, and 12 credits in student teaching. Students who complete the middle level education program at Millersville University receive a Bachelor of Science in Education degree and may apply for a Pennsylvania Instructional I teaching certificate. This program can be completed in eight (8) semesters.

Curriculum

Simple Requirements

Major in Middle Level Education, BSE (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Core Courses (15 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Earn a minimum grade of C in the following:

- MDED335 - Literature for Children & Young Adolescents
  OR MDED335H - Hnrs: Literature for Children & Young Adolescents
- SPED101 - Orientation to Special Educ
- SPED311 - Assessment for Designing & Implementing Instruction
  OR SPED311H - Hon: Assessment for Designing & Implementing Instruction
- SPED331 - Positive Learning Environments for all Students
  OR SPED331H - Hon: Positive Learning Environments for all Students

AND

Development Children and Adolescents (3 credits)

Earn a minimum grade of C in the following:

- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent

AND

Professional Block I

Fulfill ALL of the following requirements:

Tching of Literacy, Gr 4-8: Processes, Skills & Strateg (3 credits)

Earn a minimum grade of C in the following:

- MDED425 - Teaching of Literacy, Gr 4-8: Processes, Skills & Strategies

AND

Required Courses (3 credits)

Earn a minimum grade of C in the following:

- MDED486 - Teaching English Language Learners in the Middle Level
  OR MDED486H - Hon: Teaching English Language Learners in the Middle Level

AND

Professional Block II (12 credits)

Earn a minimum grade of C in the following:

- MDED323 - Content Area Literacy
- MDED446 - Teaching of Social Studies
- MDED456 - Teaching Middle Level Mathematics
- MDED466 - Teaching of Science: An Inquiry Approach

AND

A Concentration Is Required

Students must declare a concentration in English Language Arts, Mathematics, Science, or Social

Studies. Please consult your advisor.

Professional Education- Middle Level (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Block (6 credits)

Earn a minimum grade of C in the following:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Professional Block III - Student Teaching (12 credits)

Complete ALL of the following Courses:

- EDEL461 - Eled Stu Teaching
- EDEL462 - Eled Stu Teaching
- EDUC488 - EMEE Student Teaching Seminar (Capstone Experience)

The Department will be reducing the number of credits these two courses (EDEL 461 & 462) to be worth to 4.5 each to add in a Student Teaching Seminar as the Capstone for the program, worth 3 credits.

MDED Major Concentration - Science (14-16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

General Astronomy or Physics I with Algebra (3-4 credits)

Earn a minimum grade of C in the following:

- PHYS117 - General Astronomy
  OR PHYS131 - Physics 1 with Algebra

AND

Required Courses (4 credits)

Earn a minimum grade of C in the following:

- CHEM112 - Introductory Chemistry 2

AND

Earth Science Electives (7-8 credits)

Complete at least 2 of the following:

Option 1 (3 credits)

Earn a minimum grade of C in the following:

- ESCI202 - The Earth in Space

OR

Option 2 (4 credits)

Earn a minimum grade of C in the following:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology

OR

Option 3 (4 credits)

Earn a minimum grade of C in the following:

- ESSC222 - Historical Geology
  OR ESSC222H - H:Historical Geology

ESCI221 Physical Geology is a pre-req for ESSC222 Historical Geology, so, if chosen, both must be taken.

OR

Option 4 (4 credits)

Earn a minimum grade of C in the following:

- ESSC261 - Introduction to Oceanography

Required Related for Middle Level Education (42-43 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required ELA Courses (6 credits)

Earn a minimum grade of C in the following:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL220 - Introduction to Language Study

AND

Required Math Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- MATH104 - Fundamentals of Math 1
- MATH205 - Geometry for the Middle-Level Teacher

AND

Algebraic Foundations for the Middle-Level Teacher (3 credits)

Earn a minimum grade of C in the following:

- MATH204 - Algebraic Foundations for Mid-Level Teacher

AND

Data Analysis and Probability for Middle-Level Teacher (3 credits)

Earn a minimum grade of C in the following:

- MATH230 - Probability and Stats for Mid-Level Teacher

AND

Required Science Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- BIOL100 - General Biology
- PHYS101 - Survey of Physics

AND

Environmental Course (3 credits)

Earn a minimum grade of C in the following:

- GEOG130 - Intro to Environmental Science
  OR GEOG130H - Hon: Intro to Environmental Science (Inactive)
  OR ESSC120 - Environmental Geology
  OR BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness

AND

Gen Organic and Biochemistry 1 or Introductory Chemistry 1 (3-4 credits)

Earn a minimum grade of C in the following:

- CHEM103 - Gen Organic and Biochemistry 1
  OR CHEM111 - Introductory Chemistry 1

CHEM 103 for non-science concentration; CHEM 111 for science concentration.

AND

Required Social Studies Courses

Earn a minimum grade of C in the following:

- ECON100 - Introductory Economics
- GOVT111 - Introduction to American Government
- GEOG141 - World Regional Geography
- HIST200 - Reimagining Holidays & Heroes

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

General Education Requirement

Type
Completion Requirement

Complete ALL of the following Courses:

- WELL175 - Wellness

Middle Level Education Grade 4-8 B.S.Ed. - Social Studies

Overview

The program in middle level education is designed to provide the student with an in-depth knowledge of subject matter (30 credit hours) in a content area to teach 4th through 8th grades. In addition to the concentration area, candidates are expected to complete 12 credit hours in each of the remaining content areas and in social studies, a minimum of 27 credit hours in the Professional Core, and 12 credits in student teaching. Students who complete the middle level education program at Millersville University receive a Bachelor of Science in Education degree and may apply for a Pennsylvania Instructional I teaching certificate. This program can be completed in eight (8) semesters.

Curriculum

Simple Requirements

Major in Middle Level Education, BSE (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Core Courses (15 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Earn a minimum grade of C in the following:

- MDED335 - Literature for Children & Young Adolescents
  OR MDED335H - Hnrs: Literature for Children & Young Adolescents
- SPED101 - Orientation to Special Educ
- SPED311 - Assessment for Designing & Implementing Instruction
  OR SPED311H - Hon: Assessment for Designing & Implementing Instruction
- SPED331 - Positive Learning Environments for all Students
  OR SPED331H - Hon: Positive Learning Environments for all Students

AND

Development Children and Adolescents (3 credits)

Earn a minimum grade of C in the following:

- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent

AND

Professional Block I

Fulfill ALL of the following requirements:

Tching of Literacy, Gr 4-8: Processes, Skills & Strateg (3 credits)

Earn a minimum grade of C in the following:

- MDED425 - Teaching of Literacy, Gr 4-8: Processes, Skills & Strategies

AND

Required Courses (3 credits)

Earn a minimum grade of C in the following:

- MDED486 - Teaching English Language Learners in the Middle Level
  OR MDED486H - Hon: Teaching English Language Learners in the Middle Level

AND

Professional Block II (12 credits)

Earn a minimum grade of C in the following:

- MDED323 - Content Area Literacy
- MDED446 - Teaching of Social Studies
- MDED456 - Teaching Middle Level Mathematics
- MDED466 - Teaching of Science: An Inquiry Approach

AND

A Concentration Is Required

Students must declare a concentration in English Language Arts, Mathematics, Science, or Social

Studies. Please consult your advisor.

Professional Education- Middle Level (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Block (6 credits)

Earn a minimum grade of C in the following:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Professional Block III - Student Teaching (12 credits)

Complete ALL of the following Courses:

- EDEL461 - Eled Stu Teaching
- EDEL462 - Eled Stu Teaching
- EDUC488 - EMEE Student Teaching Seminar (Capstone Experience)

The Department will be reducing the number of credits these two courses (EDEL 461 & 462) to be worth to 4.5 each to add in a Student Teaching Seminar as the Capstone for the program, worth 3 credits.

MDED Major Concentration - Social Studies (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Geography of Pennsylvania or Maps and GIS (3 credits)

Earn a minimum grade of C in the following:

- GEOG245 - Geography of Pennsylvania
  OR GEOG245H - Hon: Geography of Pennsylvania (Inactive)
  OR GEOG281 - Maps and GIS

AND

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- HIST205 - The Art & Craft of History
- ECON203 - Introduction to World Economy

AND

Government Elective (3 credits)

Earn a minimum grade of C in the following:

- GOVT112 - Introduction to State and Local Government
  OR GOVT221 - Introduction to Comparative Political Systems
  OR GOVT251 - Introduction to Global Politics
  OR GOVT333 - American Political Thought
  OR GOVT352 - International Organizations

Required Related for Middle Level Education (42-43 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required ELA Courses (6 credits)

Earn a minimum grade of C in the following:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL220 - Introduction to Language Study

AND

Required Math Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- MATH104 - Fundamentals of Math 1
- MATH205 - Geometry for the Middle-Level Teacher

AND

Algebraic Foundations for the Middle-Level Teacher (3 credits)

Earn a minimum grade of C in the following:

- MATH204 - Algebraic Foundations for Mid-Level Teacher

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Data Analysis and Probability for Middle-Level Teacher (3 credits)

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Required Science Courses

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- BIOL100 - General Biology
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AND

Environmental Course (3 credits)

Earn a minimum grade of C in the following:

- GEOG130 - Intro to Environmental Science
  OR GEOG130H - Hon: Intro to Environmental Science (Inactive)
  OR ESSC120 - Environmental Geology
  OR BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness

AND

Gen Organic and Biochemistry 1 or Introductory Chemistry 1 (3-4 credits)

Earn a minimum grade of C in the following:

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  OR CHEM111 - Introductory Chemistry 1

CHEM 103 for non-science concentration; CHEM 111 for science concentration.

AND

Required Social Studies Courses

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- ECON100 - Introductory Economics
- GOVT111 - Introduction to American Government
- GEOG141 - World Regional Geography
- HIST200 - Reimagining Holidays & Heroes

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

General Education Requirement

Type
Completion Requirement

Complete ALL of the following Courses:

- WELL175 - Wellness

Courses

ECED511 - Early Childhood Education in Today's Society

Course Information

Course Title
Early Childhood Education in Today's Society

Subject code	Course Number	Academic Level
ECED	511	Graduate

Course Description
An overview of the field of early childhood education. Historical and philosophical influences on past and current approaches to teaching young children are traced and analyzed. The developmental needs and characteristics of the young child, with emphasis on the pre-primary level, are related to current curriculum programs and practices. Emphasis is placed on the necessity of using developmentally appropriate learning materials and teaching strategies.Topical study includes concepts, definitions, child developmental theories and skills needed by today's classroom professionals. In lieu of field experiences, appropriate teaching behavior is modeled by the instructor, and actual classroom occurrences are examined through Teacher Work Sample (TWS).

ECED519 - Seminar in Early Childhood Education

Course Information

Course Title
Seminar in Early Childhood Education

Subject code	Course Number	Academic Level
ECED	519	Graduate

Course Description
Investigation of contemporary goals of early childhood education. Provides analysis of organizational plans, classroom environment, teaching strategies and resources, and noteworthy trends and innovations. Application to individual situations is stressed. Focus will vary. Offered periodically.

ECED610 - Advanced Curriculum, Instruction and Assessment: Engaging Young Learners

Course Information

Course Title
Advanced Curriculum, Instruction and Assessment: Engaging Young Learners

Subject code	Course Number	Academic Level
ECED	610	Graduate

Course Description
This course is designed to prepare students in the areas of curriculum, instruction, and assessment young learners (i.e., PreK – 4th Grade). The course will focus on curricular philosophy and theory, approaches to early childhood education, pedagogical content knowledge, child development, and assessment of young learners. Current research, practice, and trends in early childhood education will be considered.

ECED611 - Affectve and Psychmtr Emphasis

Course Information

Course Title
Affectve and Psychmtr Emphasis

Subject code	Course Number	Academic Level
ECED	611	Graduate

Course Description
Investigation of contemporary practices and research pertaining to the affective and psychomotor development of children, birth to age 8. Primarily covers emotional growth, socialization, self-concept, aesthetic awareness, physical growth and perception. Offered annually.

ECED613 - Home, School, and Community

Course Information

Course Title
Home, School, and Community

Subject code	Course Number	Academic Level
ECED	613	Graduate

Course Description
Examination of current programs and recommended procedures for developing communication between home and school. Acquaints students with community resources and services available to families and teachers. Opportunities to develop a practical parent-teacher communication program for an individual teaching situation. Offered annually.

ECED614 - Advanced Curriculum in ECHD

Course Information

Course Title
Advanced Curriculum in ECHD

Subject code	Course Number	Academic Level
ECED	614	Graduate

Course Description
Extension of basic curriculum theory and practice as it applies to programs for young children. Sources of influence on early childhood curriculumsuch as professional organizations, learning theorists and historical practicewill be examined. Students analyze and revise or refine curriculum content and practices in their individual learning situations. Offered annually.

ECED615 - Adm and Suprv of Echd Prgrms

Course Information

Course Title
Adm and Suprv of Echd Prgrms

Subject code	Course Number	Academic Level
ECED	615	Graduate

Course Description
The role of the early childhood program administrator as an educational leader. Topics include educational decision making; program development; effective staff supervisory skills; facility management; funding sources and procedures; advocacy; and health, safety and nutrition issues. Offered periodically.

ECED690 - Graduate Student Teaching

Course Information

Course Title
Graduate Student Teaching

Subject code	Course Number	Academic Level
ECED	690	Graduate

Course Description
This course is the student teaching experience for our Early Childhood Post Baccalaureate teacher candidates. The successful completion of this student teaching experience is required for all teacher candidates in order to be certified in the state of Pennsylvania.

ECED699 - Thesis:

Course Information

Course Title
Thesis:

Subject code	Course Number	Academic Level
ECED	699	Graduate

Course Description
Each student writes and orally defends an individual thesis of some significance in the field of early childhood education. Prereq: 24 graduate s.h.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Graduate Credit Hours Completion

Earn at least 24 credits

ECPK110 - Introduction to Early Childhood Education

Course Information

Course Title
Introduction to Early Childhood Education

Subject code	Course Number	Academic Level
ECPK	110	Undergraduate

Course Description
Designed to provide an overview of the field of early childhood education. Historical, theoretical and philosophical influences on past and current approaches to teaching young children will be traced and analyzed. The course introduces students to the early childhood education profession, developmental characteristics of young children (birth-age 9), developmentally appropriate practices (NAEYC, 2009), and an overview of effective curriculum, instruction and assessment of young children. In the concurrent field experience, students reflect on their ability to cope with classroom reality as they affirm or change their choice of teaching as a profession. Prereq: Act 34 Clearance, Act 151 Clearance and Act 114 FBI Clearance. Offered spring, fall.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Clearances Required

Act 34 Clearance, Act 151 Clearance and Act 114 FBI Clearance.

ECPK110H - Hon:Introduction to Early Childhood Education

Course Information

Course Title
Hon:Introduction to Early Childhood Education

Subject code	Course Number	Academic Level
ECPK	110H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

Clearances Required

Act 34 Clearance, Act 151 Clearance and Act 114 FBI Clearance.

ECPK225 - Foundations of Reading

Course Information

Course Title
Foundations of Reading

Subject code	Course Number	Academic Level
ECPK	225	Undergraduate

Course Description
This course is designed to introduce teacher candidates to the field of teaching reading, including: structured literacy competencies that include evidence-based approaches to reading instruction in phonological and phonemic awareness, phonics and word recognition, spelling, automatic, fluent reading of text, vocabulary development, listening and reading comprehension, written expression, and differentiating reading instruction for a diverse population of learners. This course includes a required field experience. Pre-req: ECPK 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK 110

Complete ALL of the following Courses:
- ECPK110 - Introduction to Early Childhood Education

Clearances Required

Act 34 Clearance, Act 151 Clearance and Act 114 FBI Clearance.

Course Corequisites

Type
Prerequisite

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of

Teaching
OR EDFN241H - Hon:Psychological Foundations of Teaching

ECPK300 - Co-Op Experience in ERCH

Course Information

Course Title
Co-Op Experience in ERCH

Subject code	Course Number	Academic Level
ECPK	300	Undergraduate

Course Description
Co-op experience in Early Childhood Education

ECPK315 - Family & Community: Aspects of Diversity

Course Information

Course Title
Family & Community: Aspects of Diversity

Subject code	Course Number	Academic Level
ECPK	315	Undergraduate

Course Description
A focus on collaborative relationship building between home, school and community that facilitates positive influence on the individual child's development. These collaborative relationships create an inclusive learning environment for all children, including culturally and linguistically diverse. The collaborative relationships are based on developing reciprocal communication techniques, cultural sensitivity and rapport with children and their families. Promotes effective communication and advocacy skills for students with disabilities and their families between school, agency personnel and community members. Empowerment techniques and parent workshops are developed to encourage parent involvement, with emphasis on families who traditionally have been excluded from the collaborative process in the schools and developing parental self-efficacy skills. Offered spring, fall. Prereq: ENG 110 or ENGL 110H; EDUC 220 or ECPK 225; EDFN 211, 241; Coreq: ECPK 345 and EDFN 320.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ECPK 225 and EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- ECPK225 - Foundations of Reading
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological

Foundations of Teaching

ECPK315H - H:Family & Community: Aspects of Diversity

Course Information

Course Title
H:Family & Community: Aspects of Diversity

Subject code	Course Number	Academic Level
ECPK	315H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ECPK 225 and EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- ECPK225 - Foundations of Reading
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

ECPK316 - Creative Experiences for the Young Child

Course Information

Course Title
Creative Experiences for the Young Child

Subject code	Course Number	Academic Level
ECPK	316	Undergraduate

Course Description
An emphasis on making appropriate instructional and curricular decisions to provide creative opportunities for young children; special attention to rhythmic, aesthetic and dramatic avenues of expression; application of ideas through actual experiences with young children. Offered in fall, spring. Prereq: C- or higher in ELED 210 or ECPK 110; Act 34 Clearance, Act 151 Clearance and Act 114 FBI Clearance.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK 110

Earn a minimum grade of C- in the following:

- ECPK110 - Introduction to Early Childhood Education

Clearances Required

Act 34 Clearance, Act 151 Clearance and Act 114 FBI Clearance.

ECPK316H - Hon: Creative Experiences for the Young Child

Course Information

Course Title
Hon: Creative Experiences for the Young Child

Subject code	Course Number	Academic Level
ECPK	316H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK 110

Earn a minimum grade of C- in the following:

- ECPK110 - Introduction to Early Childhood Education

Clearances Required

Act 34 Clearance, Act 151 Clearance and Act 114 FBI Clearance.

ECPK345 - Social Studies for the Young Learner

Course Information

Course Title
Social Studies for the Young Learner

Subject code	Course Number	Academic Level
ECPK	345	Undergraduate

Course Description
Teacher candidates will apply the standards and thematic strands of social studies as defined by the National Council for the Social Studies for the PreK-4 developmental level. Emphasis is on the learner building civil competence and acquiring knowledge, skills and attitudes in civics and government, economics, history and geography. Offered in fall, spring. Prereq: EDFN 211, EDFN 241 and ECPK 225 or EDUC 220.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN211 or EDFN211H and ECPK225

Complete ANY of the following Courses:

- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- ECPK225 - Foundations of Reading

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

ECPK 422 or ECPK 422H and ECPK 455 or ECPK 455H and ECPK 465

Enroll in the following Courses:

- ECPK422 - Tching of Literacy, PreK-4: Process, Skills & Strategies **OR** ECPK422H - H:Tching of Literacy, PreK-4:

Process, Skills & Strategies
- ECPK455 - Teaching Mathematics to Young Children
  OR ECPK455H - Hon:Teaching Mathematics to Young Children
- ECPK465 - Science for the Young Learner

ECPK345H - Hon: Social Studies for the Young Learner

Course Information

Course Title
Hon: Social Studies for the Young Learner

Subject code	Course Number	Academic Level
ECPK	345H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN211 or EDFN211H and ECPK225

Complete ANY of the following Courses:
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- ECPK225 - Foundations of Reading

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

ECPK 422 or ECPK 422H and ECPK 455 or ECPK 455H and ECPK 465

Enroll in the following Courses:
- ECPK422 - Tching of Literacy, PreK-4: Process, Skills & Strategies
  OR ECPK422H - H:Tching of Literacy, PreK-4: Process, Skills & Strategies
- ECPK455 - Teaching Mathematics to Young Children
  OR ECPK455H - Hon:Teaching Mathematics to Young Children
- ECPK465 - Science for the Young Learner

ECPK421 - Language Development & Emergent Literacy

Course Information

Course Title
Language Development & Emergent Literacy

Subject code	Course Number	Academic Level
ECPK	421	Undergraduate

Course Description
Examines children's oral language development and its contribution to emergent literacy, the period between birth and the time when children learn to read and write in a conventional manner. Appropriate content and skill competencies will be covered. Strategies to enhance the family/home/ school connection will be explored. A field experience will be part of this course. Prereq: admission to Advanced Professional Studies. Coreq: ECPK 496.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

ECPK 496 or ECPK 496H

Enroll in the following Courses:

- ECPK496 - Curric, Instr & Assesss: Engaging the Young Child
  OR ECPK496H - H:Curric, Instr & Assesss: Engaging the Young Child

ECPK421H - H:Language Development & Emergent Literacy

Course Information

Course Title
H:Language Development & Emergent Literacy

Subject code	Course Number	Academic Level
ECPK	421H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

ECPK 496 or ECPK 496H

Enroll in the following Courses:

- ECPK496 - Curric, Instr & Assesss: Engaging the Young Child
  OR ECPK496H - H:Curric, Instr & Assesss: Engaging the Young Child

ECPK422 - Tching of Literacy, PreK-4: Process, Skills & Strategies

Course Information

Course Title
Tching of Literacy, PreK-4: Process, Skills & Strategies

Subject code	Course Number	Academic Level
ECPK	422	Undergraduate

Course Description
This course develops evidence-based pedagogical skills in the teaching of reading and the related language arts in grades PreK-4. Keeping with the theory that the communication processes – reading, writing, listening, and speaking – cannot arbitrarily be divided, this course will present pedagogical skills in an interrelated and integrated format. Understandings, teaching strategies and techniques will be consistent with the Structured Literacy Knowledge and Practice Standards of PK-4 Educators and the PA Core Standards for literacy instruction. Throughout this course, students will be expected to exhibit professional behaviors as delineated in Administrative Guidelines for the Assessment of the Professional and Ethical Dispositions of Professional Education Unit Candidates.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK 110 and ECPK 225

Complete ALL of the following Courses:
- ECPK110 - Introduction to Early Childhood Education
- ECPK225 - Foundations of Reading

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Early Childhood Education Majors

ECPK422H - H:Tching of Literacy, PreK-4: Process, Skills & Strategies

Course Information

Course Title
H:Tching of Literacy, PreK-4: Process, Skills & Strategies

Subject code	Course Number	Academic Level
ECPK	422H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK 110 and ECPK 225

Complete ALL of the following Courses:
- ECPK110 - Introduction to Early Childhood Education
- ECPK225 - Foundations of Reading

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Early Childhood Education Majors

Must be an Early Childhood Education major.

ECPK435 - Literature for the Young Child

Course Information

Course Title
Literature for the Young Child

Subject code	Course Number	Academic Level
ECPK	435	Undergraduate

Course Description
Prepares early childhood teacher candidates to recognize high-quality literature for children from birth to age nine. The use of literature to promote childrens language, intellectual, emotional, social/moral and aesthetic/creative development is highlighted. A focus on childrens response to literature is provided. Offered fall, spring. Prereq: PSYC 227; EDFN 211, 241; ECPK 225 or EDUC 220.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN211 or EDFN 211H and EDFN241 or EDFN241H and ECPK225 and PSYC227 or PSYC227H

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent

ECPK435H - Hon: Literature for the Young Child

Course Information

Course Title
Hon: Literature for the Young Child

Subject code	Course Number	Academic Level
ECPK	435H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN211 or EDFN 211H and EDFN241 or EDFN241H and ECPK225 and PSYC227 or PSYC227H

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent

ECPK455 - Teaching Mathematics to Young Children

Course Information

Course Title
Teaching Mathematics to Young Children

Subject code	Course Number	Academic Level
ECPK	455	Undergraduate

Course Description
Teacher candidates will apply the principles that guide all mathematics instruction as specified by the National Council of Teachers of Mathematics for the PreK through 4th-grade developmental level. Candidates will effectively deliver core mathematics content as well as have skills to stay current with the research on best practices in mathematics education. Prereq: Math 105, admission to Advanced Professional Studies. Coreq: ECPK 465, 422, SPED 331

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 105

Complete ALL of the following Courses:
- MATH105 - Fundamentals of Math 2

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

ECPK 455 or ECPK 455H and ECPK 422 or ECPK 422H and SPED 331 or SPED 331H

Enroll in the following Courses:
- ECPK455 - Teaching Mathematics to Young Children
  OR ECPK455H - Hon:Teaching Mathematics to Young Children
- ECPK422 - Tching of Literacy, PreK-4: Process, Skills & Strategies
  OR ECPK422H - H:Tching of Literacy, PreK-4: Process, Skills & Strategies
- SPED331 - Positive Learning Environments for all Students
  OR SPED331H - Hon: Positive Learning Environments for all Students

ECPK455H - Hon:Teaching Mathematics to Young Children

Course Information

Course Title
Hon:Teaching Mathematics to Young Children

Subject code	Course Number	Academic Level
ECPK	455H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 105

Complete ALL of the following Courses:
- MATH105 - Fundamentals of Math 2

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

ECPK 455 or ECPK 455H and ECPK 422 or ECPK 422H and SPED 331 or SPED 331H

Enroll in the following Courses:
- ECPK455 - Teaching Mathematics to Young Children
  OR ECPK455H - Hon:Teaching Mathematics to Young Children
- ECPK422 - Tching of Literacy, PreK-4: Process, Skills & Strategies
  OR ECPK422H - H:Tching of Literacy, PreK-4: Process, Skills & Strategies
- SPED331 - Positive Learning Environments for all Students
  OR SPED331H - Hon: Positive Learning Environments for all Students

ECPK465 - Science for the Young Learner

Course Information

Course Title
Science for the Young Learner

Subject code	Course Number	Academic Level
ECPK	465	Undergraduate

Course Description
Provides overview of the content and processes included in an early childhood (Pre K-4) science program. The course includes a study of methodology appropriate to the school setting. Prereq: admission to Advanced Pofessional Sstudies. Coreq: ECPK 422, 455, SPED 331.

ECPK465H - Hnrs: Science for the Young Learner

Course Information

Course Title
Hnrs: Science for the Young Learner

Subject code	Course Number	Academic Level
ECPK	465H	Undergraduate

ECPK485 - Teaching Young English Language Learners

Course Information

Course Title
Teaching Young English Language Learners

Subject code	Course Number	Academic Level
ECPK	485	Undergraduate

Course Description
Prepares early childhood teacher candidates to understand the social and linguistic foundations for first and second language development in the early years. Teacher candidates will be able to apply research-based strategies for supplying first language development in the home and for preparing young learners for the transitions to schooling in a second language. Candidates will demonstrate an understanding of the resources that young learners bring to academic settings, and of ways to support young learners and their families in their adjustments to English-speaking schools. Candidates will demonstrate the ability to use assessment data to differentiate and modify instruction according to the needs of their students. Teacher candidates will be prepared to support young English language learners in their acquisition of language and content within optimal learning environments that provide meaningful access to standards-based instruction. Prereq: ENGL 110, admission to Advanced Professional Studies. Equivalent to EDUC 487, credit may not be received for both courses.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

ECPK485H - H:Teaching Young English Language Learners

Course Information

Course Title
H:Teaching Young English Language Learners

Subject code	Course Number	Academic Level
ECPK	485H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

ECPK489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ECPK	489	Undergraduate

Course Description
Early Childhood Education Honors Course

ECPK495 - Integrative STEM Practicum

Course Information

Course Title
Integrative STEM Practicum

Subject code	Course Number	Academic Level
ECPK	495	Undergraduate

Course Description
This clinical practicum course provides opportunities for teacher candidates to bridge theory and practice. Students will demonstrate and apply knowledge, skills, and dispositions related to the implementation of integrative science, technology, engineering and math (STEM) education at the pre-K to grade 4 level. Emphasis is placed on the planning, development, implementation and assessment of integrative STEM instructional activities and lessons that use problem-based and experiential learning techniques targeted for Pre-K to grade 4 students. Includes field experiences. Prerequisites ECPK 110, ECPK 190, EDTE/ECPK 290, ITEC 344, EDTE 490 or 690 or Permission of Instructor; Advanced Professional Studies (APS) status required. Cross-listed with EDTE 495, credit may not be received for both courses.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK110 and ECPK190 and ECPK290

Complete ALL of the following Courses:
- ECPK110 - Introduction to Early Childhood Education
- ERCH190 - Introduction to Integrative STEM Pedagogy
- ERCH290 - Children's Engineering

EDTE 490 or EDTE 690

Complete ANY of the following Courses:
- EDTE490 - Integrative Learning Using Experiential Strategies
- EDTE690 - Integrtve Lrning Exprntl Strgy

Or must have permission of instructor.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

ECPK496 - Curric, Instr & Assesss: Engaging the Young Child

Course Information

Course Title
Curric, Instr & Assesss: Engaging the Young Child

Subject code	Course Number	Academic Level
ECPK	496	Undergraduate

Course Description
Designed to prepare teacher candidates in the general areas of curriculum,instruction, and assessment for the youngest learners (i.e., infancy-kindergarten). The course will focus on curricular philosophy and theory, approaches to early childhood education, pedagogical content knowledge, child development, and assessment of young learners. Current research, practice, and trends in early childhood education will be considered. Co-requisite for this course is ECPK 421: Language Development and Emergent Literacy. This is a six credit course with a field experience embedded into the course.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK110

Complete ALL of the following Courses:
- ECPK110 - Introduction to Early Childhood Education

Course Corequisite

Type
Corequisite

ECPK 421

Enroll in the following Courses:
- ECPK421 - Language Development & Emergent Literacy

ECPK496H - H:Curric, Instr & Assesss: Engaging the Young Child

Course Information

Course Title
H:Curric, Instr & Assesss: Engaging the Young Child

Subject code	Course Number	Academic Level
ECPK	496H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK110

Complete ALL of the following Courses:

- ECPK110 - Introduction to Early Childhood Education

Course Corequisite

Type
Corequisite

ECPK 421

Enroll in the following Courses:

- ECPK421 - Language Development & Emergent Literacy

ECPK498 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
ECPK	498	Undergraduate

ECPK499 - Dept Hnrs:

Course Information

Course Title
Dept Hnrs:

Subject code	Course Number	Academic Level
ECPK	499	Undergraduate

EDEL461 - Eled Stu Teaching

Course Information

Course Title
Eled Stu Teaching

Subject code	Course Number	Academic Level
EDEL	461	Undergraduate

Course Description
Eled Stu Teaching

EDEL462 - Eled Stu Teaching

Course Information

Course Title
Eled Stu Teaching

Subject code	Course Number	Academic Level
EDEL	462	Undergraduate

Course Description
Students must satisfactorily complete student teaching in order to qualify for certification. Seminar sessions are required. Students in the dual certification elementary and special education program must have one experience in an elementary classroom and one experience in a special education classroom. Offered in fall, spring.

EDSL461 - Student Teaching in ESL

Course Information

Course Title
Student Teaching in ESL

Subject code	Course Number	Academic Level
EDSL	461	Undergraduate

Course Description
Student Teaching and Seminar Students must satisfactorily complete student teaching in order to qualify for certification. Seminar sessions are required. Students in the dual certification elementary and ESL certification program must have one experience in an elementary classroom and one experience in an ESL classroom. Offered fall, spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDUC 461 and EDUC 462 and EDUC 463 and EDUC 464 and ECPK 485 or MDED 486 or EDUC 487

Complete ALL of the following Courses:

- EDUC461 - Second Language Acquisition: Theory, Programs, and Assessment
- EDUC462 - Methods for Teaching English Language Learners
- EDUC463 - Linguistic and Cultural Diversity in the Classroom
- EDUC464 - Assessment, Policies and Practices in Teaching English Language Learners
- ECPK485 - Teaching Young English Language Learners
  OR ECPK485H - H:Teaching Young English Language Learners
  OR MDED486 - Teaching English Language Learners in the Middle Level
  OR MDED486H - Hon: Teaching English Language Learners in the Middle Level
  OR EDUC487 - Teaching English Learners

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

EDSL462 - ESL Student Teaching

Course Information

Subject code	Course Number	Academic Level
EDSL	462	Undergraduate

Course Description
Student Teaching and Seminar Students must satisfactorily complete student teaching in order to qualify for certification. Seminar sessions are required. Students in the dual certification elementary and ESL certification program must have one experience in an elementary classroom and one experience in an ESL classroom. Prereq: admission to Advanced Professional Studies.

EDSP461 - Stu Tch: Sped, 1st

Course Information

Course Title
Stu Tch: Sped, 1st

Subject code	Course Number	Academic Level
EDSP	461	Undergraduate

Course Description
CR. Student Teaching- Special Education: 1st Half Semester

EDSP462 - Stu Tch: Sped, 2nd

Course Information

Course Title
Stu Tch: Sped, 2nd

Subject code	Course Number	Academic Level
EDSP	462	Undergraduate

Course Description
Two full-time practicum experiences where students have an opportunity to apply educational strategies and interventions for students with mild, moderate and severe disabilities. (See Academic Policies; Student Teaching, Application and Eligibility; Student Teaching, Transfer Students).

EDSP562 - Post-Bacc Student Teaching

Course Information

Course Title
Post-Bacc Student Teaching

Subject code	Course Number	Academic Level
EDSP	562	Graduate

Course Description
Post-Bacc Student Teaching

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED580 and SPED600 and SPED601 and SPED611 and SPED621 and SPED642 and SPED652 and SPED671

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities
- SPED611 - Seminar in Learning Disabled
- SPED621 - Multicultural Aspects
- SPED642 - Teaching Mild and Moderate Disabilities
- SPED652 - Issues of Diversity in Special Education
- SPED671 - Behavior Management

EDUC179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
EDUC	179	Undergraduate

Course Description
Experimental

EDUC279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
EDUC	279	Undergraduate

Course Description
Experimental

EDUC305 - Field Experience

Course Information

Course Title
Field Experience

Subject code	Course Number	Academic Level
EDUC	305	Undergraduate

Course Description
Specific work and study assignments constituting the field experience will be developed. Regular discussions, conferences and group seminars will be conducted by faculty members and field supervisors to clarify generalizations that link practice to theory. In most instances the assignments will be in public schools; however, social agencies may be included in this practicum program. Offered in fall, spring.

EDUC324 - Diagnosis of Reading and Writing Disabilities

Course Information

Course Title
Diagnosis of Reading and Writing Disabilities

Subject code	Course Number	Academic Level
EDUC	324	Undergraduate

Course Description
The focus of this course is decision-making about individuals with reading and writing difficulties, based on current theory and evidence-based practice. Students will use a variety of formal diagnostic instruments and procedures to discover a learner's literacy strengths and needs Students will administer a variety of assessments, analyze the results, and implement a mini-action research model to determine how the assessment data will then drive and inform instruction, and reflect upon which evidence-based instruction best addresses student learning needs.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK 225 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ECPK225 - Foundations of Reading
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

EDUC330 - LGBTQ+ Issues in Education

Course Information

Course Title
LGBTQ+ Issues in Education

Subject code	Course Number	Academic Level
EDUC	330	Undergraduate

Course Description
Provides an overview of past, current, and emerging LGBTQ+ issues, policies, and advocacy in P-12 and higher education. Investigates these issues from a variety of historical, cultural, and theoretical perspectives.

EDUC379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
EDUC	379	Undergraduate

Course Description
Experimental

EDUC403 - Pluralism in Society

Course Information

Course Title
Pluralism in Society

Subject code	Course Number	Academic Level
EDUC	403	Undergraduate

Course Description
Provides historical and present day information about different racial, cultural, and linguistic groups represented in our society. It explores the challenge of providing an equitable and effective education to all and provides strategies that can be used to deal with cultural issues in society. Prereq: ENGL 110 and Junior Standing (60 credits)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

EDUC403H - Hon: Pluralism in Society

Course Information

Course Title
Hon: Pluralism in Society

Subject code	Course Number	Academic Level
EDUC	403H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

EDUC424H - H:Diagnosis of Reading and Writing Disabilities

Course Information

Course Title
H:Diagnosis of Reading and Writing Disabilities

Subject code	Course Number	Academic Level
EDUC	424H	Undergraduate

Course Description
H:Diagnostic Reading Disablity

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK 225 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ECPK225 - Foundations of Reading
- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

EDUC425 - The Teaching of Literacy: Processes, Skills, & Strategies

Course Information

Course Title
The Teaching of Literacy: Processes, Skills, & Strategies

Subject code	Course Number	Academic Level
EDUC	425	Undergraduate

Course Description
This course focuses predominantly on the Structured Literacy (SL) Knowledge and Practice Standards of pre-K through 12th grade Special Education Teachers and introduces teaching strategies and techniques that are consistent with state standards for assessments and instruction for students receiving special education services. As such, students will learn, practice, and plan instruction around the following structured literacy competencies around essential SL principles and practices, phonological and phonemic awareness, phonics (decoding and encoding) and word recognition, spelling, automatic, fluent reading of text, word recognition, vocabulary development, listening and reading comprehension, written expression, and differentiating reading instruction for a diverse population of learners. Course content will also be aligned with the Pennsylvania Core Standards for reading, writing, listening, and speaking.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECPK 225 and EDUC 424 or EDUC 424H

Complete ALL of the following Courses:

- ECPK225 - Foundations of Reading
- EDUC324 - Diagnosis of Reading and Writing Disabilities
  OR EDUC424H - H:Diagnosis of Reading and Writing Disabilities

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Special Education Majors

Reserved for Special Education majors only.

EDUC433 - Gender and Race Issues

Course Information

Course Title
Gender and Race Issues

Subject code	Course Number	Academic Level
EDUC	433	Undergraduate

Course Description
Childrens literature will be examined in light of recent psychological, sociological and educational research on sexism and racism. Offered in fall, spring. Prereq: COMM 100, ENGL 110, junior status.

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

EDUC433H - Hnrs:Gender and Race Issues

Course Information

Course Title
Hnrs:Gender and Race Issues

Subject code	Course Number	Academic Level
EDUC	433H	Undergraduate

Course Description
Hnrs:Gender And Race Issues

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

EDUC461 - Second Language Acquisition: Theory, Programs, and Assessment

Course Information

Course Title
Second Language Acquisition: Theory, Programs, and Assessment

Subject code	Course Number	Academic Level
EDUC	461	Undergraduate

Course Description
Provides prospective and practicing teachers with a foundational understanding of English language structure, first and second language acquisition, and oral language assessment methods for K-12 classrooms. Historical and evolving legislative policies and programs related to schooling and English language learners in the U.S. Prereq: admission to Advanced Professional Studies.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

EDUC462 - Methods for Teaching English Language Learners

Course Information

Course Title
Methods for Teaching English Language Learners

Subject code	Course Number	Academic Level
EDUC	462	Undergraduate

Course Description
Provides prospective and practicing teachers with an opportunity to apply theoretical foundations of second language acquisition to teaching in the classroom. Methods for developing English language learners conversational and academic language, as well as strategies for learning in the content areas.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDUC461

Complete ALL of the following Courses:

- EDUC461 - Second Language Acquisition: Theory, Programs, and Assessment

EDUC463 - Linguistic and Cultural Diversity in the Classroom

Course Information

Course Title
Linguistic and Cultural Diversity in the Classroom

Subject code	Course Number	Academic Level
EDUC	463	Undergraduate

Course Description
Examines U.S. and world cultures, sources of cross-cultural conflict and approaches to cross-cultural conflict resolution as it relates to K-12 settings. Explores approaches for creating classrooms that promote equity and an appreciation for diversity.

EDUC464 - Assessment, Policies and Practices in Teaching English Language Learners

Course Information

Course Title
Assessment, Policies and Practices in Teaching English Language Learners

Subject code	Course Number	Academic Level
EDUC	464	Undergraduate

Course Description
Focuses on the use of various tools in assessing and planning for the linguistic and instructional needs of English learners. Contains a public school field experience component where participants apply methods and principles for supporting English language learners in K-12 settings. Examines state and federal policies as they relate to schooling and English learners.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDUC461 and EDUC462

Complete ALL of the following Courses:
- EDUC461 - Second Language Acquisition: Theory, Programs, and Assessment
- EDUC462 - Methods for Teaching English Language Learners

EDUC465 - Language & Literacy Interventions: Clinical Practicum

Course Information

Course Title
Language & Literacy Interventions: Clinical Practicum

Subject code	Course Number	Academic Level
EDUC	465	Undergraduate

Course Description
Application of literacy theory and knowledge of effective research based instruction. Assessment of English language learners. Acquisition of academic vocabulary, instructional strategies for teaching content area vocabulary and text, and use of interventions in a clinical setting. Prereq: EDUC 461, 462, 463 and 464. Offered in winter or summer.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete ALL of the following Courses:
- EDUC461 - Second Language Acquisition: Theory, Programs, and Assessment
- EDUC462 - Methods for Teaching English Language Learners
- EDUC463 - Linguistic and Cultural Diversity in the Classroom
- EDUC464 - Assessment, Policies and Practices in Teaching English Language Learners

EDUC475 - Current Trends in Education

Course Information

Course Title
Current Trends in Education

Subject code	Course Number	Academic Level
EDUC	475	Undergraduate

Course Description
A survey of current and future curricular and instructional trends in education. Emphasis on identification, examination and evaluation of topics, methods, strategies and issues affecting teaching and learning. Offered infrequently.

EDUC479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
EDUC	479	Undergraduate

Course Description
Experimental

EDUC486 - Topics In Education

Course Information

Course Title
Topics In Education

Subject code	Course Number	Academic Level
EDUC	486	Undergraduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics/methods will vary according to the needs of students and faculty. Offered infrequently.

EDUC486H - HNRS:Topics In Education

Course Information

Course Title
HNRS:Topics In Education

Subject code	Course Number	Academic Level
EDUC	486H	Undergraduate

EDUC487 - Teaching English Learners

Course Information

Course Title
Teaching English Learners

Subject code	Course Number	Academic Level
EDUC	487	Undergraduate

Course Description
This course prepares teacher candidates to understand cross-cultural and linguistic foundations of acquiring a new language. Teacher candidates will apply research-based strategies for providing English learners (ELs) optimal learning environments that provide meaningful access to standards-based instruction. Candidates will demonstrate the ability to use assessment data to differentiate and modify instruction. Candidates will also demonstrate an understanding of schools legal responsibilities toward ELLs and their families. Equivalent to ERCH 485, credit may not be earned for both courses.

EDUC488 - EMEE Student Teaching Seminar (Capstone Experience)

Course Information

Course Title
EMEE Student Teaching Seminar (Capstone Experience)

Subject code	Course Number	Academic Level
EDUC	488	Undergraduate

Course Description
This course supports students during student teaching in connecting theory and practice in ways that support their collective professional learning, culminating in an Action Research Project. Additionally, this course helps students make the most of their time in their student teaching placement and to think collaboratively around problems of practice that emerge. While this may include concerns and/or worries, the goal is to maintain a professional and productive space where educators are working to think through questions and concerns together and grow their pedagogy and practice.

Capstone Stage Label
Yes

Simple Requirements

To be taken with student teaching courses.

Type
Corequisite

Complete ALL of the following :

EDUC498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
EDUC	498	Undergraduate

EDUC533 - Nonfiction Lit and Literacy

Course Information

Course Title
Nonfiction Lit and Literacy

Subject code	Course Number	Academic Level
EDUC	533	Graduate

Course Description
This course offers an in-depth look at nonfiction literature written for children and young adolescents. The communication of ideas through visuals and print in books and biographies will be highlighted. Topics include evaluation and selection of books, models for student writing, visual literacy and student response to nonfiction. Prereq: Survey course in childrens literature or permission of instructor. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Survey Course in Children's Literature or Instructor Permission

Completed a survey course in children’s literature or permission of the instructor.

EDUC535 - Children's Literature and Creative Experiences for Young Children and Adolescents

Course Information

Course Title
Children's Literature and Creative Experiences for Young Children and Adolescents

Subject code	Course Number	Academic Level
EDUC	535	Graduate

Course Description
This course introduces the genres of literature for children and young adolescents from birth through early adolescence. Students examine the work of renowned authors and illustrators. Response to literature and the selection of books for the classroom receive emphasis. Emphasis on making appropriate instructional and curricular decisions to provide creative opportunities for young children; special attention to rhythmic, aesthetic, and dramatic avenues of expression; application of ideas through actual experiences with young children.

EDUC536 - Picture Book Communication

Course Information

Course Title
Picture Book Communication

Subject code	Course Number	Academic Level
EDUC	536	Graduate

Course Description
Examines the unique qualities of communication in picture books. Book design, illustration, verbal-visual integration, renowned illustrators and childrens responses to picture books receive in-depth attention. Exploration of picture books for all ages will occur. Before enrolling, students must have completed a survey course in childrens literature. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Survey Course in Children's Literature

Completed a survey course in children’s literature.

EDUC561 - Second Language Acquisition: Theory, Programs & Assessment

Course Information

Course Title
Second Language Acquisition: Theory, Programs & Assessment

Subject code	Course Number	Academic Level
EDUC	561	Graduate

Course Description
This course focuses on the basic foundational theories, program approaches and teaching strategies for learning English as an additional language, which all teachers need to understand in order to better serve the varying cultural, linguistic, and academic needs of students who are developing proficiency in English. We will focus on approaches which facilitate the development of English as an additional language through evidence-based structured literacy components in listening, speaking, reading, and writing, as well as in natural contexts of communication across content-based learning experiences. This course provides prospective and practicing teachers with a foundational understanding of English language structure, home and target language acquisition, and oral language assessment methods for K-12 classrooms. Offered annually.

EDUC562 - Methods for Teaching English Language Learners

Course Information

Course Title
Methods for Teaching English Language Learners

Subject code	Course Number	Academic Level
EDUC	562	Graduate

Course Description
This course provides prospective and practicing teachers with opportunities to learn and apply theoretical foundations of second language acquisition to teaching in the classroom. Participants will learn and apply effective research-supported methods for developing English language learners' conversational and academic language competence, as well as learning content in linguistically supportive environments, and developing literacy skills through evidence-based structured literacy approaches. Offered two times a year. Prereq: EDUC 561

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDUC 561

Complete ALL of the following Courses:

- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment

EDUC563 - Linguistic and Cultural Diversity in the Classroom

Course Information

Course Title
Linguistic and Cultural Diversity in the Classroom

Subject code	Course Number	Academic Level
EDUC	563	Graduate

Course Description
Examines U.S. and world cultures, sources of cross-cultural conflict and approaches to cross-cultural conflict resolution as it relates to K-12 settings. Explores approaches for creating classrooms that promote equity and an appreciation for diversity. Offered annually.

EDUC564 - Assessment, Policies & Practice in Teaching of English Language Learners

Course Information

Course Title
Assessment, Policies & Practice in Teaching of English Language Learners

Subject code	Course Number	Academic Level
EDUC	564	Graduate

Course Description
Focuses on the use of various tools in assessing and planning for the linguistic and instructional needs of English learners. Contains a public school field experience component where participants apply methods and principles for supporting English language learners in K-12 settings. Examines state and federal policies as they relate to schooling and English language learners. Prereq: EDUC 561 or 562. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDUC 561 and EDUC 562

Complete ANY of the following Courses:

- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment
- EDUC562 - Methods for Teaching English Language Learners

EDUC565 - Language & Literacy Interventions: Clinical Practicum

Course Information

Course Title
Language & Literacy Interventions: Clinical Practicum

Subject code	Course Number	Academic Level
EDUC	565	Graduate

Course Description
Application of literacy theory and knowledge of effective research-based instruction. Assessment of English learners. Acquisition of foundational literacy skills (structured literacy), instructional strategies for teaching content area vocabulary and text, and use of interventions in a clinical setting. Prereq: EDUC 561, 562, 563 and 564 or permission of instructor. Offered in the summer.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDUC 561 and EDUC 562 and EDUC 563 and EDUC 564

Complete ALL of the following Courses:

- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment
- EDUC562 - Methods for Teaching English Language Learners
- EDUC563 - Linguistic and Cultural Diversity in the Classroom
- EDUC564 - Assessment, Policies & Practice in Teaching of English Language Learners

EDUC575 - Current Trends in Education

Course Information

Course Title
Current Trends in Education

Subject code	Course Number	Academic Level
EDUC	575	Graduate

Course Description
A survey of current and future curricular and instructional trends in education. Emphasis on identification, examination and evaluation of topics, methods, strategies and issues affecting teaching and learning. Offered periodically.

EDUC580 - Methods for Teaching English Language Learners

Course Information

Course Title
Methods for Teaching English Language Learners

Subject code	Course Number	Academic Level
EDUC	580	Graduate

Course Description
This course prepares initial teacher certification candidates to understand cross-cultural and linguistic foundations of acquiring a new language. Teacher candidates will apply research-based strategies for providing English language learners optimal learning environments that provide meaningful access to standards-based instruction. Candidates will demonstrate the ability to use assessment data to differentiate and modify instruction. Candidates will also demonstrate an understanding of schools' legal responsibilities toward ELLs and their families. This course includes a field component. Clearances for all course participants must be up to date and filed with the Field Services office. Restricted to Post-Baccalaureate Certification students.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Post-Baccalaureate Certification Students

Restricted to Post-Baccalaureate Certification students.

EDUC586 - Topics in Elementary Education

Course Information

Course Title
Topics in Elementary Education

Subject code	Course Number	Academic Level
EDUC	586	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods used will vary according to the needs of students and faculty involved. Offered periodically.

EDUC587 - Topics in Elementary Education

Course Information

Course Title
Topics in Elementary Education

Subject code	Course Number	Academic Level
EDUC	587	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods used will vary according to the needs of students and faculty involved. Offered periodically.

EDUC588 - Topics in Elementary Education

Course Information

Course Title
Topics in Elementary Education

Subject code	Course Number	Academic Level
EDUC	588	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods used will vary according to the needs of students and faculty involved. Offered periodically.

EDUC589 - Topics in Elementary Education

Course Information

Course Title
Topics in Elementary Education

Subject code	Course Number	Academic Level
EDUC	589	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods used will vary according to the needs of students and faculty involved. Offered periodically.

EDUC610 - Critical Literacy

Course Information

Course Title
Critical Literacy

Subject code	Course Number	Academic Level
EDUC	610	Graduate

Course Description
Development of a personal perspective of critical literacy, encompassing reading, writing, speaking and listening. Consideration of literacy as cultural social practice, comparison of multiple perspectives, and implications as to how educators define literacy. Knowledge of how adolescent students use literacy to make meaning of text in multiple contexts, including content area material. Application of assessment tools to determine practical strategies to develop students literacy skills. Offered infrequently.

EDUC631 - Linguistic Foundations

Course Information

Course Title
Linguistic Foundations

Subject code	Course Number	Academic Level
EDUC	631	Graduate

Course Description
Survey of the science of language and ways in which it can enrich the teaching of language. Offered periodically.

EDUC634 - Realism in Child Literature

Course Information

Course Title
Realism in Child Literature

Subject code	Course Number	Academic Level
EDUC	634	Graduate

Course Description
Examines the realistic treatments of topics in fiction and nonfiction for children and the issues that they raise. Censorship will be explored, and procedures for addressing it will be examined. Offered periodically.

EDUC635 - Folk Literature

Course Information

Course Title
Folk Literature

Subject code	Course Number	Academic Level
EDUC	635	Graduate

Course Description
Designed to provide opportunities for teachers, librarians and interested members of the community to explore the realm of traditional literature appropriate for use in the educational curriculum and cultural arts programs. It allows participants to achieve an understanding of the purpose and history of oral literature, as well as its modern educational and social applications. Offered periodically.

EDUC636 - Literature and Response

Course Information

Course Title
Literature and Response

Subject code	Course Number	Academic Level
EDUC	636	Graduate

Course Description
Examines literature for children and adolescents and their responses to it. Students investigate the influences upon and patterns of response, including motor, oral, written and expressive-art response, and the authentic assessment of it. Literature in all genres will be read. Students should possess a working knowledge of contemporary childrens literature. Course is intended for students who have completed a survey course in childrens literature. Offered annually.

EDUC641 - Social Studies Elementary Sch

Course Information

Course Title
Social Studies Elementary Sch

Subject code	Course Number	Academic Level
EDUC	641	Graduate

Course Description
An overall view of social studies in the elementary school curriculum. Investigation of the role it plays and the methods and strategies appropriate for elementary school children. Offered in summer.

EDUC643 - Curriculum Trends in Social Studies

Course Information

Course Title
Curriculum Trends in Social Studies

Subject code	Course Number	Academic Level
EDUC	643	Graduate

Course Description
Study of significant trends in social studies education that are a result of the many social issues in our society. Emphasis on content and methodology appropriate for Social Studies education. Offered in summer and winter.

EDUC651 - Math in the School Program

Course Information

Course Title
Math in the School Program

Subject code	Course Number	Academic Level
EDUC	651	Graduate

Course Description
The nature of mathematics and mathematical thought processes; current views on the learning and teaching of mathematics; problem solving; aids to instruction; instructional strategies in mathematics education.

EDUC658 - Seminar in School Math Educ

Course Information

Course Title
Seminar in School Math Educ

Subject code	Course Number	Academic Level
EDUC	658	Graduate

Course Description
Examination of critical issues, research studies and individual research problems. Prereq: EDUC 651 or permission of instructor. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDUC 651

Complete ALL of the following Courses:

- EDUC651 - Math in the School Program

Or must have permission of instructor.

EDUC661 - Science in the School Program

Course Information

Course Title
Science in the School Program

Subject code	Course Number	Academic Level
EDUC	661	Graduate

Course Description
The nature of science and science thought processes; current views on learning and teaching science; analysis and critical evaluation in developing science for children.

EDUC668 - Seminar in School Science

Course Information

Course Title
Seminar in School Science

Subject code	Course Number	Academic Level
EDUC	668	Graduate

Course Description
Examination of critical issues, research studies and individual research problems in the teaching of science in the schools. Offered periodically.

EDUC671 - Curriculum Development in the School

Course Information

Course Title
Curriculum Development in the School

Subject code	Course Number	Academic Level
EDUC	671	Graduate

Course Description
Developing curriculum in theory and practice for subject areas. Emphasis is on critiquing planned programs of study and articulating a personal philosophy of curriculum design. Offered annually.

EDUC672 - Cooperating Tchr in Schools

Course Information

Course Title
Cooperating Tchr in Schools

Subject code	Course Number	Academic Level
EDUC	672	Graduate

Course Description
Examination of issues involved in supervision of preservice teachers. Includes supervision of student teachers. Prereq: Teacher certification. Offered infrequently.

EDUC680 - Standards Aligned Systems

Course Information

Course Title
Standards Aligned Systems

Subject code	Course Number	Academic Level
EDUC	680	Graduate

Course Description
This course will examine the Pennsylvania Standards Aligned System (SAS) components and tools. Resources from the SAS Portal will be used for curriculum alighment and the development of classroom based instructional materials. A research-based framework for constructivist instruction will be explored to develop more thoughful practitioners. Coursework will be alighed with the Pennsylvania Common Core Standards.

EDUC686 - Topics in Elementary Education

Course Information

Course Title
Topics in Elementary Education

Subject code	Course Number	Academic Level
EDUC	686	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods used will vary according to the needs of students and faculty involved. Offered periodically.

EDUC687 - Topics in Elementary Education

Course Information

Course Title
Topics in Elementary Education

Subject code	Course Number	Academic Level
EDUC	687	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods used will vary according to the needs of students and faculty involved. Offered periodically.

EDUC688 - Topics in Elementary Education

Course Information

Course Title
Topics in Elementary Education

Subject code	Course Number	Academic Level
EDUC	688	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods used will vary according to the needs of students and faculty involved. Offered periodically.

EDUC689 - Topics in Elementary Education

Course Information

Course Title
Topics in Elementary Education

Subject code	Course Number	Academic Level
EDUC	689	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods used will vary according to the needs of students and faculty involved. Offered periodically.

EDUC691 - Independent Studies

Course Information

Course Title
Independent Studies

Subject code	Course Number	Academic Level
EDUC	691	Graduate

Course Description
Intensive study of a particular field, curriculum area or problem in education. Prereq: 12 graduate s.h. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Graduate Credit Hours Completion

Earn at least 12 credits

ELED179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ELED	179	Undergraduate

Course Description
Experimental

ELED279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ELED	279	Undergraduate

Course Description
Experimental

ELED300 - Co-Op Ed Experience in ELED

Course Information

Course Title
Co-Op Ed Experience in ELED

Subject code	Course Number	Academic Level
ELED	300	Undergraduate

Course Description
Co-Op Ed Experience in ELED

ELED376 - Assessment for Instrctnl Plnng

Course Information

Course Title
Assessment for Instrctnl Plnng

Subject code	Course Number	Academic Level
ELED	376	Undergraduate

Course Description
Principles, procedures and use of traditional and alternative testing and measurement to make curricular decisions to enhance student learning in the elementary classroom. Emphasizes analysis of student learning to inform teacher decision making. Prereq: ENGL 110, EDUC 220, EDFN 211, EDFN 241, MATH 104. Coreq: MATH 105. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H and MATH 104

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
- MATH104 - Fundamentals of Math 1

Course Corequisites

Type
Corequisite

MATH 105

Enroll in the following Courses:

- MATH105 - Fundamentals of Math 2

ELED379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ELED	379	Undergraduate

Course Description
Experimental

ELED419 - Seminar in Early Chldhd Educ

Course Information

Course Title
Seminar in Early Chldhd Educ

Subject code	Course Number	Academic Level
ELED	419	Undergraduate

Course Description
Investigation of contemporary goals of early childhood education. Provides analysis of organizational plans, classroom environment, teaching strategies and resources and noteworthy trends and innovations. Application to individual situations is stressed. Focus will vary. Offered infrequently.

ELED479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ELED	479	Undergraduate

Course Description
Experimental

ELED489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ELED	489	Undergraduate

Course Description
For the definition of departmental honors and eligibility refer to the Special Academic Opportunities section of this catalog.

ELED498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
ELED	498	Undergraduate

Course Description
Conferences and seminars designed for special study of particular topics in elementary education. Emphasis on new and emerging curriculum for teaching. Prereq: 60 s.h. and approval of the department chairperson. Offered periodically.

ELED499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
ELED	499	Undergraduate

Course Description
For the definition of departmental honors and eligibility refer to the Special Academic Opportunities section of this catalog.

ELED500 - Co-Op Ed Experience in ELED

Course Information

Course Title
Co-Op Ed Experience in ELED

Subject code	Course Number	Academic Level
ELED	500	Graduate

Course Description
Co-Op Ed Experience in ELED

ELED576 - Assessmnt for Instrctnl Plnng

Course Information

Course Title
Assessmnt for Instrctnl Plnng

Subject code	Course Number	Academic Level
ELED	576	Graduate

Course Description
Principles, procedures and use of traditional and alternative testing and measurement to make curricular decisions to enhance student learning in the elementary classroom. Emphasizes analysis of student learning to inform teacher decision making. Prereq: ELED 502, EDFN 545, READ 621 and two college-level mathematics courses. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN 545 and READ 621

Complete ANY of the following Courses:

- EDFN545 - Advanced Educational Psychology
- READ621 - Foundations of Reading and Writing

2 College-level Mathematics Courses

Must have completed 2 college-level mathematics courses.

ELED678 - Internship in Elementary Education

Course Information

Course Title
Internship in Elementary Education

Subject code	Course Number	Academic Level
ELED	678	Graduate

Course Description
Internship in schools or educational situations under supervision of the graduate faculty of the Department of Elementary and Early Childhood Education. Offered periodically.

ELED699 - Thesis:

Course Information

Course Title
Thesis:

Subject code	Course Number	Academic Level
ELED	699	Graduate

Course Description
Each student writes and orally defends an individual thesis on an elementary education topic. Prereq: 24 graduate s.h. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Graduate Credit Hours Completion

Earn at least 24 credits

ENED462 - Student Teaching in English

Course Information

Course Title
Student Teaching in English

Subject code	Course Number	Academic Level
ENED	462	Undergraduate

Course Description
Student Teaching in English

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN330 and EDSE321 or EDSE321H and ENGL 487 or ENGL 487H and ENGL 488 or ENGL 488H and EDSE340 or EDSE540 and SPED346 or SPED546

Complete ALL of the following Courses:

- EDFN330 - Instructional Technology, Design & Assessment
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English
- SEED340 - Content Area Literacy for Diverse Classrooms
  OR SEED540 - Cntnt Area Litrcy Divers Class
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings
  OR SPED546 - Sec Stdnts w Disab Inclu Sttgs

ERCH190 - Introduction to Integrative STEM Pedagogy

Course Information

Course Title
Introduction to Integrative STEM Pedagogy

Subject code	Course Number	Academic Level
ERCH	190	Undergraduate

Course Description
Serves as an introduction to students enrolled in the Integrative Science, Technology, Engineering & Math (STEM) Education Methods Minor. Students will learn basic information regarding integrative STEM education and examine various curricular models.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete ALL of the following Courses:
- ECPK110 - Introduction to Early Childhood Education
  OR SPED101 - Orientation to Special Educ

ERCH290 - Children's Engineering

Course Information

Course Title
Children's Engineering

Subject code	Course Number	Academic Level
ERCH	290	Undergraduate

Course Description
The intent of this course is to teach students about fundamentals of electricity, mechanisms, fluidics (liquids and gases under pressure), computer-control, and structures. Content will be delivered through a series of hands-on activities that will allow the students to immerse themselves in the content through problem-based learning by doing. Simple knowledge and skill building activities will lead to more complex open-ended problem solving and prototyping activities to build deeper understandings of scientific, technological, engineering, and mathematical (STEM) concepts for teachers of young children. Cross-listed with EDTE 290, students may not receive credit for both courses.

Gateway Stage Labels
Technological Competency (TC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ERCH110

Complete ALL of the following Courses:
- ECPK110 - Introduction to Early Childhood Education
  OR SPED101 - Orientation to Special Educ

Complete ALL of the following Courses:
- ERCH190 - Introduction to Integrative STEM Pedagogy

FYEX100R - First Year Experience: Take A Hike!

Course Information

Course Title
First Year Experience: Take A Hike!

Subject code	Course Number	Academic Level
FYEX	100R	Undergraduate

Course Description
Perspectives on outdoor education, which vary based on country or culture. Outdoor education in this course is defined as experiential learning outside the classroom; i.e., to learn by doing. The aims of outdoor education are to learn how to overcome adversity, foster personal and social development, and promote a relationship with nature. Four hikes of increasing distance occur on weekends during the semester. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

GFED370 - Teaching Gifted Learners

Course Information

Course Title
Teaching Gifted Learners

Subject code	Course Number	Academic Level
GFED	370	Undergraduate

Course Description
Designed to acquaint prospective teachers with some viable techniques for dealing with gifted and able children in their classrooms. Some attention will also be paid to reviewing existing programs and means of identification. Some work with gifted students in the schools will be another component of the course. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Clearances Required

Must have clearances.

GFED377 - The Gifted in Pop Culture

Course Information

Course Title
The Gifted in Pop Culture

Subject code	Course Number	Academic Level
GFED	377	Undergraduate

Course Description
This course will introduce students to various characteristics, issues and needs of gifted individuals. Through the lens of popular culture media (e.g., film, television, graphic novels, literature) portrayals of fictional gifted characters will be examined in regards to topics such as identification, education, socialization, gender, ethnicity, poverty and disability. These portrayals will then be juxtaposed with current research to gain an authentic understanding of this group and their unique needs. Pre-requisites: ENGL 110 or ENGL 110H, COMM 100 or COMM 100H and 60 credits (Junior Standing).

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GFED377H - Hon: The Gifted in Pop Culture

Course Information

Course Title
Hon: The Gifted in Pop Culture

Subject code	Course Number	Academic Level
GFED	377H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GFED670 - Psychology of the Gifted

Course Information

Course Title
Psychology of the Gifted

Subject code	Course Number	Academic Level
GFED	670	Graduate

Course Description
Covers diverse elements in psychology that converge in the study of giftedness. The early studies of Terman will give a historical perspective leading to an exploration of developments in the areas of measurement, individual differences and multifactorial views of intelligence. Emphasis will be placed upon the literature on creativity and problem solving. The contribution of humanistic psychology which gives a sense of process or personal growth and of achievement will be explored.

GFED674 - Program for the Gifted

Course Information

Course Title
Program for the Gifted

Subject code	Course Number	Academic Level
GFED	674	Graduate

Course Description
Designed for in-service teachers pursuing a masters degree in gifted education or for those teachers with special interest in educating the gifted and talented. In-depth exploration of six components of gifted programs: definition of gifted, identification of the gifted, curriculum, teacher selection, program organization, and management.

GFED675 - Evaluating Instruct. Effectiveness: App for the Gifted

Course Information

Course Title
Evaluating Instruct. Effectiveness: App for the Gifted

Subject code	Course Number	Academic Level
GFED	675	Graduate

Course Description
An advanced course dealing with ways to evaluate the achievement of gifted and able students. Attention will be paid to interpretation of relevant research pertaining to the instruction and identification of gifted and able students. Prereq: GFED 674 or permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GFED 674

Complete ALL of the following Courses:

- GFED674 - Program for the Gifted

Or must have permission of instructor.

GFED676 - Teaching Gifted Learners Instructional Strategies

Course Information

Course Title
Teaching Gifted Learners Instructional Strategies

Subject code	Course Number	Academic Level
GFED	676	Graduate

Course Description
Prepares teachers to identify and use appropriate instructional and curricular strategies to meet the needs of gifted and talented learners. Best practices and current research on instructional pedagogy for the gifted and talented will be examined and implemented. Appropriate informational technology will be used to research, plan and implement instructional strategies for gifted and talented learners.

GFED686 - Topics in Gifted Education

Course Information

Course Title
Topics in Gifted Education

Subject code	Course Number	Academic Level
GFED	686	Graduate

Course Description
Possible topics include creativity, motivation, management of gifted programs, research, etc. Participants may take this course more than once. Topics vary each year and are taught by faculty from various departments.

GFED687 - Topics in Gifted Education

Course Information

Course Title
Topics in Gifted Education

Subject code	Course Number	Academic Level
GFED	687	Graduate

Course Description
Possible topics include creativity, motivation, management of gifted programs, research, etc. Participants may take this course more than once. Topics vary each year and are taught by faculty from various departments.

GFED688 - Topics in Gifted Education

Course Information

Course Title
Topics in Gifted Education

Subject code	Course Number	Academic Level
GFED	688	Graduate

Course Description
Possible topics include creativity, motivation, management of gifted programs, research, etc. Participants may take this course more than once. Topics vary each year and are taught by faculty from various departments.

GFED690 - Clinical Practicum

Course Information

Course Title
Clinical Practicum

Subject code	Course Number	Academic Level
GFED	690	Graduate

Course Description
Practical application of curriculum models and strategies for gifted students. Production of materials/units to be used in the classroom. Direct instruction and/or access to gifted students will be required. Prereq: GFED 670, GFED 674, GFED 675, & GFED 676 or permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GFED 670, GFED 674, GFED 675, & GFED 676

Complete ALL of the following Courses:

- GFED674 - Program for the Gifted
  AND GFED670 - Psychology of the Gifted
  AND GFED675 - Evaluating Instruct. Effectiveness: App for the Gifted
  AND GFED676 - Teaching Gifted Learners Instructional Strategies

Or must have permission of instructor.

GFED691 - Ind Stdy: Gifted Education

Course Information

Course Title
Ind Stdy: Gifted Education

Subject code	Course Number	Academic Level
GFED	691	Graduate

Course Description
Independent Study in Gifted Education

GFED699 - Thesis

Course Information

Course Title
Thesis

Subject code	Course Number	Academic Level
GFED	699	Graduate

Course Description
Thesis. Prereq: 24 graduate s.h.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Graduate Credits

Earn at least 24 credits

MDED001 - Middle Level Professional Bloc

Course Information

Subject code	Course Number	Academic Level
MDED	001	Undergraduate

MDED323 - Content Area Literacy

Course Information

Course Title
Content Area Literacy

Subject code	Course Number	Academic Level
MDED	323	Undergraduate

Course Description
Reading in the content areas is an undergraduate course designed to help Middle Level certification students develop an understanding of the reading process in the disciplines, especially those that use informational texts. Before, during, and after reading strategies used in reading expository materials will be the focus of this course. Teaching writing across the content areas will also be a focus. A required field experience is part of this course.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

MDED335 - Literature for Children & Young Adolescents

Course Information

Course Title
Literature for Children & Young Adolescents

Subject code	Course Number	Academic Level
MDED	335	Undergraduate

Course Description
Prepares middle level teacher candidates to recognize high-quality literature for youth from age 10 to 14. Grounded in adolescent psychology, it guides teacher candidates in the identification of literature, across genres and content areas, that is relevant to the lives of adolescents. The course engages teacher candidates in collaborative approaches to literature study, modeling best practices for the instruction of adolescents. Response to literature receives emphasis. Offered annually. Prereq: PSYC 227.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 227 or PSYC 227H

Complete ANY of the following Courses:

- PSYC227 - Development of the Child and Adolescent
- PSYC227H - Hnrs:Development of the Child and Adolescent

MDED335H - Hnrs: Literature for Children & Young Adolescents

Course Information

Course Title
Hnrs: Literature for Children & Young Adolescents

Subject code	Course Number	Academic Level
MDED	335H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 227 or PSYC 227H

Complete ANY of the following Courses:

- PSYC227 - Development of the Child and Adolescent
- PSYC227H - Hnrs:Development of the Child and Adolescent

MDED425 - Teaching of Literacy, Gr 4-8: Processes, Skills & Strategies

Course Information

Course Title
Teaching of Literacy, Gr 4-8: Processes, Skills & Strategies

Subject code	Course Number	Academic Level
MDED	425	Undergraduate

Course Description
This course is a three-credit course, which develops pedagogy in the teaching of reading and the related language arts. Keeping with current theory that the communication processes - reading, writing, listening, and speaking - cannot arbitrarily be divided, this course will present pedagogy in an interrelated and integrated format. Understandings, teaching strategies and techniques will be consistent with the Pennsylvania System of School Assessment (PSSA), the Structured Literacy (SL) Program Framework Guidelines for 4-8th grades, and the Pennsylvania Core Standards for Reading, Writing, Speaking, and Listening. Throughout this course, students will have opportunities to establish the habit of on-going professional growth. This class will also provide students with concrete experiences to interact within a school setting. Prerequisite: Admission to Advanced Professional Standing (APS) status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

MDED 486

Enroll in the following Courses:

- MDED486 - Teaching English Language Learners in the Middle Level

MDED446 - Teaching of Social Studies

Course Information

Course Title
Teaching of Social Studies

Subject code	Course Number	Academic Level
MDED	446	Undergraduate

Course Description
In this course, teacher candidates will apply the standards and thematic strands of social studies as defined by the National Council for the Social Studies for middle level learners (Grades 4-8). Emphasis is on the learner building civil competence and acquiring knowledge, skills, and attitudes in civics and government, economics, history, and geography.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN211 and EDFN241 or EDFN241H and ENGL220 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education **OR** EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching **OR** ENGL220 - Introduction to Language Study **OR** ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

MDED 323 and MDED 456 and MDED 466

Enroll in the following Courses:

- MDED323 - Content Area Literacy
  AND MDED456 - Teaching Middle Level Mathematics
  AND MDED466 - Teaching of Science: An Inquiry Approach

MDED456 - Teaching Middle Level Mathematics

Course Information

Course Title
Teaching Middle Level Mathematics

Subject code	Course Number	Academic Level
MDED	456	Undergraduate

Course Description
Pedagogy for teaching middle level mathematics is aligned with national and state standards, current research, forms of assessment and curricular frameworks. Technology and hands-on instructional strategies are utilized. Prereq: MATH 205, MATH 230 and admission to Advanced Professional Studies. Coreq: MDED 425, 466, SPED 331.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 205 and MATH 230 and

Complete ALL of the following Courses:
- MATH205 - Geometry for the Middle-Level Teacher
- MATH230 - Probability and Stats for Mid-Level Teacher

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

MDED 323 and MDED 446 and MDED 466

Enroll in the following Courses:
- MDED323 - Content Area Literacy
  AND MDED446 - Teaching of Social Studies
  AND MDED466 - Teaching of Science: An Inquiry Approach

MDED466 - Teaching of Science: An Inquiry Approach

Course Information

Course Title
Teaching of Science: An Inquiry Approach

Subject code	Course Number	Academic Level
MDED	466	Undergraduate

Course Description
Focuses on the teaching of science through inquiry in the middle grades. Inquiry based strategies stress evidence based argumentation, experimentation, and the building of student understanding of the nature of science through active involvement. Prereq: ENGL 110, admission to Advanced Professional Studies. Coreq: MDED 425, 456, SPED 331.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:

- ENGL 110 and COMM 100

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

MDED 323 and MDED 446 and MDED 456

Enroll in the following Courses:

- MDED323 - Content Area Literacy
  AND MDED446 - Teaching of Social Studies
  AND MDED456 - Teaching Middle Level Mathematics

MDED486 - Teaching English Language Learners in the Middle Level

Course Information

Course Title
Teaching English Language Learners in the Middle Level

Subject code	Course Number	Academic Level
MDED	486	Undergraduate

Course Description
Prepares teacher candidates to understand cross-cultural and linguistic foundations of acquiring a new language. Teacher candidates will apply research-based strategies for providing English language learners (ELLs) with optimal learning environments that provide meaningful access to standards-based instruction in grades 4-8. This course places a special emphasis on instructional planning that facilitates student success with academic language and academic texts in upper-elementary settings. Candidates will demonstrate the ability to use assessment data to differentiate and modify instruction. Candidates will also demonstrate an understanding of schools legal responsibilities toward ELLs and their families. Offered in fall. Prereq: COMM 100, ENGL 110 and admission to Advanced Professional Studies.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

MDED 425

Enroll in the following Courses:

- MDED425 - Teaching of Literacy, Gr 4-8: Processes, Skills & Strategies

MDED486H - Hon: Teaching English Language Learners in the Middle Level

Course Information

Course Title
Hon: Teaching English Language Learners in the Middle Level

Subject code	Course Number	Academic Level
MDED	486H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

MDED 425

Enroll in the following Courses:
- MDED425 - Teaching of Literacy, Gr 4-8: Processes, Skills & Strategies

MDED499 - Dept Hnrs:

Course Information

Course Title
Dept Hnrs:

Subject code	Course Number	Academic Level
MDED	499	Undergraduate

MDED540 - Middle Lvl Tchng and Learning

Course Information

Course Title
Middle Lvl Tchng and Learning

Subject code	Course Number	Academic Level
MDED	540	Graduate

READ620 - Current Practices in Literacy Education

Course Information

Course Title
Current Practices in Literacy Education

Subject code	Course Number	Academic Level
READ	620	Graduate

Course Description
Current trends and appropriate pedagogy in the teaching of literacy processes, including reading, writing, and speaking in the pre-K through grade 4 classroom. Content consistent with the Pennsylvania Standards for Reading, Writing, Speaking and Listening. the Common Core State Standards, and the Structured Literacy PK-4 Competencies (Chapter 49/PDE). Offered spring.

READ621 - Foundations of Reading and Writing

Course Information

Course Title
Foundations of Reading and Writing

Subject code	Course Number	Academic Level
READ	621	Graduate

Course Description
Emergent literacy, vocabulary development, comprehension instruction, assessment techniques and the reading/writing needs of both the exceptional and the culturally diverse learner. Offered annually.

READ622 - Reading and Writing in the Content Areas

Course Information

Course Title
Reading and Writing in the Content Areas

Subject code	Course Number	Academic Level
READ	622	Graduate

Course Description
Discussion of strategies and techniques for enhancing comprehension, concept and vocabulary development, and writing skills in the content areas, specifically those reflected in the Structured Literacy Competences, grades 4-8. Offered winters

READ623 - Diag. of Reading & Writing Disabilities: Practicum

Course Information

Course Title
Diag. of Reading & Writing Disabilities: Practicum

Subject code	Course Number	Academic Level
READ	623	Graduate

Course Description
Administration and interpretation of diagnostic assessments related to each literacy competency. Decision making about individuals with reading and writing difficulties, based on current theory and practice. Prereq: READ 621 and 622. Offered in fall.

Simple Requirements

Completed Course Prerequisites

Type
Prerequisite

READ 621 and READ 622

Complete ALL of the following Courses:

- READ621 - Foundations of Reading and Writing
- READ622 - Reading and Writing in the Content Areas

READ624 - Diag and Correction of Reading and Writing Diff

Course Information

Course Title
Diag and Correction of Reading and Writing Diff

Subject code	Course Number	Academic Level
READ	624	Graduate

Course Description
Course focuses on procedures and materials for prevention and correction of reading difficulties, evaluation of student progress, and differentiation of instructional techniques. Prereq: READ 623. Offered in summer.

Simple Requirements

Course Prerequisites

Type
Prerequisite

READ 623

Complete ALL of the following Courses:

- READ623 - Diag. of Reading & Writing Disabilities: Practicum

READ625 - Psych & Social Factors in Reading & Writing Ability

Course Information

Course Title
Psych & Social Factors in Reading & Writing Ability

Subject code	Course Number	Academic Level
READ	625	Graduate

Course Description
Discussion of psychological, social and health factors that influence reading and writing ability; theories and practices of teaching reading to culturally diverse individuals; and the role of the reading specialist in the planning and implementation of a schoolwide reading program. Prereq: READ 623.

Simple Requirements

Course Prerequisites

Type
Prerequisite

READ 623

Complete ALL of the following Courses:

- READ623 - Diag. of Reading & Writing Disabilities: Practicum

READ626 - Literacy Leadership

Course Information

Course Title
Literacy Leadership

Subject code	Course Number	Academic Level
READ	626	Graduate

Course Description
Course focuses on the role of the reading specialist as a literacy leader. Topics will include theoretical orientations, the observation and supervision of reading, principles of staff development, principles of coaching and leadership practices. Prereq:READ 621 and 622. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

READ 621 and READ 622

Complete ALL of the following Courses:

- READ621 - Foundations of Reading and Writing
- READ622 - Reading and Writing in the Content Areas

READ627 - Sp Top:

Course Information

Course Title
Sp Top:

Subject code	Course Number	Academic Level
READ	627	Graduate

Course Description
In-depth investigation and development of an area of current reading interest not normally covered in regular courses. Topics covered and methods used will vary according to needs of students and faculty involved. Course instructors include staff, national reading authorities and area reading personnel. Offered periodically.

READ628 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
READ	628	Graduate

Course Description
In-depth investigation and development of an area of current reading interest not normally covered in regular courses. Topics covered and methods used will vary according to needs of students and faculty involved. Course instructors include staff, national reading authorities and area reading personnel. Offered periodically.

READ629 - Special Topics in Reading

Course Information

Course Title
Special Topics in Reading

Subject code	Course Number	Academic Level
READ	629	Graduate

Course Description
In-depth investigation and development of an area of current reading interest not normally covered in regular courses. Topics covered and methods used will vary according to needs of students and faculty involved. Course instructors include staff, national reading authorities and area reading personnel. Offered periodically.

READ630 - Sp Top:

Course Information

Course Title
Sp Top:

Subject code	Course Number	Academic Level
READ	630	Graduate

Course Description
In-depth investigation and development of an area of current reading interest not normally covered in regular courses. Topics covered and methods used will vary according to needs of students and faculty involved. Course instructors include staff, national reading authorities and area reading personnel. Offered periodically.

READ699 - Thesis

Course Information

Course Title
Thesis

Subject code	Course Number	Academic Level
READ	699	Graduate

Course Description
Each student writes and orally defends an individual thesis of some significance in the field of reading education. Prereq:24 graduate s.h. Offered periodically.

READ798 - Advanced Theories Pedagogy of Reading

Course Information

Course Title
Advanced Theories Pedagogy of Reading

Subject code	Course Number	Academic Level
READ	798	Graduate

Course Description
Advanced theoretical pedagogy of reading and the supervision of literacy instruction. Principles of supervision and progressive discipline; principles of staff development and evaluation of staff development; curriculum auditing practices. Site-based supervision of staff development and coaching. Prereq: EDSU 700, 701 and 703. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDSU 700 and EDSU 701 and EDSU 703

Complete ALL of the following Courses:

- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision

READ799 - Applied Supervision: Clinical Practicum

Course Information

Course Title
Applied Supervision: Clinical Practicum

Subject code	Course Number	Academic Level
READ	799	Graduate

Course Description
Supervision of teachers working in a classroom and in a reading clinic, complete with observations and follow-up conferences. Written case reports on teachers supervised will be required. Prereq: EDSU 700, 701 and 703. Offered periodically

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDSU 700 and EDSU 701 and EDSU 703

Complete ALL of the following Courses:

- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision

Economics Department

The flexible nature of Economics, and the fact that it overlaps with diverse areas such as Business, Law, Politics, Health Care, and the Environment, makes Economics a dynamic and marketable area of study. Today's educators, government officials, and business leaders are aware of the crucial role economics plays in building of a more productive and equitable world. Economists are at the center of power all over the world. Within the last few decades, the economist has become a central figure helping corporations reach their goals. The economist can be found advising governments on urban problems, unemployment, inflation, and financial markets.

Millersville economics students receive personalized instruction in the classroom, individualized counsel outside of class, opportunities for hands-on experience, and counsel in career pursuits.

FACULTY LIST
Baker, Ronald; Associate Professor College of Arts, Humanities and Social Sciences B.S., St. Vincent College, 1998; M.A., Indiana University, 2000; Ph.D., Ibid., 2005
Madden, Kirsten; Associate Professor College of Arts, Humanities and Social Sciences B.A. University of Alabama at Tuscaloosa, 1986; Ph.D., University of North Carolina- Chapel Hill, 1995
McPherson, Sandra; Associate Professor College of Arts, Humanities and Social Sciences B.A., Bemidji State University, 1991; M.A., Indiana University, 1993; Ph.D., Ibid., 1998
Smith, Kenneth; Department Chairperson, Associate Professor College of Arts, Humanities and Social Sciences B.S., University of Minnesota, 1986; M.S., University of Wisconsin-Madison, 1989; Ph.D., Ibid., 1993

Programs

Economics Minor

Overview

The 18-credit Economics Minor provides training in core economics principles and theory and depth in applied economic analysis. The Economics Minor provides an excellent complementary program to a wide variety of majors including those in Business, Mathematics, and Government.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Economics (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

AND

Intermediate Microeconmics or Intermediate Macroeconmics (3 credits)

Complete at least 1 of the following courses:

- ECON318 - Intermediate Microeconomics **OR** ECON318H - H:Intermediate Microeconomics
- ECON319 - Intermediate Macroeconomics

AND

300/400 Level Economics Electives (6 credits)

Earn at least 6 credits from the following:

- Any 3-level ECON course(s)
- Any 4-level ECON course(s)

May also take BUSN310 Economics of Justice

AND

Economics Electives (3 credits)

Earn at least 3 credits from the following:

- Any ECON course(s)

Choose economics electives in consultation with your advisor. 2 of your electives must be at the 300-level or above.

Economics, B.A.

Overview

The Economics Department expects all students graduating with an Economics degree to have a sound understanding of economic principles and theory and demonstrate the ability to apply principles and theory to issues of everyday life and analysis of important policy issues. The Economics B.A. Program provides training in economic principles and theory, quantitative analysis, and research and presentation skills. The Economics curriculum emphasizes critical-thinking and problem-solving skills appropriate to a variety of careers.

The United States Bureau of Labor Statistics estimates that employment for Economists will grow six percent over the next decade – somewhat faster than overall national employment. According to the National Association of Colleges and Employers, starting salaries for Economists with bachelor's degrees are the highest among social science and humanities graduate.

Curriculum

Simple Requirements

Major in Economics, BA (36 credits)

Type
Completion Requirement

Required Courses (18 credits)

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics
  OR ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics
  OR ECON102H - Hnrs:Principles of Microeconomics
- ECON318 - Intermediate Microeconomics
  OR ECON318H - H:Intermediate Microeconomics
- ECON319 - Intermediate Macroeconomics
- ECON333 - Econometrics
  OR ECON333H - H:Econometrics
- ECON488 - Seminar in Economics

Applied Statistics (3 credits)

Complete ALL of the following Courses:

- ECON231 - Applied Statistcs 1
  OR ECON231H - Hon: Applied Statistcs 1

Economics Electives (15 credits)

Earn at least 15 credits from the following:

- ECON215 - Money, Credit, and Banking
- ECON225 - Comparative Economic Systems
- ECON226 - Area Studies
- ECON235 - Mathematical Economics
- ECON246 - Econ Health and Welfare Prgm
- ECON305 - Economics in Film
- ECON307 - Environmental Economics
- ECON310 - Economics of Justice
- ECON316 - Public Finance
- ECON323 - Games and Experiments in Econ
- ECON325 - International Economics
  OR ECON325H - Hon: International Economics
- ECON326 - Economic Growth and Develpmnt
- ECON327 - Women and Global Econ Devlop
- ECON335 - Forecasting and Analytics
- ECON345 - Labor Economics
  OR ECON345H - HNRS:Labor Economics
- ECON355 - Econ of Sex, Drugs, & Religion
- ECON375 - Econ of Industrial Orgnization
- ECON379 - Experimental
- ECON498 - Independent Study

Courses

ECON100 - Introductory Economics

Course Information

Course Title
Introductory Economics

Subject code	Course Number	Academic Level
ECON	100	Undergraduate

Course Description
Introduction to economics as a social science for nonmajors or students interested in taking ECON 101 or 102 who would like a preparatory course. Introduction to fundamental economic concepts, economic policy and global markets. Class activities and simulations complement an emphasis on current events. No credit towards an economics major or minor or BSE social studies major. Offered periodically.

Gateway Stage Labels
Problem Solving (PS)

ECON101 - Principles of Macroeconomics

Course Information

Course Title
Principles of Macroeconomics

Subject code	Course Number	Academic Level
ECON	101	Undergraduate

Course Description
Introduction to macroeconomic analysis concentrating on national income, price levels, employment, monetary policy and fiscal policy with introductory analysis of the global economy. To be successful, it is recommended that students be proficient in algebra (the equivalent of successfully completing MATH 101 or MPT equivalent); however MATH 101 is not a pre-requisite. Offered in fall, spring.

Gateway Stage Labels
Problem Solving (PS)

ECON101H - Hnrs:Principles of Macroeconomics

Course Information

Course Title
Hnrs:Principles of Macroeconomics

Subject code	Course Number	Academic Level
ECON	101H	Undergraduate

Course Description
Hnrs:Prin of Macroeconomics

Gateway Stage Labels
Problem Solving (PS)

ECON102 - Principles of Microeconomics

Course Information

Course Title
Principles of Microeconomics

Subject code	Course Number	Academic Level
ECON	102	Undergraduate

Course Description
Introduction to microeconomic analysis concentrating on consumer and producer behavior, competitive and other markets, public policy and government regulation. To be successful, it is recommended that students be proficient in algebra (the equivalent of successfully completing MATH 101 or MPT equivalent); however MATH 101 is not a pre-requisite. Offered in fall, spring.

Gateway Stage Labels
Problem Solving (PS)

ECON102H - Hnrs:Principles of Microeconomics

Course Information

Course Title
Hnrs:Principles of Microeconomics

Subject code	Course Number	Academic Level
ECON	102H	Undergraduate

Course Description
Hnrs:Prin of Microeconomics

Gateway Stage Labels
Problem Solving (PS)

ECON179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ECON	179	Undergraduate

Course Description
Experimental

ECON203 - Introduction to World Economy

Course Information

Course Title
Introduction to World Economy

Subject code	Course Number	Academic Level
ECON	203	Undergraduate

Course Description
An introductory course analyzing and comparing global economies, trade and economic development. MATH 101 or MPT equivalent is highly recommended prior to taking this course. Offered in fall, spring. Prereq: ECON 100, 101 or 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 100 or ECON 101 or ECON 101H or ECON 102 or ECON 102H

Complete ANY of the following Courses:

- ECON100 - Introductory Economics
- ECON101 - Principles of Macroeconomics
  OR ECON101H - Hnrs:Principles of Macroeconomics
  OR ECON102 - Principles of Microeconomics
  OR ECON102H - Hnrs:Principles of Microeconomics

ECON215 - Money, Credit, and Banking

Course Information

Course Title
Money, Credit, and Banking

Subject code	Course Number	Academic Level
ECON	215	Undergraduate

Course Description
Survey of monetary and banking institutions, policies and practices, including study of monetary theory. Offered in fall, occasionally in spring. Prereq: ECON 101.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H

Complete ANY of the following Courses:

- ECON101 - Principles of Macroeconomics
- ECON101H - Hnrs:Principles of Macroeconomics

ECON225 - Comparative Economic Systems

Course Information

Course Title
Comparative Economic Systems

Subject code	Course Number	Academic Level
ECON	225	Undergraduate

Course Description
Analysis of economic systems in France, the former Yugoslavia, China, Japan, the United Kingdom, the former Soviet Union and the United States. Emphasis varies with each offering at the discretion of the instructor. Offered in spring. Prereq: ECON 101, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

ECON226 - Area Studies

Course Information

Course Title
Area Studies

Subject code	Course Number	Academic Level
ECON	226	Undergraduate

Course Description
Analysis of regional economies such as Africa, Asia or Latin America. The area of study will be specified by the instructor expected to teach the course. Offered periodically. Prereq: ECON 101 or 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H or ECON 102 or ECON 102H

Complete ANY of the following Courses:

- ECON101 - Principles of Macroeconomics
- ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics
- ECON102H - Hnrs:Principles of Microeconomics

ECON231 - Applied Statistcs 1

Course Information

Course Title
Applied Statistcs 1

Subject code	Course Number	Academic Level
ECON	231	Undergraduate

Course Description
Presentations of data, measures of central tendency and variation, and index numbers. Introduction to probability theory, sampling and inference and regression and time series analysis. Offered in fall, spring.

Cornerstone Stage Labels
Quantitative Literacy (QL)

ECON231H - Hon: Applied Statistcs 1

Course Information

Course Title
Hon: Applied Statistcs 1

Subject code	Course Number	Academic Level
ECON	231H	Undergraduate

Cornerstone Stage Labels
Quantitative Literacy (QL)

ECON235 - Mathematical Economics

Course Information

Course Title
Mathematical Economics

Subject code	Course Number	Academic Level
ECON	235	Undergraduate

Course Description
Static analysis in economics, consumer and firm equilibrium, marginal analysis, optimization problems. Preliminary use of algebra and calculus for business and economic applications. Offered infrequently. Prereq: ECON 101, 102; MATH 101 or equivalent.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H and ECON 102 or ECON 102H and MATH 101 or equivalent

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics
- MATH101 - College Algebra

ECON246 - Econ Health and Welfare Prgm

Course Information

Course Title
Econ Health and Welfare Prgm

Subject code	Course Number	Academic Level
ECON	246	Undergraduate

Course Description
Analysis of consumer theory, firm theory and market failure within the context of health economics. Emphasis on the institutions involved in health care provision, labor markets for health care professionals and market structure and government regulation. Offered in fall. Prereq: ECON 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 102 or ECON 102H

Complete ANY of the following Courses:
- ECON102 - Principles of Microeconomics
- ECON102H - Hnrs:Principles of Microeconomics

ECON300 - Co-Op Ed Experience in Econ

Course Information

Course Title
Co-Op Ed Experience in Econ

Subject code	Course Number	Academic Level
ECON	300	Undergraduate

Course Description
Co-Op Ed Experience in Econ

ECON305 - Economics in Film

Course Information

Course Title
Economics in Film

Subject code	Course Number	Academic Level
ECON	305	Undergraduate

Course Description
This course utilizes film as a bridge between real economic life and scholarly treatment of the relevant issues. The course emphasizes critical thinking and synthesis of economic ideas. Students must also engage in questioning the obvious, exploring meaning, and writing about issues from films incisively and analytically following the scientific method. While maintaining rigor in their writing, students must state clearly their hypothesis and empirical methodology. Data collection includes prilnary data, surveys, personal interviews, and focus groups (culturally diverse groups related to the underlying socioeconomic issue). Prereq: ECON 100 or 101 or 102; COMM 100; ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 100 or ECON 101 or ECON 101H or ECON 102 or ECON 102H

Complete ANY of the following Courses:
- ECON100 - Introductory Economics
- ECON101 - Principles of Macroeconomics
- ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics
- ECON102H - Hnrs:Principles of Microeconomics

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ECON307 - Environmental Economics

Course Information

Course Title
Environmental Economics

Subject code	Course Number	Academic Level
ECON	307	Undergraduate

Course Description
Microeconomic theory applied to the problems of pollution control, sustainability, and valuation of environmental goods and services. Topics include economic efficiency, externalities, public goods, benefit-cost analysis and environmental policy. Content includes economic theory, critical analysis, and problem solving applied to applications of economic efficiency, welfare analysis, and optimal pollution abatement policy. Offered in spring. Prereq: ECON 102, ENGL 110, and Math 101 or MATH placement beyond MATH 101 (MATH 151, 155H, 160, 161, 163H)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 102 or ECON 102H and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

MATH 101

Complete ALL of the following Courses:
- MATH101 - College Algebra

Or MATH placement beyond MATH 101 (MATH 151, 155H, 160, 161, 163H).

ECON310 - Economics of Justice

Course Information

Course Title
Economics of Justice

Subject code	Course Number	Academic Level
ECON	310	Undergraduate

Course Description
Economic concepts and models are used to explain laws and legal situations. Economics is applied in some of the principal areas of the law: property, contracts, torts and crime. Offered infrequently. Prereq: ENGL 110, COMM 100, junior status, ECON 102, BUSN 202, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

ECON 102 or ECON 102H and BUSN 202 or BUSN 202H

Complete ALL of the following Courses:
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics
- BUSN202 - Legal Environment of Business **OR** BUSN202H - Hon: Legal Environment of Business

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ECON316 - Public Finance

Course Information

Course Title
Public Finance

Subject code	Course Number	Academic Level
ECON	316	Undergraduate

Course Description
Economic aspects of governmental budgeting emphasizing fiscal policy including impact of taxation and expenditures. Topics include the allocation, distribution and stabilization effects of the public household. Offered in spring. Prereq: ECON 101, 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON101 or ECON101H and ECON102 or ECON102H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ECON318 - Intermediate Microeconomics

Course Information

Course Title
Intermediate Microeconomics

Subject code	Course Number	Academic Level
ECON	318	Undergraduate

Course Description
Similar in scope to ECON 102 with major emphasis on the further development and refinement of tools of economic analysis. Offered in spring. Prereq: ECON 101, 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H and ECON 102 or ECON 102H and MATH 151 or MATH 161

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ECON318H - H:Intermediate Microeconomics

Course Information

Course Title
H:Intermediate Microeconomics

Subject code	Course Number	Academic Level
ECON	318H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H and ECON 102 or ECON 102H and MATH 151 or MATH 161

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ECON319 - Intermediate Macroeconomics

Course Information

Course Title
Intermediate Macroeconomics

Subject code	Course Number	Academic Level
ECON	319	Undergraduate

Course Description
Similar in scope to 101, with major emphasis on the determination of the economy's total output, the price level and the level of employment. The course incorporates the interaction of the market for goods and services, the assets market and the labor market. Offered in fall. Prereq: ECON 101.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H

Complete ANY of the following Courses:

- ECON101 - Principles of Macroeconomics
- ECON101H - Hnrs:Principles of Macroeconomics

ECON323 - Games and Experiments in Econ

Course Information

Course Title
Games and Experiments in Econ

Subject code	Course Number	Academic Level
ECON	323	Undergraduate

Course Description
This course presents how economic theory is used to explain decisions of economic agents (e.g., consumers, firms or the government) in markets and strategic environments where the outcomes depend on the interaction of the decisions of the agents. Tests of economic theory predictions in the form of laboratory experiments will also be discussed and implemented. The areas of study include market behavior under various institutional settings, allocation decisions in settings with externalities, and individual choice and uncertainty. Offered annually. Prereq: ECON 102 or 102H, and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 102 or ECON 102H and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

ECON325 - International Economics

Course Information

Course Title
International Economics

Subject code	Course Number	Academic Level
ECON	325	Undergraduate

Course Description
Theory of international trade, commercial policy and trade in relation to economic development, balance of payments and the foreign exchange market, international monetary developments, foreign aid and economic growth. Offered in spring. Prereq: ECON 101, 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON101 or ECON101H and ECON102 or ECON102H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ECON325H - Hon: International Economics

Course Information

Course Title
Hon: International Economics

Subject code	Course Number	Academic Level
ECON	325H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON101 or ECON101H and ECON102 or ECON102H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ECON326 - Economic Growth and Develpmnt

Course Information

Course Title
Economic Growth and Develpmnt

Subject code	Course Number	Academic Level
ECON	326	Undergraduate

Course Description
Introduction to economic characteristics and problems of less developed countries and to associated theories and policies. Offered annually. Prereq: ECON 101, 102; ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H and ECON 102 or ECON 102H and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

ECON327 - Women and Global Econ Devlop

Course Information

Course Title
Women and Global Econ Devlop

Subject code	Course Number	Academic Level
ECON	327	Undergraduate

Course Description
Theoretical and case-based examination of women in the political economy of less developed economies. Issues covered include womens experiences with economic development; effects of economic development on womens status, roles, workloads and resource access; effective methods of empowerment for women experiencing contemporary economic development; and targeting gender in development, particularly through grassroots efforts. Offered annually. Prereq: ECON 101 or 102, COMM 100, ENGL 110, junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H or ECON 102 or ECON 102H

Complete ANY of the following Courses:
- ECON101 - Principles of Macroeconomics
- ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics
- ECON102H - Hnrs:Principles of Microeconomics

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ECON333 - Econometrics

Course Information

Course Title
Econometrics

Subject code	Course Number	Academic Level
ECON	333	Undergraduate

Course Description
The estimation and hypothesis-testing of economic models, principally using regression techniques. Topics include linear models, time series analysis and simultaneous equations models. The uses and limitations of these models for economic forecasting are examined with the aid of computers. Offered in spring. Prereq: ECON 101, 102 and either 231 or 332.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H and ECON 102 or ECON 102H and ECON 231 or ECON 231H

Complete ALL of the following Courses:
- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics
- ECON231 - Applied Statistcs 1 **OR** ECON231H - Hon: Applied Statistcs 1

ECON333H - H:Econometrics

Course Information

Course Title
H:Econometrics

Subject code	Course Number	Academic Level
ECON	333H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 101 or ECON 101H and ECON 102 or ECON 102H and ECON 231 or ECON 231H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics
- ECON231 - Applied Statistcs 1 **OR** ECON231H - Hon: Applied Statistcs 1

ECON335 - Forecasting and Analytics

Course Information

Course Title
Forecasting and Analytics

Subject code	Course Number	Academic Level
ECON	335	Undergraduate

Course Description
Emphasis is on authentic learning of the forecasting and analytics methods that practitioners have found most useful. Prereq: ECON 231 or MATH 235, and ECON 101.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 231 or ECON 231H or MATH 235 and ECON 101 or ECON 101H

Complete ALL of the following Courses:

- ECON231 - Applied Statistcs 1 **OR** ECON231H - Hon: Applied Statistcs 1 **OR** MATH235 - Survey of Statistics
- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics

ECON345 - Labor Economics

Course Information

Course Title
Labor Economics

Subject code	Course Number	Academic Level
ECON	345	Undergraduate

Course Description
The labor market and labor forces, theories of wages and employment, security, determinants of trade union policy and governmental manpower policies. Offered in spring. Prereq: ECON 101, 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON101 or ECON101H and ECON102 or ECON102H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ECON345H - HNRS:Labor Economics

Course Information

Course Title
HNRS:Labor Economics

Subject code	Course Number	Academic Level
ECON	345H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON101 or ECON101H and ECON102 or ECON102H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ECON355 - Econ of Sex, Drugs, & Religion

Course Information

Course Title
Econ of Sex, Drugs, & Religion

Subject code	Course Number	Academic Level
ECON	355	Undergraduate

Course Description
This course applies consumer theory, firm theory, and market failure to the economics of social issues via the broad, and often controversial, topics of sex, drugs, and religion. Emphasis is placed on the current economic, political, and legal aspects of these issues and therefore specific topics may change depending on current events. Students will explore these topics and lessons via research articles published in academic journals and by research published by the top economic research organizations. Prerequisites: ECON 102 and MATH 101 or math placement beyond 101, MATH 130 or equivalent.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

ECON102 or ECON102H and MATH101 or MATH130

Complete ALL of the following Courses:
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics
- MATH101 - College Algebra **OR** MATH130 - Elements of Statistics 1

ECON365 - History of Economic Thought

Course Information

Course Title
History of Economic Thought

Subject code	Course Number	Academic Level
ECON	365	Undergraduate

Course Description
Examination of a variety of theoretical and philosophical perspectives in economics developed during the past few hundred years. The ideas of well-known economists such as Adam Smith and Karl Marx are typically analyzed, as is the thought of a selection of lesser known contributors to the discipline. Offered once every two years. Prereq: ECON 101, 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON101 or ECON101H and ECON102 or ECON102H

Complete ALL of the following Courses:
- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ECON375 - Econ of Industrial Orgnization

Course Information

Course Title
Econ of Industrial Orgnization

Subject code	Course Number	Academic Level
ECON	375	Undergraduate

Course Description
The study of (1) how enterprises function within a variety of market structures and (2) how well the outcomes fit the public interest. Specific topics include market share, barriers, concentration, vertical power, economies of scale, pricing behavior, mergers and efficiency. Offered in spring. Prereq: ECON 101 and 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON101 or ECON101H and ECON102 or ECON102H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

ECON379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ECON	379	Undergraduate

Course Description
Experimental

ECON400 - Co-Op Ed Experience in Econ

Course Information

Course Title
Co-Op Ed Experience in Econ

Subject code	Course Number	Academic Level
ECON	400	Undergraduate

Course Description
Co-Op Ed Experience in Econ

ECON479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ECON	479	Undergraduate

Course Description
Experimental

ECON488 - Seminar in Economics

Course Information

Course Title
Seminar in Economics

Subject code	Course Number	Academic Level
ECON	488	Undergraduate

Course Description
Students participate in the process of knowledge creation by generating a research question in economics and undertaking in-depth analysis of that question. The course is structured to support student development and application of critical analytical skills through theoretical and/or empirical methods, research and information management skills, and writing and presentation skills. The course emphasizes the process of research and writing, culminating in three final products: the paper, the poster and the presentation. Majors only. Offered annually. Prereq: ENGL 110, minimum 12 hours of economics or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ECON 101 and 102

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **AND** ECON102 - Principles of Microeconomics

ECON489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ECON	489	Undergraduate

Course Description
Honors Courses/Thesis

ECON498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
ECON	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section.

ECON499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
ECON	499	Undergraduate

Course Description
Honors Courses/Thesis

ECON500 - Co-Op Ed Experience in Econ

Course Information

Course Title
Co-Op Ed Experience in Econ

Subject code	Course Number	Academic Level
ECON	500	Graduate

Course Description
Co-Op Ed Experience in Econ

ECON507 - Environmental Econ and Policy

Course Information

Course Title
Environmental Econ and Policy

Subject code	Course Number	Academic Level
ECON	507	Graduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON 102 or ECON 102H and MATH 503

Complete ALL of the following Courses:

- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics
- MATH503 - Probability and Statistics for Teachers

ECON579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ECON	579	Graduate

Educational Foundations Department

Educational Foundations (EDFN) is the education home to single subject and secondary BSE majors. We believe strongly that teachers must both know the subjects they teach and how to teach them to students. Because of this belief, we value our partnership with liberal arts departments in providing education courses, field experience, and co-advisors for our undergraduate secondary education students. This partnership also includes content specific preparation.

Educational Foundations is also home to two multidisciplinary concentrations, Educational Studies and Applied Disability Studies.

FACULTY LIST
Brooks, Sarah; Professor College of Education and Human Services B.A., Gordon College, 2002; M.A., University of Connecticut, 2006; Ph.D., University of Virginia, 2010
Davis, Emily; Assistant Professor College of Education and Human Services B.A., Lewis & Clark College, 2000; M.A.T., Lewis & Clark College, 2002; Ph.D., University of Virginia, 2010
Deemer, Sandra; Professor College of Education and Human Services B.A., Millersville University, 1992; M.A., University of Delaware, 1997; Ph.D., Ibid., 1999
Dietrich, Nanette; Professor College of Education and Human Services Ph.D., University of Delaware, 2005
Dreon, Oliver; Professor College of Education and Human Services B.S., University of Pittsburgh, 1991; M.A., Ibid., 1992; Ph.D., The Pennsylvania State University, 2008
Gaudino, Ann; Professor College of Education and Human Services B.S., University of Michigan, 1989; M.S., Ibid., 1990; Ed.D., University of Pittsburgh, 2008
Hanich, Laurie; Professor College of Education and Human Services B.A., Temple University, 1993; M.S., Indiana University of Pennsylvania, 1998; Ph.D., University of Delaware, 2001
Ibrahim, Abdulsalami; Associate Professor College of Education and Human Services B.S.Ed., Usmanu Danfodiyo University (Nigeria), 2007; M.Ed., Ibid., 2012; D.Ed., Indiana University of Pennsylvania, 2019
Primus, Nakeiha; Associate Professor College of Education and Human Services B.A., Tufts University, 2005; M.A., Duke University, 2008; Ph.D., University of Delaware, 2014
Witmer, Miriam; Associate Professor College of Education and Human Services B.S., Millersville University, 1983; M.S., Ibid., 1992; Ph.D., Temple University, 2014
Wright, Tiffany; Department Chairperson, Professor College of Education and Human Services B.A, Gettysburg College, 1997; M.Ed., Millersville University, 2002; Ed.D., Johns Hopkins University, 2009

Programs

Artificial Intelligence in Education Endorsement

Overview

The Artificial Intelligence Endorsement is a four-course (12-credit) program designed to prepare educators to effectively and ethically integrate AI technologies within educational settings. Grounded in theories of cognitive, emotional, and social development, the program emphasizes research-based practices that enable teachers to navigate the evolving role of AI in schools. Each course is structured to build competencies aligned with key endorsement domains, including the foundations and applications of AI, responsible and ethical use, instructional and assessment strategies, student AI literacy, and leadership for innovation. In addition to coursework, the program draws upon field experiences to provide practical opportunities to apply learning in real-world educational contexts. Upon completion, candidates will be equipped with the knowledge, skills, and ethical grounding needed to support human and societal thriving in an AI-integrated educational landscape.

Curriculum

Simple Requirements

Untitled Requirement

Type
Completion Requirement

Complete ALL of the following Courses:

- ACTE550 - Foundations of Artificial Intelligence in Education
- ACTE551 - Teaching and Learning with Artificial Intelligence
- ACTE552 - Ethical and Responsible Use of Artificial Intelligence in Education
- ACTE553 - Leading and Integrating Artificial Intelligence Across the Curriculum

STEM Education Endorsement

Overview

The STEM program endorsement is intended to improve a teacher's skills in dealing with complex classroom settings. The STEM endorsement is designed to provide additional knowledge and promote skills related to more integrative ways to deliver content in these areas. While the endorsement does not lead to state licensure, it may be added to an existing Level I or Level II
Certificate. Millersville's STEM endorsement courses can also be applied to the Assessment, Curriculum and Teaching Masters in Education Program with the addition of five more courses.
STEM education creates opportunities to integrate student-centered learning approaches to improve the quality of K-12 education and interaction with the larger community. This program incorporates active project-based learning, where you will develop and use skills in analysis, problem solving and critical thinking.

Program Highlights:

- 12-Credit, four-course Program
- Adds a STEM endorsement to an existing PA teaching license
- Can be completed 100% online
- All 12 credits count towards Millersville's M.Ed. program in Assessment, Curriculum and Teaching
- Affordable tuition rates
- Credits meet ACT 48 requirements
- Interdisciplinary faculty from three departments

Who This Program is for:

- Teachers who hold an initial teaching certification in any discipline K-12
  (*This program will NOT lead to an initial teaching certification)
- Teachers in STEM subjects: science, technology, engineering and mathematics
- Teachers in non-STEM disciplines who are interested in embracing the ideas associated with STEM education

This program builds upon our existing high-quality science, technology, engineering and math education courses taught by Millersville University's faculty experts.

Curriculum

Simple Requirements

Requirements

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

PDE Endorsement

Endorsement in STEM Education - See separate block

Concentration in STEM Education

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ACTE651 - Science Curriculum and Reform
- ACTE625 - Technology and Assessment for Learning

AND

Math in the School Program or Problem Solving Seminar (3 credits)

Complete at least 1 of the following courses:

- EDUC651 - Math in the School Program
- MATH610 - Problem Solving Seminar

AND

Engineering Principles and Concepts or Int. STEM Educ (3 credits)

Complete at least 1 of the following courses:

- TEIN604 - Engineering, Ethics, and AI
- ACTE655 - Integrative STEM Education

Online Teaching Endorsement

Overview

This program is among the first in the state approved to deliver the PDE endorsement in Online Teaching and consists of twelve (12) graduate credits offered by the Educational Foundations department in a fully online format. Faculty members for this program are among state and national leaders in online pedagogy and instruction, and are also affiliated with Millersville's graduate degree programs in Leadership for Teaching and Learning, Special Education and other education degrees.

This program is for:

- K-12 Educators who want to develop Online Teaching Expertise
- Classroom Teachers Already Using Flipped and Hybrid Instruction
- Curriculum Supervisors and Technology Coordinators
- Current and Prospective Teachers Seeking an Edge in the Job Market
- Educational Administrators and School Leaders
- Community college faculty in online and hybrid programs

Curriculum

Simple Requirements

PDE Endorsement

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Endorsement in Online Teaching

See separate block

Concentration in Online Teaching (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses

Complete ALL of the following Courses:

- ACTE630 - Current Technology for Online Instruction
- ACTE632 - Online Learning Environments
- ACTE633 - Learners in Online Classrooms
- ACTE634 - Legal and Ethical Issues in Online Education

Educational Leadership, Ed.D.

Overview

The Doctorate in Educational Leadership (Ed.D.) is designed to provide rising school, state, and organizational leaders with the knowledge, skills and dispositions to develop, implement, and lead educational programming in a variety of settings. The program has two focal areas, poverty and technology, which are embedded throughout the program. Superintendent Letter of Eligibility (LOE) courses are designed to provide those with principal certification the opportunity to pursue superintendent coursework. Coursework is delivered in a variety of modalities including face-to-face, hybrid, online and integration of other cyber applications.

Admission Requirements

- Graduate application and application fee.
- Transcripts from all previous colleges and universities, including any additional certification program(s).
- Master's degree in education or a related field is required.
- Certifications.
- Current resume or curriculum vitae.
- 500 word goal statement addressing the applicant's goals and objectives for doctoral study in educational leadership and how this program will assist them in achieving those outcomes.

Ed.D. Program Examinations

Candidacy Exam

The purpose of the candidacy examination is for the doctoral student to demonstrate their growth during the first segment of the program which suggests that they are ready to pursue dissertation writing and research. The exam will take place in two parts. The first part is written and allows the student to examine and write about research-based articles as well as their own research interests. The second part is their oral defense of their writing. When doctoral students pass the candidacy exam, they are then referred to as doctoral candidates.

Dissertation Prospectus defense

The purpose of the prospectus defense is for students to demonstrate their writing and ability to present and converse in the introduction, literature review and methodology to be employed in their dissertation. Students will participate in this defense with their faculty dissertation committee members.

Dissertation Defense

The purpose of the dissertation defense is for doctoral candidates to demonstrate their writing and ability to present and converse about their entire dissertation project. It takes place after the entire dissertation research and writing are complete. Doctoral candidates will participate in this defense with their faculty dissertation committee members and may open their defense for public attendance.

Curriculum

Simple Requirements

Major in Educational Leadership - EDD (54 credits)

Type
Completion Requirement

Coursework (48 credits)

Fulfill ALL of the following requirements:

Intro to Executive Leadership and Educational Statistics (6 credits)

Complete ALL of the following Courses:
- EDLD832 - Intro to Executive Leadership **AND** EDLD831 - Educational Statistics

AND

Introduction to Research in Ed Leadership (3 credits)

Complete ALL of the following Courses:
- EDLD820 - Intro to Research in Ed Leadrs

AND

Emergent Technologies and Instructional Practices (3 credits)

Complete ALL of the following Courses:
- EDLD828 - Emernt Tech & Instruc Practice

AND

Qualitative Research in Ed Leadership (3 credits)

Complete ALL of the following Courses:
- EDLD808 - Qual Methods in Ed Ldshp

AND

Political/Social Context for Educational Leadership (3 credits)

Complete ALL of the following Courses:

- EDLD829 - Pol/Soc Cont for Ed Leadership

AND

Quantitative Research in Ed Leadership (3 credits)

Complete ALL of the following Courses:

- EDLD830 - Quan Research Mthd in Ed Ldrsh

AND

Communication Theory for School District Administrators (3 credits)

Complete ALL of the following Courses:

- EDLD822 - Comm Theory for District Admin

AND

Advanced Level Leadership (3 credits)

Complete ALL of the following Courses:

- EDLD851 - Advanced Level Leadership

AND

Leadership of Instruction and Learning (3 credits)

Complete ALL of the following Courses:

- EDLD854 - Leadership of Instruction and Learning

AND

Leadership for Equity and Inclusion (3 credits)

Complete ALL of the following Courses:

- EDLD855 - Leadership for Equity and Inclusion

AND

Governing Board and Community Relations (3 credits)

Complete ALL of the following Courses:

- EDLD721 - Strat Lead in Dist Gov & Comm

AND

Legal and Ethical Issues (3 credits)

Complete ALL of the following Courses:

- EDLD724 - Eth & Leg Dec-mak at Dist Lvl

AND

Finance and Facilities (3 credits)

Complete ALL of the following Courses:

- EDLD725 - Impct Fac & Plnt Mgmt Schl Eff

Candidacy Exam

A candidacy exam is required to progress in the Educational Leadership program, year two.

Research Seminars (6 credits)

Fulfill ALL of the following requirements:

Research in Educational Leadership Part 1 (3 credits)

Complete ALL of the following Courses:

- EDLD890 - Research in Edu Ldshp Part 1

AND

Research in Educational Leadership Part 2 (3 credits)

Complete ALL of the following Courses:

- EDLD891 - Research in Edu Ldshp Part 2

Dissertation Courses (6 credits)

Fulfill ALL of the following requirements:

Dissertation I - Educational Leadership (3 credits)

Complete ALL of the following Courses:

- EDLD898 - Dissertation I - EL

AND

Dissertation II - Educational Leadership (3 credits)

Earn at least 3 credits from the following:

- EDLD899 - Dissertation II - EL

Comprehensive Exam

A comprehensive exam is required to complete the EDD in Educational Leadership.

M.Ed. ACTE in Art Education

Overview

Graduate study in art education is designed to meet the specific needs of art education graduates, practicing art teachers who need graduate credits to meet state mandates, and art teachers who wish to conduct advanced independent study or research in art, art education, art history or related fields.

Admission Requirements

Those persons applying for admission to the graduate studies program of Millersville University who wish to pursue a program leading to a master's degree in Assessment, Curriculum and Teaching in art education must possess Pennsylvania Instructional I Certification in art education.

Applicants who meet the requirements for admission through the Office of Graduate Studies, as specified in the *Admission Requirements* section, will be reviewed by the ACTE Coordinator and art department graduate admission committee, which will use the following to formulate a recommendation of probational admission, regular admission or admission denied:

1. Undergraduate and post-baccalaureate grades and grade averages (minimum: 3.0 cumulative; 3.25 in art and art education courses);
2. Three letters of recommendation from persons familiar with the applicant's education and teaching experience (including the applicant's immediate supervisor);
3. Evidence of artistic expression (portfolio review); applicants who completed an undergraduate degree in art at Millersville University are not required to submit a portfolio for review;
4. Professional goals as stated by the applicant; and,
5. If the department recommends probational admission, the conditions shall be clearly stipulated (e.g., the successful completion of a designated course (or courses) either at the graduate or undergraduate level).

Degree Requirements

A program of study will be developed for each student based upon the individual's specific academic background, skills and educational aspirations.

Each student is required to complete the professional

studies core, the art education core, the comprehensive studies program and either a thesis or a documented study that represents original investigation relating to art education.

Each student will select work in this program in conjunction with the other M.Ed. requirements. The comprehensive studies courses should provide a direction to the student's professional career.

The concepts and skills necessary for teaching are emphasized, as required for the elementary or secondary art classroom, or in other art programs such as special education and adult education.

As part of the comprehensive studies program, the student, in conference with an advisor, may select studies in art studio and art history as well as other graduate studies (e.g., special education, psychology, professional education, literature, and technology and innovation).

Curriculum

Simple Requirements

M.Ed. Core

Type
Completion Requirement

Complete ALL of the following Courses:
- EDFN601 - Research Methods
- ACTE630 - Current Technology for Online Instruction

Complete ANY of the following Courses:
- EDFN511 - Comparative Education
- EDFN545 - Advanced Educational Psychology
- EDFN604 - Education and Public Policy

ACTE Core

Type
Completion Requirement

Complete ALL of the following Courses:
- ACTE625 - Technology and Assessment for Learning

In ACTE core student MUST complete six credits. That is ACTE625 and any elective in ACTE, EDFN, or ART courses.

Art Education Concentration

Type
Completion Requirement

Complete ALL of the following Courses:
- ART603 - Assessment in Art Education
- ART526 - Trends Art Ed:
- ART523 - Art Curriculum Seminar/Wkshp

In Art Education concentration, students MUST complete 12 credits. That is ART603, ART526, ART523 and any THREE credit ART course or through EXCEPTIONS, like current process.

Capstone

Type
Completion Requirement

Complete ALL of the following Courses:
- ACTE699 - Inquiry for Teaching/Learning

Assessment, Curriculum & Teaching, M.Ed. - Integrative STEM Education

Overview

The Master of Education in Assessment, Curriculum and Teaching (ACTE) is designed for current teachers who are seeking to advance their professional effectiveness. The program builds five outcomes related to assessment, curriculum and teaching in emerging fields and offers two concentrations: one in Online Teaching, one in STEM Education, and one in Certification. All candidates entering the program must meet all Millersville University graduate entrance requirements. Additionally, all candidates must have Instructional I certification and pass both a written essay and oral interview.

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Required Courses

Fulfill ALL of the following requirements:

Complete ALL of the following Courses:
- EDFN601 - Research Methods
- ACTE630 - Current Technology for Online Instruction

AND

Complete at least 1 of the following courses:
- EDFN545 - Advanced Educational Psychology
- EDFN604 - Education and Public Policy
- EDFN511 - Comparative Education

Major in Assessment, Curriculum and Teaching - MED (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

ACTE Core Courses (6 credits)

Complete ALL of the following Courses:
- ACTE625 - Technology and Assessment for Learning

ACTE 625 plus an advisor approved elective must be completed.

AND

Concentration in Online Teaching

See separate block.

AND

Thesis/Capstone Experience (6 credits)

Complete ALL of the following Courses:
- ACTE699 - Inquiry for Teaching/Learning

Concentration in STEM Education (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:
- ACTE651 - Science Curriculum and Reform
- TEIN604 - Engineering, Ethics, and AI
- ACTE655 - Integrative STEM Education

AND

Mathematics in the School Program or Problem Solving Seminar (3 credits)

Complete at least 1 of the following courses:
- EDUC651 - Math in the School Program
- MATH610 - Problem Solving Seminar

Assessment, Curriculum and Teaching, M.Ed. - Online Instruction

Overview

The Master of Education in Assessment, Curriculum and Teaching (ACTE) is designed for current teachers who are seeking to advance their professional effectiveness. The program builds five outcomes related to assessment, curriculum and teaching in emerging fields and offers three concentrations: one in Online Teaching and one in STEM Education. All candidates entering the program must meet all Millersville University graduate entrance requirements. Additionally, all candidates must have Instructional I certification.

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Required Courses

Fulfill ALL of the following requirements:

Complete ALL of the following Courses:
- EDFN601 - Research Methods
  AND ACTE630 - Current Technology for Online Instruction

AND

Complete at least 1 of the following courses:
- EDFN545 - Advanced Educational Psychology
- EDFN604 - Education and Public Policy
- EDFN511 - Comparative Education

Major in Assessment, Curriculum and Teaching - MED (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

ACTE Core Courses (6 credits)

Complete ALL of the following Courses:
- ACTE625 - Technology and Assessment for Learning

ACTE 625 and an advisor approved elective must be completed.

AND

Concentration in Online Teaching

See separate block.

AND

Thesis/Capstone Experience (6 credits)

Complete ALL of the following Courses:
- ACTE699 - Inquiry for Teaching/Learning

Concentration in Online Teaching (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Online Teaching Concentration

Complete ALL of the following Courses:
- ACTE632 - Online Learning Environments
- ACTE633 - Learners in Online Classrooms
- ACTE634 - Legal and Ethical Issues in Online Education
- ACTE635 - Instructional and Curricular Design for Online, Blended and Customized Instruction

Leadership for Teaching and Learning, M.Ed.

Overview

The Master of Education degree in leadership for teaching and learning prepares teachers for roles in basic education as principals, department heads, curriculum directors, supervisors and other leadership positions. The program philosophy is rooted in the literature demonstrating the effectiveness of leaders who facilitate responsible, responsive change through cooperative action. The program utilizes the strengths of cohort groups of students, portfolio assessment, an internship, mentors, technology and case studies. Community relations; respect of the influences of race, class, gender and ethnicity in education; and the liberal arts as a source of knowledge and perspective are acknowledged in the program curriculum.

The Master's degree program includes 36 semester hours of coursework. Candidates who complete the curriculum and degree requirements, and have five years of teaching experience, are eligible to be recommended for the K-12 Principal's Certificate and also for the K-12 Curriculum and Instruction Supervisory Certificate. Those who already hold an appropriate master's degree may apply to pursue only the certificates; a review of their previous coursework will determine what requirements must be satisfied to be eligible for the certificates.

Admissions Requirements

Students who seek admission to the Master of Education degree in leadership for teaching and learning must comply with the University's established admissions criteria and procedures. Admission to the degree program will be on a cohort basis. Twenty students will be admitted to each cohort group, with a new cohort commencing each fall semester. Courses completed prior to the beginning of a cohort may be considered for inclusion in the program.

The following criteria will be used in determining admission to a cohort:

1. Letters of recommendation
2. Official transcripts
3. Academic and Professional Goals Statement
4. Commonwealth of Pennsylvania Teacher's Certificate, Instructional I. Applicants without Instructional I Certificates must meet with the Graduate Program Coordinator for review and possible acceptance.
5. Structured interview

Assessment

In addition to the normal course requirements and assessment instruments, a portfolio will be utilized as a form of formative and summative assessment. Completion of the program is contingent upon passing the portfolio review and maintaining a 3.0 GPA. Students who fail to maintain the academic scholarship and/or professional standards are subject to dismissal from the program.

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Professional Core: Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN601 - Research Methods
- EDFN545 - Advanced Educational Psychology

AND

Professional Core: Philosophy of Education (3 credits)

Complete at least 1 of the following courses:

- EDFN603 - Philosophy of Education
- EDFN604 - Education and Public Policy

Additional Comments:
EDFN601 Research Methods is required. Choose 2 courses from two of the three Core Option areas.

Major in Leadership for Teaching - MED (27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Education Leadership Core: Leadership Theory & Organizational Behavior (3 credits)

Complete ALL of the following Courses:

- EDLD610 - Theory and Organizatnl Behavr

AND

Education Leadership Core: School Law, Public Policy and the Principal (3 credits)

Complete ALL of the following Courses:

- EDLD620 - School Law and Public Policy

AND

Education Leadership Core: Introduction to Supervision (3 credits)

Complete ALL of the following Courses:

- EDSU701 - Administrative Supervision

AND

Education Leadership Core: Required Courses (24 credits)

Complete ALL of the following Courses:

- EDLD614 - School Community Relations
- EDLD667 - Leadership Seminar 1
  OR EDLD668 - Leadership Seminar 2
  OR EDLD681 - Supporting Inclusion as a Current School Leader 1
- EDLD669 - Leadership Seminar 3
- EDSU700 - Functions Supervision
- EDSU703 - Curriculum and Supervision
- EDLD798 - Applied Supervision
- EDLD799 - Applied Practicum

AND

Portfolio Review

Upon completion of all required courses, students are eligible to schedule the portfolio review. The portfolio is utilized as a form of formative and summative assessment. Completion of the degree requires successful completion of the portfolio review.

Leadership for Teaching and Learning - Music, M.Ed.

Overview

The Master of Education degree in leadership for teaching and learning prepares teachers for roles in basic education as principals, department heads, curriculum directors, supervisors and other leadership positions. The program philosophy is rooted in the literature demonstrating the effectiveness of leaders who facilitate responsible, responsive change through cooperative action. The program utilizes the strengths of cohort groups of students, portfolio assessment, an internship, mentors, technology and case studies. Community relations; respect of the influences of race, class, gender and ethnicity in education; and the liberal arts as a source of knowledge and perspective are acknowledged in the program curriculum.

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Professional Core: Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN601 - Research Methods
- EDFN545 - Advanced Educational Psychology

AND

Professional Core: Philosophy of Education (3 credits)

Complete at least 1 of the following courses:

- EDFN603 - Philosophy of Education
- EDFN604 - Education and Public Policy

Additional Comments:
EDFN601 Research Methods is required. Choose 2 courses from two of the three Core Option areas.

Major in Leadership for Teaching, Music - MED (27

credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Leadership Core (13 credits)

Fulfill ALL of the following requirements:

Educational Leadership Courses (10 credits)

Earn at least 10 credits from the following:

- EDLD610 - Theory and Organizatnl Behavr
- EDLD614 - School Community Relations
- EDLD620 - School Law and Public Policy
- EDLD667 - Leadership Seminar 1
- EDLD668 - Leadership Seminar 2
- EDLD669 - Leadership Seminar 3

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- EDSU701 - Administrative Supervision

AND

Music Courses (14 credits)

Earn at least 14 credits from the following:

- MUSI512 - Solfege, Harmony and Analysis III According to the Kodaly Concept
- MUSI513 - Solfege, Harmony and Analysis IV According to the Kodaly Concept
- MUSI572 - The Art of Teaching Middle Level According to the Kodaly Concept
- MUSI554 - Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 1
- MUSI555 - Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 2
- MUSI654 - Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 3
- MUSI655 - Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 4
- MUSI550 - AoT Modern Band

Upon completion of all required courses and students are eligible to schedule the portfolio review. The portfolio is utilized as a form of formative and summative assessment. Completion of the degree requires successful completion of the portfolio review.

AND

Portfolio Review

Upon completion of all required courses, students are eligible to schedule the portfolio review. The portfolio is utilized as a form of formative and summative assessment. Completion of the degree requires successful completion of the portfolio review.

Curriculum & Instruction Supervisory Certification

Overview

The program consists of 15 credits, including three core courses and a six-credit field experience. In exceptional cases, an approved substitution may be made for one of the core courses.

The field experience demands a high degree of cooperation between the University and the school where the student is employed or assigned. The student is supervised by a faculty member from the department/area in which the certificate is sought. It is important that the candidate give due consideration to this aspect of the program, since in some cases it may be necessary for the student to take a sabbatical or leave of absence in order to meet the requirement of the field experience.

Except for secondary education and music, which do not have master's degree programs, consult the appropriate department section in this catalog for description of field experience.

Field experiences vary, but generic competencies apply to all program areas. These include:

1. Knowledge of recent research and application of basic research tools and techniques to problems encountered in supervisory positions.
2. The ability to work with paraprofessionals, teachers, student teachers and the auxiliary staff.
3. Skill in curriculum planning and evaluation.
4. Ability to coordinate supporting services to the major curriculum components, such as speech therapy, dental hygienist, and home and school visitors.
5. Ability to review and assess various curriculum needs and recommended changes as deemed necessary.

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision
- EDSU798 - Administrative Supervision
- EDSU799 - Applied Practicum

For EDSU799: Applied supervision in the applicable content subject area.

Curriculum

Simple Requirements

Curriculum & Instruction Supervisory Certification (15 credits)

Type
Completion Requirement

Superintendent Letter of Eligibility/LOE (Superintendent Certification)

Overview

This online Graduate Certificate in Educational Leadership/ Superintendent Letter of Eligibility (LOE) program will be of interest to both school leaders in Pennsylvania and elsewhere wishing to obtain superintendent licensure as well as those in other positions seeking a graduate certificate in educational leadership. All students completing the coursework satisfactorily will be awarded the MU Graduate Certificate in Educational Leadership. For those who are school leaders, this coursework includes necessary curriculum and 360 internship hours to qualify for the LOE in PA as well as preparation to take the School Superintendent Assessment Exam required for the LOE in PA.

Curriculum

Simple Requirements

Superintendent Letter of Eligibility/LOE (18 credits)

Type
Completion Requirement

Millersville Offered LOE Coursework

Complete ALL of the following Courses:

- EDLD851 - Advanced Level Leadership
- EDLD854 - Leadership of Instruction and Learning
- EDLD855 - Leadership for Equity and Inclusion

Shippensburg Offered LOE Coursework

Complete ALL of the following Courses:

- EDLD721 - Strat Lead in Dist Gov & Comm
- EDLD724 - Eth & Leg Dec-mak at Dist Lvl
- EDLD725 - Impct Fac & Plnt Mgmt Schl Eff

Principal Post-Master's Certification

Overview

Progress through a unique course of study catered to your previous education and experiences in pursuit of a Principalship certification based on Pennsylvania Department of Education standards.

Curriculum

Simple Requirements

Major in Principal Certification - Post-Master's (27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Education Leadership Core

Fulfill ALL of the following requirements:

Leadership Theory & Organizational Behavior (3 credits)

Complete ALL of the following Courses:

- EDLD610 - Theory and Organizatnl Behavr

AND

Required Courses (21 credits)

Complete ALL of the following Courses:

- EDLD614 - School Community Relations
- EDLD620 - School Law and Public Policy
- EDLD667 - Leadership Seminar 1
- EDLD668 - Leadership Seminar 2
- EDLD669 - Leadership Seminar 3
- EDSU700 - Functions Supervision
- EDSU703 - Curriculum and Supervision
- EDLD798 - Applied Supervision
- EDLD799 - Applied Practicum

AND

Introduction to Supervision (3 credits)

Complete ALL of the following Courses:

- EDSU701 - Administrative Supervision

Portfolio Review

Upon completion of all required courses, students are eligible to schedule the portfolio review. The portfolio is utilized as a form of formative and summative assessment. Completion of the degree requires successful completion of the portfolio review.

Courses

ACTE550 - Foundations of Artificial Intelligence in Education

Course Information

Course Title
Foundations of Artificial Intelligence in Education

Subject code	Course Number	Academic Level
ACTE	550	Graduate

Course Description
This course provides an in-depth exploration of generative artificial intelligence and AI literacy, equipping educators with the knowledge and skills to use AI effectively to support their work and learning. Participants will learn about core AI technologies, such as machine learning, natural language processing, and adaptive learning systems. Additionally, participants will examine fundamental AI concepts, including generative, predictive, and adaptive models, and their applications in education. Participants will critically evaluate AI's strengths and limitations, with a focus on ethical considerations, bias, accuracy, and misinformation and analyze potential societal impacts from broader AI use. Participants will recognize how AI is shaping the future of learning and society and develop strategies for leveraging AI in their roles as educators and learners.

ACTE551 - Teaching and Learning with Artificial Intelligence

Course Information

Course Title
Teaching and Learning with Artificial Intelligence

Subject code	Course Number	Academic Level
ACTE	551	Graduate

Course Description
This course explores the integration of artificial intelligence (AI) in education, focusing on how AI can impact teaching, learning, and assessment. Participants will learn how AI can support instructional design and personalized learning while leveraging data-informed decision-making for improved educational outcomes. Additionally, the course emphasizes human-centered AI use while equipping participants with the critical skills to evaluate and implement AI tools for instructional and curricular planning. Through hands-on engagement with AI technologies, participants will develop strategies to integrate AI to enhance teaching and learning and support creativity, critical thinking, and innovation.

ACTE552 - Ethical and Responsible Use of Artificial Intelligence in Education

Course Information

Course Title
Ethical and Responsible Use of Artificial Intelligence in Education

Subject code	Course Number	Academic Level
ACTE	552	Graduate

Course Description
This course explores the ethical and responsible use of artificial intelligence (AI) in educational settings. Participants will examine AI-powered educational tools, analyzing their terms of service, data usage policies, and alignment with legal and ethical standards. The course will also delve into AI's impact on society, equity, and inclusion, as well as identifying potential missteps and risks. Participants will develop strategies to integrate AI responsibly, ensuring it enhances learning while safeguarding student rights. Participants will also explore the broader societal and environmental impacts of AI, how AI can support human development and the evolving role of AI with a focus on foresight and long-term implications.

ACTE553 - Leading and Integrating Artificial Intelligence Across the Curriculum

Course Information

Course Title
Leading and Integrating Artificial Intelligence Across the Curriculum

Subject code	Course Number	Academic Level
ACTE	553	Graduate

Course Description
This course is designed to help educators and school leaders integrate AI into their schools. Participants will learn how to implement AI tools in the curriculum, encourage a mindset of innovation and adaptability, and address the challenges and opportunities AI brings to education. By exploring these topics, participants will learn how to effectively integrate AI technologies to engage students with AI tools and AI-generated content and prepare students for emergent careers.

ACTE561 - Student Teaching in the Secondary Classroom

Course Information

Course Title
Student Teaching in the Secondary Classroom

Subject code	Course Number	Academic Level
ACTE	561	Graduate

Course Description
Taken in sequence with SEED 572: Inquiry into Inclusive Classroom Instruction, ACTE 561 will provide a field-based experience for ACTE students who are seeking teacher certification. As part of the ACTE program, students will serve as the instructor of record in schools and University supervisors will provide formal observations in compliance with PDE regulations.

ACTE610 - The Reflective Practitioner

Course Information

Course Title
The Reflective Practitioner

Subject code	Course Number	Academic Level
ACTE	610	Graduate

Course Description
Reflective practice is essential for educators as it allows them to examine their instruction, identify areas for improvement, and make informed decisions to support student learning. This graduate level course is designed to equip early career teachers with the fundamental knowledge, skills, and dispositions to become reflective practitioners. Through a blend of theoretical exploration and practical application, the course will delve into key areas of teaching, including planning and preparation, the classroom environment, instruction, and professional responsibilities. By fostering a culture of reflection and continuous learning, the course aims to empower teachers to critically analyze their practice, identify areas for growth, and implement evidence-based strategies to enhance student learning and well-being.

ACTE625 - Technology and Assessment for Learning

Course Information

Course Title
Technology and Assessment for Learning

Subject code	Course Number	Academic Level
ACTE	625	Graduate

Course Description
Technology and Assessment for Learning is designed for the practicing teacher to fully realize the role of assessment as a foundation for student learning and growth. The incorporation of assessment practices and technology in the classroom is grounded in practical classroom applications. This course intends to provide in-service teachers with a set of assessment and technological strategies and tools that can be used to provide different paths for student achievement and enhance student learning.

ACTE630 - Current Technology for Online Instruction

Course Information

Course Title
Current Technology for Online Instruction

Subject code	Course Number	Academic Level
ACTE	630	Graduate

Course Description
Students will develop skills in using current and emerging instructional technology to support online learning environments. Instructional design and assessment as well as national standards are used as a basis for planning and evaluating student-centered distance education. The methodologies and technologies used in the course are updated each semester according to current trends, practices, and research in the field of instructional technology.

ACTE631 - Social Foundatns of Online Ed

Course Information

Course Title
Social Foundatns of Online Ed

Subject code	Course Number	Academic Level
ACTE	631	Graduate

Course Description
A consideration of K-12 distance education from a social foundations perspective including philosophy of education, study of the history and evolution of distance education, public policy implications, economic implications, and other current issues in distance education. Students will complete an online field experience in a K-12 online environment.

ACTE632 - Online Learning Environments

Course Information

Course Title
Online Learning Environments

Subject code	Course Number	Academic Level
ACTE	632	Graduate

Course Description
Students will examine methods of engaging students in online learning environments and ways to effectively foster communication and interaction between students, content and instructor. Current research studies will be used to inform the creation of online learning environments that supports and assesses student learning. Students will complete an online field experience in a K- 12 online environment.

ACTE633 - Learners in Online Classrooms

Course Information

Course Title
Learners in Online Classrooms

Subject code	Course Number	Academic Level
ACTE	633	Graduate

Course Description
Fosters teachers' understanding and ability to respond to various characteristics that impact students' learning within the online environment. Course content examines individual differences across learning, development, cognitive abilities, reading proficiency and student readiness for online learning, while acknowledging the influences of prior educational experiences, home environment, and necessary special education accommodations. Emphasis is placed on adapting instruction by working with students and their families, other community stakeholders, and additional professionals who support student learning and achievement.

ACTE634 - Legal and Ethical Issues in Online Education

Course Information

Course Title
Legal and Ethical Issues in Online Education

Subject code	Course Number	Academic Level
ACTE	634	Graduate

Course Description
With the wealth of online learning tools and resources available, teachers need an understanding of the legal issues that impact their use with learners in the K-12 setting. This course addresses current legislation pertaining to the use of copyrighted digital media in the classroom, best practice in the use of online tools and applications with children over and under 13 years of age, and current controversies and legal challenges related to children's online behaviors. While the content of the course is updated every semester the course goal remains the same: to investigate the legal issues pertaining to the use of digital media and online tools in the classroom by teachers and students.

ACTE635 - Instructional and Curricular Design for Online, Blended and Customized Instruction

Course Information

Course Title
Instructional and Curricular Design for Online, Blended and Customized Instruction

Subject code	Course Number	Academic Level
ACTE	635	Graduate

Course Description
This course is designed as an integrative, project-based experience for students. The course applies instructional design methodology to the development of online, blended and customized courses that are engaging, effective and in alignment with standards and best practices as identified by learning research. Participants will enact a unit of instruction as either the lead teacher or as an intern co-teaching role. Participants are guided through the process of conducting needs assessments; defining course goals and objectives; and designing instructional lesson plans, activities and materials, and assessments. Consideration is given to various models of online delivery, content organization and presentation, and design principles.

ACTE640 - Universal Design for Learning: Curricular Access for All Students

Course Information

Course Title
Universal Design for Learning: Curricular Access for All Students

Subject code	Course Number	Academic Level
ACTE	640	Graduate

Course Description
The challenge and opportunity of individual differences confront every teacher, administrator, and curriculum designer. To meet that challenge and to capitalize on that opportunity, educators are typically equipped with media and materials that are one size fits all and that have been designed primarily for a narrow and illusive group of learners. In this course, we will explore an alternative approach universal design for learning (UDL)that creates curricula, informs instructional methods, and upholds learning environments that are designed to achieve success for a much wider range of student abilities and disabilities. To do that, the UDL approach takes advantage of advances in two fields: (1) the cognitive neuroscience of learning and individual differences and (2) the universal design of educational technologies and multimedia. This course will explore recent advances in both of these fields as they relate to content area instruction through appropriate readings and through media construction exercises designed to prepare and support participants to optimize the challenge of individual differences through universal design for learning.

ACTE641 - Foundations of Multiculturl Ed

Course Information

Course Title
Foundations of Multiculturl Ed

Subject code	Course Number	Academic Level
ACTE	641	Graduate

Course Description
This course lays the foundational framework about knowledge of multicultural education. It offers an in-depth examination of the history and evolution of multicultural education. Definitions of multicultural education are presented as these were shaped by events in history. Topics will include the theoretical and pedagogical content knowledge of multicultural education and their connections to learning about diversity in secondary classrooms. Models and dimensions of diversity will be analyzed as these relate to stages of identity development within a global context.

ACTE642 - Teaching About Diversity

Course Information

Course Title
Teaching About Diversity

Subject code	Course Number	Academic Level
ACTE	642	Graduate

Course Description
This course builds on the topic of diversity by examining multicultural issues in contemporary society and how they impact the educational system, equity, inclusion, and cultural tolerance. It will help candidates understand the positive attributes of pluralism and how this knowledge can be used effectively in the classroom and within schools to educate all children.

ACTE643 - Disciplinary Thinking

Course Information

Course Title
Disciplinary Thinking

Subject code	Course Number	Academic Level
ACTE	643	Graduate

Course Description
Effective teaching requires more than disciplinary content knowledge and an understanding of ways of knowing in the discipline. It also requires understanding of pedagogical content-specific knowledge that is uniquely helpful in the work of teaching. Studies of teaching have elaborated on pedagogical content knowledge to apply knowledge to specific content-related inquiry as well as the broad and flexible knowledge of how students think about content upon which to base instructional decisions that arise in unanticipated ways. This suggests that the disciplines are more than just accumulated bodies of knowledge or epistemic frameworks, but rather unique sets of ideas about what it might mean to generate knowledge, often referred to as the syntactic structure of the discipline. This course will engage students in the inquiry necessary to access the syntactic structure of their discipline and demonstrate their new knowledge in multiple modalities.

ACTE650 - Science Teaching and Learning

Course Information

Course Title
Science Teaching and Learning

Subject code	Course Number	Academic Level
ACTE	650	Graduate

Course Description
Teaching and learning are inseparable, in that learning is the goal of teaching. Someone has not taught unless someone else has learned. Science teaching requires attention to both the content of the course and the process of moving students from their initial state of knowledge and understanding to a more informed way of knowing. Students in this course will critically examine the latest research about science teachers and learners and use this information to assess their current instructional practices. The emphasis of the course will be on gaining the skills necessary to improve inquiry teaching in science classrooms.

ACTE651 - Science Curriculum and Reform

Course Information

Course Title
Science Curriculum and Reform

Subject code	Course Number	Academic Level
ACTE	651	Graduate

Course Description
`The purpose of the course is to develop a better understanding of school science curriculum. This course examines literature that provides the foundation for modern reform in science education. With the past in the background and current issues in the forefront, the course analyzes the implications of reform initiatives for classroom practice with a focus on student learning. In class discussions we examine how different assumptions and perceived goals of science education influence what is taught, how it is taught, and how it is assessed and interpreted.

ACTE655 - Integrative STEM Education

Course Information

Course Title
Integrative STEM Education

Subject code	Course Number	Academic Level
ACTE	655	Graduate

Course Description
Integrative STEM (iSTEM) education is a standards-based metadiscipline integrating Science, Technology, Engineering, and Math. This course examines the goals and outcomes of integrative STEM teaching and learning. iSTEM instruction is grounded in inquiry methodologies by using project-basad learning strategies, technological tools, equipment, and procedures in innovative ways. The goal of iSTEM instruction is to prepare students to address societal needs and challenges in order to compete in the global workforce by improving college-readiness skills, and increasing the number of students who may consider a career in a STEM-related field.

ACTE660 - Teach & Learn Secondary Ed

Course Information

Course Title
Teach & Learn Secondary Ed

Subject code	Course Number	Academic Level
ACTE	660	Graduate

Course Description
This course introduces candidates to a variety of evidence-based pedagogies appropriate for secondary classroom environments. Candidates will critically examine the syntax of instructional models that can be applied across a variety of content areas for the 7-12 classroom. Candidates will demonstrate their understanding of various teaching models and assessment strategies through the development of lesson plans and units in their content area. In addition, candidates will become engaged in critical analysis and evaluation of these instructional plans in order to develop a self-reflective approach to praxis.

ACTE699 - Inquiry for Teaching/ Learning

Course Information

Course Title
Inquiry for Teaching/Learning

Subject code	Course Number	Academic Level
ACTE	699	Graduate

Course Description
Design, execution and communication of applied research in emerging fields of online teaching or STEM education. Two types of applied research may be pursued: (1) basic research using experimental, descriptive or other traditional research methodologies, (2) documented study of innovative curricular development. In either approach, candidates must demonstrate use of emerging technologies, effective instructional design and use of assessment data for improving curricular design. Permission of instructor required to register.

ACTE700 - Seminar 1

Course Information

Course Title
Seminar 1

Subject code	Course Number	Academic Level
ACTE	700	Graduate

Course Description
Seminar 1

ACTE701 - Seminar 2

Course Information

Course Title
Seminar 2

Subject code	Course Number	Academic Level
ACTE	701	Graduate

Course Description
Seminar 2

ACTE702 - Seminar 3

Course Information

Course Title
Seminar 3

Subject code	Course Number	Academic Level
ACTE	702	Graduate

Course Description
Seminar 3

EDCI700 - The Mentoring Teacher

Course Information

Course Title
The Mentoring Teacher

Subject code	Course Number	Academic Level
EDCI	700	Graduate

Course Description
This course is designed to adequately prepare cooperating teachers (mentor teachers) to observe, analyze, guide and evaluate the field experiences of teacher candidates as they serve students with and without disabilities. The course presents a formal program for cooperating teachers, including strategies for the effective interaction with student teachers as well as crucial techniques of observation, supervision and evaluation. The course creates opportunities for the cooperating teacher to prepare for the responsibilities of the mentoring role. Understanding the evaluation processes, completing online evaluations, understanding the candidates developmental process and the efficient use of mediation and collaboration are detailed and planned. The best strategies for partnering with university faculty are considered in relation to each specific environment. Establishing expectations and environmental influences aimed at the teacher candidates development are detailed and codeveloped. Offered in summer.

EDCI799 - Applied Supervision

Course Information

Course Title
Applied Supervision

Subject code	Course Number	Academic Level
EDCI	799	Graduate

Course Description
A field-based experience designed to develop the candidates leadership abilities K-12. Comprehensive involvement in on-site activities, including classroom observations K-12, required research, policy and skill competencies. Specific activities include the demonstration of effective communication, staff development, budgeting and the ability to integrate curriculum across disciplines K-12, in addition to other activities at the elementary and secondary levels. The field experience demands a high degree of cooperation between the University and the school where the student is employed or assigned.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDSU700 and EDSU701 and EDSU703

Complete ALL of the following Courses:

- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision

EDFN090 - Topics: Life Transitions

Course Information

Course Title
Topics: Life Transitions

Subject code	Course Number	Academic Level
EDFN	90	Undergraduate

Course Description
This is an applied seminar and skill acquisition course including historical, sociological, and philosophical foundations of education & life transition as it applies to learning, personal growth, and professionalism. The course is designed to provide an opportunity for students to learn more about their major field of study and the professional behavior essential to their chosen careers. Through this professional participatory seminar, students will begin the important process of collecting information about career paths, education for life, professional expectations and conduct, ethics, and service. Additionally this course is designed to assist in thinking critically to improve academic performance, develop mastery of their emotions and judgment, and improve problem-solving skills. The course provides opportunities for students to evaluate personal development, goals, reasoning, and logical thinking. Other course topics include; creative thinking, organizational skills, evaluating facts versus opinions, interpersonal skills, and conflict resolution.

EDFN179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
EDFN	179	Undergraduate

Course Description
Experimental

EDFN211 - Foundations Modern Education

Course Information

Course Title
Foundations Modern Education

Subject code	Course Number	Academic Level
EDFN	211	Undergraduate

Course Description
This course provides an analysis of the philosophical, anthropological, sociological, economic and historical foundations for the contemporary PreK-12 school system in the United States; more specifically how issues of race, ethnicity, language, gender, disability, sexual orientation, geography, socioeconomics and religion influence the profession of teaching in particular grade-level contexts. The content for each section will be focused on the respective program area of the candidates (PreK-4 grades, 4-8 grades, and 7-12 grades). The course addresses the Pa. Dept. of Educations sociocultural standards for English-language learners. Must be taken simultaneously with EDFN 241. Includes field experience, which requires submission of satisfactory FBI, Act 34/151 clearances for eligibility for field placement.

Simple Requirements

Course Corequisite

Type
Corequisite

EDFN 241 or EDFN 241H

Enroll in the following Courses:

- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

Course Prerequisites

Type
Prerequisite

Clearances

Submission of satisfactory FBI, Act 34/151 clearances for eligibility for field placement.

EDFN211H - H: Foundations Modern Education

Course Information

Course Title
H: Foundations Modern Education

Subject code	Course Number	Academic Level
EDFN	211H	Undergraduate

Simple Requirements

Course Corequisite

Type
Corequisite

EDFN 241 or EDFN 241H

Enroll in the following Courses:

- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

Course Prerequisites

Type
Prerequisite

Clearances

Submission of satisfactory FBI, Act 34/151 clearances for eligibility for field placement.

EDFN212 - Education Foundations Liability

Course Information

Course Title
Education Foundations Liability

Subject code	Course Number	Academic Level
EDFN	212	Undergraduate

Course Description
This course serves as a companion to EDFN 241. Students will understand the importance of and obtain the mandatory liability insurance associated with field placement experiences.

Simple Requirements

EDFN 241

Type
Corequisite

EDFN241 - Psychological Foundations of Teaching

Course Information

Course Title
Psychological Foundations of Teaching

Subject code	Course Number	Academic Level
EDFN	241	Undergraduate

Course Description
Teaching and learning through the application of psychology to the activities of the classroom. Learning theory and practice, human growth and development, motivation, classroom management, evaluation and principles of effective instruction. Must be taken simultaneously with EDFN 211. Includes field experience, which requires submission of satisfactory FBI, Act 34/151 clearances for eligibility for field placement.

Simple Requirements

Course Corequisite

Type
Corequisite

EDFN 211 or EDFN 211H

Enroll in the following Courses:

- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education

Course Prerequisites

Type
Prerequisite

Clearances

Submission of satisfactory FBI, Act 34/151 clearances for eligibility for field placement.

EDFN241H - Hon:Psychological Foundations of Teaching

Course Information

Course Title
Hon:Psychological Foundations of Teaching

Subject code	Course Number	Academic Level
EDFN	241H	Undergraduate

Simple Requirements

Course Corequisite

Type
Corequisite

EDFN 211 or EDFN 211H

Enroll in the following Courses:

- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education

Course Prerequisites

Type
Prerequisite

Clearances

Submission of satisfactory FBI, Act 34/151 clearances for eligibility for field placement.

EDFN279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
EDFN	279	Undergraduate

Course Description
Experimental

EDFN300 - Co-Op Ed Experience in EDFN

Course Information

Course Title
Co-Op Ed Experience in EDFN

Subject code	Course Number	Academic Level
EDFN	300	Undergraduate

Course Description
Co-Op Ed Experience in EDFN

EDFN312 - Women in Education

Course Information

Course Title
Women in Education

Subject code	Course Number	Academic Level
EDFN	312	Undergraduate

Course Description
This course uses philosophical analysis and a sociology of knowledge approach to examine women's and girls' experiences with respect to educational institutions as they exist in contemporary America. These concerns are explored dialectically, examining not only how educational institutions and opportunities shape women, but also how the presence of women in educational activities alters the nature of that enterprise. Offered periodically. Prereq: COMM 100, ENGL 110, junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

EDFN312H - Women in Education

Course Information

Course Title
Women in Education

Subject code	Course Number	Academic Level
EDFN	312H	Undergraduate

Course Description
Hnrs:Women and Education

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

EDFN320 - Instructional Technology in Elementary Education

Course Information

Course Title
Instructional Technology in Elementary Education

Subject code	Course Number	Academic Level
EDFN	320	Undergraduate

Course Description
Students use case studies to explore the uses of technology and its application in elementary education. Topics include computer basics, applications software, curriculum integration, evaluation of educational software, telecommunications and multimedia presentation systems. Students are provided a series of hands-on experiences with hardware and software to develop the skills and competencies required of the elementary education teacher. Offered in fall, spring. No credit given if credit earned in EDFN 130, 220, 230, 330/530, 333/533 or EDAR 330/530.

EDFN320H - H:Instructional Technology in Elementary Education

Course Information

Course Title
H:Instructional Technology in Elementary Education

Subject code	Course Number	Academic Level
EDFN	320H	Undergraduate

Course Description
H:Instructnl Technol in ELED

EDFN330 - Instructional Technology, Design & Assessment

Course Information

Course Title
Instructional Technology, Design & Assessment

Subject code	Course Number	Academic Level
EDFN	330	Undergraduate

Course Description
Instructional design and assessment will be used as a basis for planning and evaluating the use of technology for student-centered teaching and learning within specific disciplines. Offered in fall, spring. Admission to advanced professional studies. No credit given if credit earned in EDFN 130, 220, 230, 320/520 or EDAR 330/530. Taken with professional bloc. Professional bloc field experience includes approximately 150 hours in schools.

EDFN336 - Assistive Technology & Online Learning

Course Information

Course Title
Assistive Technology & Online Learning

Subject code	Course Number	Academic Level
EDFN	336	Undergraduate

Course Description
Designed to provide pre-service special education teachers with experiences in the use of technology in teaching and online learning. This includes assistive technology by students with disabilities to become more independent, as well as the use of a variety of instructional technologies to encourage more active and effective learning. In addition, teacher candidates will learn various technological strategies and tools that can be used to provide different paths for student achievement and enhance student learning.

Gateway Stage Labels
Technological Competency (TC)

EDFN355 - Living Online

Course Information

Course Title
Living Online

Subject code	Course Number	Academic Level
EDFN	355	Undergraduate

Course Description
"All the world's a stage" famously open Act II of As You Like It, a Shakespearean comedy uniquely positioned to showcase the valleys and peaks of human experience. Interestingly, as the world's stages become increasingly technological and anonymous, how youth learn, think, and find voice has also shifted. Looking beyond the social posturing characteristic of today's "selfie generation," these contexts offer incredible insights about the nature of learning and identity development. This course will explore the work of social theorists, technology gurus, public policy makers, and youth participants who continue to grapple with ever-changing landscape of social media. Using major current events as a lens: #EgyptianRevolution #OccupyWallStreet #RapeCulture #AllLivesMatter #Islamphobia, this course explores social media as a culturally mediated/sustaining response and practice worldwide.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:

- ENGL 110 and COMM 100

EDFN376 - Whose School Is It?

Course Information

Course Title
Whose School Is It?

Subject code	Course Number	Academic Level
EDFN	376	Undergraduate

Course Description
Historical, political and legal investigation of American public schooling in the 19th and 20th centuries and of the issue of equal educational opportunity in regard to gender, class, race and ethnicity. Students should have completed a lower level history, historiography, political science or educational history course. Offered periodically. Prereq: COMM 100, ENGL 110, junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

EDFN376H - Hnrs:Whose School Is It?

Course Information

Course Title
Hnrs:Whose School Is It?

Subject code	Course Number	Academic Level
EDFN	376H	Undergraduate

Course Description
Honors Course - Historical, political and legal investigation of American public schooling in the 19th and 20th centuries and of the issue of equal educational opportunity in regard to gender, class, race and ethnicity. Students should have completed a lower level history, historiography, political science or educational history course. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

EDFN379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
EDFN	379	Undergraduate

Course Description
Experimental

EDFN386 - Topics:

Course Information

Course Title
Topics:

Subject code	Course Number	Academic Level
EDFN	386	Undergraduate

Course Description
Detailed investigation of a topic of current interest. Topic to be announced each time course is offered. Credit and meeting hours variable, depending on topic offered. May be taken more than once for credit as topic varies. Offered periodically.

EDFN387 - Topics:

Course Information

Course Title
Topics:

Subject code	Course Number	Academic Level
EDFN	387	Undergraduate

Course Description
Detailed investigation of a topic of current interest. Topic to be announced each time course is offered. Credit and meeting hours variable, depending on topic offered. May be taken more than once for credit as topic varies. Offered periodically.

EDFN388 - Topics:

Course Information

Course Title
Topics:

Subject code	Course Number	Academic Level
EDFN	388	Undergraduate

Course Description
Detailed investigation of a topic of current interest. Topic to be announced each time course is offered. Credit and meeting hours variable, depending on topic offered. May be taken more than once for credit as topic varies. Offered periodically.

EDFN398 - Urban Immersion Seminar

Course Information

Course Title
Urban Immersion Seminar

Subject code	Course Number	Academic Level
EDFN	398	Undergraduate

Course Description
Intensive living-learning experience based in an urban setting. On-site experience in urban schools and social service agencies is provided as well as service-learning experiences within the urban community. Professional development geared to developing the skills and knowledge base needed to work effectively in urban communities will be available. Course portfolio tailored to students area of interest/major is required. Offered in summer. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

EDFN399 - Culture & Education Seminar

Course Information

Course Title
Culture & Education Seminar

Subject code	Course Number	Academic Level
EDFN	399	Undergraduate

Course Description
Humans are divided into different groups based on religion, language, ability, beliefs, ethnicity, appearance, values, traditions and many other markers. Effective communication across these differences requires all humans, and teachers in particular, to develop skills that enable successful interaction and collaborate across boundaries. Culture can be understood, at least partially, as the background and preconceptions humans carry into any interpersonal situation. Since culture constitutes the keystone of identity, it is a key source of conflict between people, particularly in the teacher-student relationship. This seminar pairs discussions and readings about the nexus of culture, identity and education with immersion in different cultures, internationally, nationally and locally, to develop a deeper commitment in students to be effective teachers for all children across all differences. Prereq: EDFN 211 and 241

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

EDFN400 - Co-Op Ed Experience in EDFN

Course Information

Course Title
Co-Op Ed Experience in EDFN

Subject code	Course Number	Academic Level
EDFN	400	Undergraduate

Course Description
Co-Op Ed Experience in EDFN

EDFN489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
EDFN	489	Undergraduate

Course Description
Two to four semesters of supervised research by highly motivated students capable of conducting independent research projects. For further information, see the Special Academic Opportunities section.

EDFN498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
EDFN	498	Undergraduate

Course Description
For further information, see the Special Academic Opportunities section.

EDFN499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
EDFN	499	Undergraduate

Course Description
Two to four semesters of supervised research by highly motivated students capable of conducting independent research projects. For further information, see the Special Academic Opportunities section.

EDFN511 - Comparative Education

Course Information

Course Title
Comparative Education

Subject code	Course Number	Academic Level
EDFN	511	Graduate

Course Description
Analyze crucial educational questions and issues using the comparative method. Cross-cultural studies pursued in a multiple-disciplinary format will help participants discover how education serves economic, sociopolitical, ideological and other purposes, and how it reflects the historically derived tensions within national development. Factors underlying similarities and differences in various cultures, nations and contexts are studied. Includes appraisal of educational issues from a global perspective. Offered annually.

EDFN513 - Sexual Orientation, Gender Identity and Schooling

Course Information

Course Title
Sexual Orientation, Gender Identity and Schooling

Subject code	Course Number	Academic Level
EDFN	513	Graduate

Course Description
Students will study the history of sexual orientation and gender identity, the research on school climate related to sexual orientation and gender identity of students and professionals, knowledge of current laws and policies, and recommended practices for supporting LGBTQ+ youth and educators.

EDFN520 - Instructional Technology in Elem Ed

Course Information

Course Title
Instructional Technology in Elem Ed

Subject code	Course Number	Academic Level
EDFN	520	Graduate

Course Description
Students use case studies to explore the uses of technology and its application in elementary education. Topics include computer basics, applications software, curriculum integration, evaluation of educational software, telecommunication and multimedia presentation systems. Students are provided a series of hands-on experiences with hardware and software to develop the skills and competencies required of the elementary education teacher. Offered regularly. Students may not receive credit for both EDFN 520 and any of the following courses: EDFN 130, 320, 330, 333, 530, 533 and EDAR 330.

EDFN530 - Instructional Technology, Design and Assessment

Course Information

Course Title
Instructional Technology, Design and Assessment

Subject code	Course Number	Academic Level
EDFN	530	Graduate

Course Description
Instructional design and assessment will be used as a basis for planning and evaluating the use of technology for student-center teaching and learning within specific disciplines. Must be taken as a block with SEED 321 (or graduate equivalent) and the Teaching of Methods class required in each secondary certification program. Students may not receive credit for both EDFN 530 and any of the following courses: EDFN 130, 320, 330, 333, 520, 533 and EDAR 330.

EDFN545 - Advanced Educational Psychology

Course Information

Course Title
Advanced Educational Psychology

Subject code	Course Number	Academic Level
EDFN	545	Graduate

Course Description
A review of psychological principles as they relate to human learning in the urban and non-urban setting. Special consideration is given to motivational and developmental factors in the school that influence students learning. Additional topics include examination of assessment and evaluation practices, classroom management and accommodating individual differences.

EDFN586 - Topics in Education

Course Information

Course Title
Topics in Education

Subject code	Course Number	Academic Level
EDFN	586	Graduate

Course Description
Investigation and development of educational topics of current interest not normally covered in regular courses. Special topics and methods will vary according to the needs of students involved. Offered periodically.

EDFN587 - Topics in Education

Course Information

Course Title
Topics in Education

Subject code	Course Number	Academic Level
EDFN	587	Graduate

Course Description
Investigation and development of educational topics of current interest not normally covered in regular courses. Special topics and methods will vary according to the needs of students involved. Offered periodically.

EDFN589 - Topics in Education

Course Information

Course Title
Topics in Education

Subject code	Course Number	Academic Level
EDFN	589	Graduate

Course Description
Investigation and development of educational topics of current interest not normally covered in regular courses. Special topics and methods will vary according to the needs of students involved. Offered periodically.

EDFN590 - Social Foundation of Educ

Course Information

Course Title
Social Foundation of Educ

Subject code	Course Number	Academic Level
EDFN	590	Graduate

Course Description
An analysis of the K-12 school system of the U.S. philosophical and historical influences, significance of education in society, contemporary problems in schooling, challenges and requirements of the profession. Offered annually.

EDFN601 - Research Methods

Course Information

Course Title
Research Methods

Subject code	Course Number	Academic Level
EDFN	601	Graduate

Course Description
Introduces methods of empirical educational research. Emphasis on training individuals to be intelligent consumers of educational research. It is strongly recommended that the course be taken early in the students program.

EDFN603 - Philosophy of Education

Course Information

Course Title
Philosophy of Education

Subject code	Course Number	Academic Level
EDFN	603	Graduate

Course Description
An analysis of current and perennial education problems using the tools of the philosopher: logic, language analysis and inquiry, and phenomenological description. Students articulate their own beliefs and assumptions about education as well as critically examine and evaluate selected texts. Offered annually.

EDFN604 - Education and Public Policy

Course Information

Course Title
Education and Public Policy

Subject code	Course Number	Academic Level
EDFN	604	Graduate

Course Description
An analysis of public policy development in the field of education. Major questions to explore include: (1) Who governs education? (2) What are the processes by which policies are formulated? (3) What values are reflected in specific present policy or proposed reform? (4) What do we know about reforming education? (5) How useful is social science research in the formulation of educational policy? Offered annually.

EDLD610 - Theory and Organizatnl Behavr

Course Information

Course Title
Theory and Organizatnl Behavr

Subject code	Course Number	Academic Level
EDLD	610	Graduate

Course Description
Examination of theories of leadership based on cooperation, empowerment and facilitation of change. The implications of leadership theories on administration in educational organizations. Attention given to organizational climate, conflict negotiation, decision making, communication, assumptions about power and change. Theory, research, practice and the influences of special-needs learners, race, class, gender and other social constructs will be integrated into the course. Offered in fall.

EDLD614 - School Community Relations

Course Information

Course Title
School Community Relations

Subject code	Course Number	Academic Level
EDLD	614	Graduate

Course Description
Examination of the political, social and economic factors which influence the school's relationship with various community agencies and constituencies. Developing administrative sensitivity to community needs and effective articulation of the schools programs to the various communities. Offered annually.

EDLD620 - School Law and Public Policy

Course Information

Course Title
School Law and Public Policy

Subject code	Course Number	Academic Level
EDLD	620	Graduate

Course Description
An overview of American public elementary and secondary school law in the context of public policy. Examines federal and state constitutional, statutory and common law decisions that impact on the substantive or procedural rights of students, teachers and other school personnel. Emphasis on issues of equity and equality, and First Amendment issues. Makes use of 1) an interactive, empowering pedagogy, 2) case studies addressing race, class, gender and religious diversity, and 3) alternative assessment strategies.

EDLD667 - Leadership Seminar 1

Course Information

Course Title
Leadership Seminar 1

Subject code	Course Number	Academic Level
EDLD	667	Graduate

Course Description
The first in a series of three one-credit seminars on the emergent issues and PDE competencies surrounding special education and English language learners for principal candidates, the over representation of diverse students in special education, prevention and early-intervention strategies for students with disabilities. Offered in spring.

EDLD668 - Leadership Seminar 2

Course Information

Course Title
Leadership Seminar 2

Subject code	Course Number	Academic Level
EDLD	668	Graduate

Course Description
The second in a series of three one-credit seminars on the emergent issues and PDE competencies surrounding special education and English language learners for principal candidates, including early intervention and effective instructional strategies for students with disabilities in inclusive settings. Prereq: EDLD 667. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDLD 667

Complete ALL of the following Courses:
- EDLD667 - Leadership Seminar 1

EDLD669 - Leadership Seminar 3

Course Information

Course Title
Leadership Seminar 3

Subject code	Course Number	Academic Level
EDLD	669	Graduate

Course Description
The third in a series of three one-credit seminars on the integration of a mini-portfolio on emergent issues and PDE competencies surrounding special education and English language learners into the comprehensive program portfolio based on national standards. Prereq: EDLD 668. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDLD 668

Complete ALL of the following Courses:
- EDLD668 - Leadership Seminar 2

EDLD681 - Supporting Inclusion as a Current School Leader 1

Course Information

Course Title
Supporting Inclusion as a Current School Leader 1

Subject code	Course Number	Academic Level
EDLD	681	Graduate

Course Description
This course is designed to provide targeted professional development for current and aspiring school administrators who seek to understand their role as the school leader in the IEP process and related components in meeting the needs of all learners. Emphasis is given to culturally responsive practices and inclusive strategies for achieving high levels of student growth. Must be a current school administrator to enroll.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Current School Administrators Only

Must be a current school administrator to enroll.

EDLD721 - Strat Lead in Dist Gov & Comm

Course Information

Course Title
Strat Lead in Dist Gov & Comm

Subject code	Course Number	Academic Level
EDLD	721	Graduate

Course Description
Provides an initial exploration and exposure to leadership roles at the district setting and should be taken as part of a candidate's practicum experiences at the end of the program of study. Candidates expected to log a minimum of 90 hours of total practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for basic leadership activities as assigned by mentor and conducting a case study on leadership concepts. Candidate will participate in three leadership seminars which focus on leadership foundations and best practices as articulated by current leaders in the field and a basic action research activity. Candidate will also begin to explore the role of the superintendent as an agent of change and/or reform.

EDLD723 - Negotn & Persnl Strat Dec Makn

Course Information

Course Title
Negotn & Persnl Strat Dec Makn

Subject code	Course Number	Academic Level
EDLD	723	Graduate

Course Description
Designed to prepare school leaders for leadership in the area of human resources in public schools. Includes a comprehensive review of the personnel function from the perspective of district central office administration and the theories and best practices in staff recruitment, selection, assignment, orientation, evaluation, professional development, reduction in force and other relevant current issues. Explores negotiations concepts, strategies, regulations and the other legal considerations within the commonwealth of Pennsylvania. Core field experiences, from the basis of the exploration and development of critical skills necessary to be successful, in the areas covered within the course to include the integration of institutional standards as they apply to all topics.

EDLD724 - Eth & Leg Dec-mak at Dist Lvl

Course Information

Course Title
Eth & Leg Dec-mak at Dist Lvl

Subject code	Course Number	Academic Level
EDLD	724	Graduate

Course Description
Designed for preparing executive leadership positions in public education. Students expected to have background in public school law and some experiences in leading public schools at either the building and/or district levels. Focuses on a review of key areas of school law with advanced study in the level areas which are currently challenging school and district leaders. State laws affecting public education will be studied in detail along with issues dealing with student rights, the role of the school board, laws specific to the roles of school leaders, parent and community issues, emerging special education challenges and laws dealing with business and finance.

EDLD725 - Impct Fac & Plnt Mgmt Schl Eff

Course Information

Course Title
Impct Fac & Plnt Mgmt Schl Eff

Subject code	Course Number	Academic Level
EDLD	725	Graduate

Course Description
Designed for students in the Superintendent's Letter of Eligibility Program and for practicing educational administrators who want to update skills in educational facilities and plant management. Related educational program to facilities planning and development; provides an opportunity for students to interact with professional from a variety of disciplines related to planning and development of educational facilities, relates local planning to Pennsylvania Department of Education requirements and regulations; and provides field-based work in contemporary facility planning, development and maintenance.

EDLD726 - Opt Fin Res Supp Dist Lvl Achv

Course Information

Course Title
Opt Fin Res Supp Dist Lvl Achv

Subject code	Course Number	Academic Level
EDLD	726	Graduate

Course Description
Project driven course focuses on the changing perception of finance in the American public schools (K-12). Assists in creating a platform of beliefs about school finance, budgeting and the role of the superintendent by helping them understand key issues from a historical perspective, as well as current thinking on what it should become. Emphasis on approaches to developing, evaluating and articulating financial planning strategies to staff, the public and the school board that inform decisions about student achievement. Also discusses the relationship between school boards and superintendents specific to budget development and strategies for enhancing the relationship.

EDLD727 - Inst & Tech Ldrshp at Exec Lvl

Course Information

Course Title
Inst & Tech Ldrshp at Exec Lvl

Subject code	Course Number	Academic Level
EDLD	727	Graduate

Course Description
Provides an advanced exploration and exposure to leadership roles at the district setting and should be taken as part of a candidate's practicum experiences at the end of program of study. Candidates expected to log 180 hours of practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for instructional leadership activities as assigned by mentor and conducting a case study on instructional leadership concepts. In addition, the candidate will participate in three leadership seminars which will focus on instructional leadership foundations and best practices as articulated by current leaders in the field. Candidate will also begin to explore the role of superintendent as an agent of change and/or reform.

EDLD798 - Applied Supervision

Course Information

Course Title
Applied Supervision

Subject code	Course Number	Academic Level
EDLD	798	Graduate

Course Description
Internship in which the candidate must conduct six cycles of clinical supervision: one at the elementary, middle and high school levels, and observes each teacher twice.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDSU700 and EDSU701 and EDSU703

Complete ALL of the following Courses:

- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision

EDLD799 - Applied Practicum

Course Information

Course Title
Applied Practicum

Subject code	Course Number	Academic Level
EDLD	799	Graduate

Course Description
Internship is a performance-based, on-site field experience on administrative best practices. Emphasis is on curriculum development, professional growth plans, organizational and financial management, school-community engagement and administrative responsibilities.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDSU700 and EDSU701 and EDSU703

Complete ALL of the following Courses:

- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision

EDLD808 - Qual Methods in Ed Ldshp

Course Information

Course Title
Qual Methods in Ed Ldshp

Subject code	Course Number	Academic Level
EDLD	808	Graduate

Course Description
This course is designed to prepare school leaders for leadership positions in public education. It intends to help postgraduate students in defining an appropriate mode of qualitative inquiry related to a chosen topic of study. The course has been constructed to guide students through a range of issues and considerations, which should inform their general approach to qualitative research. It will give students a general understanding of postgraduate and professional qualitative research, its methodologies, its challenges and its organization. Students will be introduced to a range of research tools and will be equipped to plan and organize their research, as well as to communicate their findings with academic, school district and community audiences.

EDLD820 - Intro to Research in Ed Leadrs

Course Information

Course Title
Intro to Research in Ed Leadrs

Subject code	Course Number	Academic Level
EDLD	820	Graduate

Course Description
This course will provide an introduction to educational research - qualitative, quantitative, and mixed method designs. The primary purpose of the course is to develop the skills and disposition needed to be a critical consumer of educational research. Students will learn the key characteristics, strengths and limitations of various research designs. Students will learn to critique the research methodologies employed by various studies and to synthesize the findings of multiple studies on a specific educational topic/problem.

EDLD822 - Comm Theory for District Admin

Course Information

Course Title
Comm Theory for District Admin

Subject code	Course Number	Academic Level
EDLD	822	Graduate

Course Description
This course is concerned with communication processes within an organization. It focuses on the sending, the receiving and the interpretation of messages. Principles of downward, upward and lateral systems are investigated. Case studies, specific to traditionally under-served and marginalized populations, including but not limited to those living in poverty, students learning English as another language, and students with disabilities are employed to illustrate typical problems that arise and the methodologies devised for successful resolutions to achieve effective communication. Designed for students to learn how to represent a school district to all internal and external constituents, including the wider community.

EDLD828 - Emernt Tech & Instruc Practice

Course Information

Course Title
Emernt Tech & Instruc Practice

Subject code	Course Number	Academic Level
EDLD	828	Graduate

Course Description
Designed to provide future school and district administrators with the requisite skill sets and conceptual knowledge needed for effective 21st century leadership. Understanding technology as a tool for learning, managing, analyzing, communicating and collaborating is integral to successful school leadership at the classroom, building and central office levels. Topics explored include technology integration, digital citizenship, use of technology in systematic organizational improvement, professional growth, digital culture and visionary leadership. In addition to developing personal philosophies regarding use of technology in teaching, learning, and leading, each student will develop a personal portfolio of resources.

EDLD829 - Pol/Soc Cont for Ed Leadership

Course Information

Course Title
Pol/Soc Cont for Ed Leadership

Subject code	Course Number	Academic Level
EDLD	829	Graduate

Course Description
Examines the theories of leadership and organization and their applications to administrative practices. Sociological, psychological and organizational models will be described and analyzed to gain insight into administrative practices and processes such as decision making, group motivation, goal setting, delegating, conflict resolution and site-based management. Extensive research of current practices including but not limited to including programming for those living in poverty, students learning English as another language, and students with disabilities is required. Course designed to target current issues and problematic situations facing the central office administrator in today's dynamic system of public education.

EDLD830 - Quan Research Mthd in Ed Ldrsh

Course Information

Course Title
Quan Research Mthd in Ed Ldrsh

Subject code	Course Number	Academic Level
EDLD	830	Graduate

Course Description
This course is designed to prepare school leaders for leadership positions in public education. It intends to help postgraduate students in defining an appropriate mode of quantitative inquiry related to a chosen topic of study. The course has been constructed to guide students through a range of issues and considerations, which should inform their general approach to quantitative research. It will give students a general understanding of postgraduate and professional quantitative research, its methodologies, its challenges and its organization. Students will be introduced to a range of research tools and will be equipped to plan and organize their research, as well as to communicate their findings with academic, school district and community audiences.

EDLD831 - Educational Statistics

Course Information

Course Title
Educational Statistics

Subject code	Course Number	Academic Level
EDLD	831	Graduate

Course Description
Designed to enable the student to interpret the scientific literature in education and psychology and to make the computations involved in the use of tests and original investigations that require statistical technique. Measure of central tendency, variability and correlations are included as are knowledge of and evaluation of effect size research related to instructional practices, leadership practices, and educational policy.

EDLD832 - Intro to Executive Leadership

Course Information

Course Title
Intro to Executive Leadership

Subject code	Course Number	Academic Level
EDLD	832	Graduate

Course Description
Introductory study of the organization and administration of American public education for persons interested in pursuing a professional career in educational administration. Students will examine theories of leadership based on cooperation, empowerment and fucilitation of change. A basic understanding of educational leadership is developed through integration oftheory, knowledge and actual practice. Focusing on the multi-fuceted roles of school/district leaders, students will study the role of an executive leader through the lens of the executive leader as a learner, mentor, instructional leader, supervisor, manager, politician, advocate and innovator. Combining theory with practice, students will obtain a deeper understanding ofthe complexity ofleadership within traditional and non-traditional school and district settings, including but not limited to urban and multilingual schools and/or blended and online learning environments.

EDLD851 - Advanced Level Leadership

Course Information

Course Title
Advanced Level Leadership

Subject code	Course Number	Academic Level
EDLD	851	Graduate

Course Description
EDLD 851: Advanced Level Leadership (3 credits) No pre or co requisites
In this course, students will collaboratively lead, design, and implement a district mission, vision, and process for continuous improvement that reflects a core set of values and priorities that include data use, technology, values, equity, diversity, digital citizenship, and community. They will work collaboratively to demonstrate the capacity to advocate for ethical decisions and cultivate professional norms and culture. These aspects will be further examined through various leadership theories along with a focus to poverty and technology (in alignment with existing MU leadership foci). This course includes 60 required internship hours.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MEd Required

Students must hold MEd.

EDLD852 - Resource Leadership

Course Information

Course Title
Resource Leadership

Subject code	Course Number	Academic Level
EDLD	852	Graduate

Course Description
EDLD 852: Resource Leadership (3 credits) No pre or co requisites
In this course, students will develop, monitor, evaluate, and manage data-informed and equitable district systems for operations, resources, technology, and human capital management. These aspects will be further examined through various leadership theories along with a focus to poverty and technology (in alignment with existing MU leadership foci). This course includes 60 required internship hours.

Simple Requirements

Additional Requirements

Type
Prerequisite

MEd Required

Students must hold MEd.

EDLD853 - Governance

Course Information

Course Title
Governance

Subject code	Course Number	Academic Level
EDLD	853	Graduate

Course Description
EDLD 853: Governance (3 credits) No pre or co requisites
In this course, students will cultivate relationships, lead collaborative decision making and governance, and represent and advocate for district needs in broader policy conversations. These aspects will be further examined through various leadership theories along with a focus to poverty and technology (in alignment with existing MU leadership foci).

This course includes 60 required internship hours.

Simple Requirements

Course Prerequisites

Type
Prerequisite

M.Ed or Equivalent

This course is part of a post-masters certificate in educational leadership. Students must hold an M.Ed. or equivalent to enroll in course.

EDLD854 - Leadership of Instruction and Learning

Course Information

Course Title
Leadership of Instruction and Learning

Subject code	Course Number	Academic Level
EDLD	854	Graduate

Course Description
EDLD 854: Leadership of Instruction and Learning (3 credits) No pre or co requisites
In this course, students will evaluate, design, cultivate, and implement coherent systems of curriculum, instruction, data systems, supports, assessment, and instructional leadership. These aspects will be further examined through Follett/Drucker leadership theory along with a focus to poverty and technology (in alignment with existing MU leadership foci).This course includes 60 required internship hours.

Simple Requirements

Course Prerequisites

Type
Prerequisite

M.Ed or Equivalent

This course is part of a post-masters certificate in educational leadership. Students must hold an M.Ed. or equivalent to enroll in course.

EDLD855 - Leadership for Equity and Inclusion

Course Information

Course Title
Leadership for Equity and Inclusion

Subject code	Course Number	Academic Level
EDLD	855	Graduate

Course Description
In this course, students will develop and maintain a supportive, equitable, culturally responsive, and inclusive district culture to engage families, communities, and other constituents in the work of schools and the district and to advocate for district, student, and community needs. These aspects will be further examined through various leadership theories along with a focus to poverty and technology (in alignment with existing MU leadership foci). This course includes 60 required internship hours. No pre or co requisites.

Simple Requirements

Course Prerequisites

Type
Prerequisite

M.Ed or Equivalent

This course is part of a post-masters certificate in educational leadership. Students must hold an M.Ed. or equivalent to enroll in course.

EDLD856 - ELPP 856: Facilities and Technology Leadership (3 credits) No pre or co requisites

Course Information

Course Title
ELPP 856: Facilities and Technology Leadership (3 credits) No pre or co requisites

Subject code	Course Number	Academic Level
EDLD	856	Graduate

Course Description
EDLD 856: Facilities and Technology Leadership (3 credits) No pre or co requisites
In this course, students will develop, monitor, evaluate, and manage data-informed and equitable district systems for operations, resources, technology, and human capital management. These aspects will be further examined through Follett/Drucker leadership theory along with a focus to poverty and technology (in alignment with existing MU leadership foci). This course includes 60 required internship hours.

Requisites
This course is part of a post-master's certificate in educational leadership. Students must hold M.Ed. or equivalent to enroll in course.

EDLD890 - Research in Edu Ldshp Part 1

Course Information

Course Title
Research in Edu Ldshp Part 1

Subject code	Course Number	Academic Level
EDLD	890	Graduate

Course Description
The purpose of the course is to help students identify potential dissertation topics in the field of education leadership such that when they pass their comprehensive examiniations they are prepared for dissertation seminar activities that support the development of their dissertation proposals. This course will bring together a group of students and faculty members periodically throughout the program to examine possible areas of research in the field of executive leadership in concert with the program themes of poverty and digital learning. Students will explore their ideas, background and potential methodologies with a collegial faculty and candidate group, address questions about the viability of possible research ideas and be introduced to a variety of sources that may help them refine their ideas or locate alternative areas of exploration based on their interests.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDLD832 and EDLD820

Complete ALL of the following Courses:

- EDLD832 - Intro to Executive Leadership
- EDLD820 - Intro to Research in Ed Leadrs

EDLD891 - Research in Edu Ldshp Part 2

Course Information

Course Title
Research in Edu Ldshp Part 2

Subject code	Course Number	Academic Level
EDLD	891	Graduate

Course Description
The purpose of the course is to help students identify potential dissertation topics in the field of education leadership such that when they pass their comprehensive examiniations they are prepared for dissertation seminar activities that support the development of their dissertation proposals. This course will bring together a group of students and faculty members periodically throughout the program to examine possible areas of research in the field of executive leadership in concert with the program themes of poverty and digital learning. Students will explore their ideas, background and potential methodologies with a collegial faculty and candidate group, address questions about the viability of possible research ideas and be introduced to a variety of sources that may help them refine their ideas or locate alternative areas of exploration based on their interests.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDLD832 and EDLD820 and EDLD890

Complete ALL of the following Courses:

- EDLD832 - Intro to Executive Leadership
- EDLD820 - Intro to Research in Ed Leadrs
- EDLD890 - Research in Edu Ldshp Part 1

EDLD898 - Dissertation I - EL

Course Information

Course Title
Dissertation I - EL

Subject code	Course Number	Academic Level
EDLD	898	Graduate

Course Description
Working with an assigned dissertation advisor, each candidate formally begins the dissertation process. This includes a) finalizing a dissertation proposal describing the theoretical framework and antecedent literature, b) defending the written proposal in an oral examination before his/her Dissertation Committee, c) beginning dissertation activities as described in the proposal.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDLD897

Complete ALL of the following Courses:
- EDLD897 - Dissertation Seminar (Inactive)

EDLD899 - Dissertation II - EL

Course Information

Course Title
Dissertation II - EL

Subject code	Course Number	Academic Level
EDLD	899	Graduate

Course Description
This course is a continuation of EDLD 898: Dissertation I. Working with the assigned dissertation advisor from EDLD 898 each candidate moves fully into the execution stage of the research as set forth in the dissertation proposal. following the conclusion of the data collection stage the candidate refines the initial chapters of the dissertation and develops the presentation of the data to include the summaries, discussion, implications and recommendations for future research. finally, the candidate presents the findings in a defense of the dissertation before the Dissertation Committee.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDLD898

Complete ALL of the following Courses:
- EDLD898 - Dissertation I - EL

EDSU700 - Functions Supervision

Course Information

Course Title
Functions Supervision

Subject code	Course Number	Academic Level
EDSU	700	Graduate

Course Description
Interpersonal processing, data gathering in analysis of classroom teaching, simulation, microteaching, staff development, in-service program development and staff selection. Offered annually.

EDSU701 - Administrative Supervision

Course Information

Course Title
Administrative Supervision

Subject code	Course Number	Academic Level
EDSU	701	Graduate

Course Description
Administrative theory, budget development and school finance, certification, teachers and students rights and responsibilities, school law, tenure, collective bargaining. Offered annually.

EDSU703 - Curriculum and Supervision

Course Information

Course Title
Curriculum and Supervision

Subject code	Course Number	Academic Level
EDSU	703	Graduate

Course Description
Describe and analyze a curriculum plan, formulate a set of criteria for evaluating a curriculum plan, study roles of various persons in curriculum planning. Identify and evaluate characteristics, features and trends of education programs on levels K-12. Offered annually.

EDSU798 - Administrative Supervision

Course Information

Course Title
Administrative Supervision

Subject code	Course Number	Academic Level
EDSU	798	Graduate

Course Description
Internship in which the candidate must conduct two cycles of clinical supervision with each of three
teachers: one at the elementary school, one at the middle school and one at the high school.

Simple Requirements

Prerequisite

Type
Prerequisite

EDSU 700

Complete ALL of the following :
These :

No selection provided

EDSU799 - Applied Practicum

Course Information

Course Title
Applied Practicum

Subject code	Course Number	Academic Level
EDSU	799	Graduate

Course Description
Internship is a performance-based, on-site field experience on administrative best practices. Emphasis is on curriculum development, professional growth plans, organizational and financial management, school-community engagement and administrative responsibilities.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDSU700 and EDSU701 and EDSU703

Complete ALL of the following Courses:

- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision

FYEX100AE - First Year Experience: STEM Foundations Experiential Learning at the Lancaster Science Factory

Course Information

Course Title
First Year Experience: STEM Foundations Experiential Learning at the Lancaster Science Factory

Subject code	Course Number	Academic Level
FYEX	100AE	Undergraduate

Course Description
This seminar provides first-year students with a hands-on, immersive experience in STEM education through direct engagement with the Lancaster Science Factory. Students will design and facilitate inquiry-based STEM activities for diverse community audiences, cultivating STEM identity, teaching identity, and communication skills. Emphasizing real-world application of STEM concepts, the course also integrates transition-to-college topics and Millersville's EPPIIC values of exploration, professionalism, public mission, inclusion, integrity, and compassion. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

SEED179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SEED	179	Undergraduate

Course Description
Experimental

SEED279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SEED	279	Undergraduate

Course Description
Experimental

SEED300 - Co-Op Ed Experience in EDFN

Course Information

Course Title
Co-Op Ed Experience in EDFN

Subject code	Course Number	Academic Level
SEED	300	Undergraduate

Course Description
Co-Op Ed Experience in EDFN

SEED321 - Issues in Secondary Education

Course Information

Course Title
Issues in Secondary Education

Subject code	Course Number	Academic Level
SEED	321	Undergraduate

Course Description
Examines the role of the secondary teacher, issues encountered in the classroom and classroom interactions. Includes field experiences. Offered in fall, spring. Prereq: EDFN 211, 241. Admission to advanced professional studies. Must be taken simultaneously with professional bloc. Professional bloc field experience includes approximately 150 hours in schools.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

Must be taken simultaneously with professional bloc. Professional bloc field experience includes approximately 150 hours in schools.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

SEED321H - H: Issues in Secondary Education

Course Information

Course Title
H: Issues in Secondary Education

Subject code	Course Number	Academic Level
SEED	321H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching

Must be taken simultaneously with professional bloc. Professional bloc field experience includes approximately 150 hours in schools.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

SEED340 - Content Area Literacy for Diverse Classrooms

Course Information

Course Title
Content Area Literacy for Diverse Classrooms

Subject code	Course Number	Academic Level
SEED	340	Undergraduate

Course Description
Students are offered opportunities to explore research-based strategies for effectively teaching in inclusive multilingual settings. Instructional best practices will be presented as they relate to differentiating instruction for the plethora of diverse needs in modern-day classrooms. There will be a strong focus on exploring and reflecting on methods that are aimed at helping students gain proficiency in reading and writing as a means of accessing and interacting with the curriculum. Assessment will be explored, as it offers critical insights for informed and targeted decision-making. Admission to advanced professional studies. Taken with professional bloc. Professional bloc field experience includes approximately 150 hours in schools.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

SEED379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SEED	379	Undergraduate

Course Description
Experimental

SEED400 - Co-Op Ed Experience in EDFN

Course Information

Course Title
Co-Op Ed Experience in EDFN

Subject code	Course Number	Academic Level
SEED	400	Undergraduate

Course Description
Co-Op Ed Experience in EDFN

SEED433 - Teaching of Secondary Social Studies

Course Information

Course Title
Teaching of Secondary Social Studies

Subject code	Course Number	Academic Level
SEED	433	Undergraduate

Course Description
Consideration of the goals of social studies in secondary schools; materials, instructional methods and strategies; recent developments; and field experiences. Offered in fall, spring. Prereq: EDFN 211, 241. Admission to Advanced Professional Studies. Taken with professional bloc. Professional bloc field experience includes approximately 150 hours in schools.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

SEED435 - Teaching of Science in Secondary Schools

Course Information

Course Title
Teaching of Science in Secondary Schools

Subject code	Course Number	Academic Level
SEED	435	Undergraduate

Course Description
Current initiatives in science education; state standards in science/technology and environment/ecology, creativity, effective demonstrations, lab work and short/long-range planning. Opportunities for realistic teaching and field experiences. Offered only in fall. Prereq: EDFN 211, 241. Admission to Advanced Professional Studies. Taken with professional bloc. Professional bloc field experience includes approximately 150 hours in schools.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

SEED471 - Student Teaching Seminar

Course Information

Course Title
Student Teaching Seminar

Subject code	Course Number	Academic Level
SEED	471	Undergraduate

Course Description
This course, taken in conjunction with Student Teaching, is for all secondary content and preK-12 BSE and PK-12 Special Education programs. This course will provide teacher candidates with the ability to develop and apply their knowledge, skills, and dispositions in accommodating instruction for English Language Learners and students with disabilities. Candidates will design, implement, and assess intervention plans and differentiated instruction techniques according to established federal mandates and state standards. Candidates will demonstrate sensitivity and competence in adapting lesson plans, addressing literacy in content area courses, modifying assessments, helping students acquire academic language, contribute to multidisciplinary teams and co-teach.

Capstone Stage Label
Yes

SEED479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SEED	479	Undergraduate

Course Description
Experimental

SEED521 - Issues in Second Education

Course Information

Course Title
Issues in Second Education

Subject code	Course Number	Academic Level
SEED	521	Graduate

Course Description
Examines the role of the secondary teacher, issues encountered in the classroom and classroom interactions. Open only to post-baccalaureate students who are employed as full-time teachers but have not completed certification. Offfered in summer. Prereq: EDFN 211 or EDFN 590, and EDFN 241 or EDFN 545. Admission to advanced professional studies.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN 211 or EDFN 211H or EDFN 590 and EDFN 241 or EDFN 241H or EDFN 545 and

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
  OR EDFN590 - Social Foundation of Educ
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
  OR EDFN545 - Advanced Educational Psychology

Admission to Advanced Professional Studies (APS)

Requisite Condition Not Found

SEED540 - Cntnt Area Litrcy Divers Class

Course Information

Course Title
Cntnt Area Litrcy Divers Class

Subject code	Course Number	Academic Level
SEED	540	Graduate

Course Description
This course offers participants opportunities to explore research-based strategies for effectively teaching in inclusive multilingual settings. Instructional best practices will be presented as they relate to differentiating instruction for the plethora of diverse needs in modern day classrooms. There will be a strong focus on exploring and reflecting on methods that are aimed at helping students gain proficiency in reading and writing as a means of accessing and interacting with the curriculum. Assessment will be explored as it offers critical insights for informed and targeted decision-making.

SEED572 - Inquiry Inclusive Clasrm Instr

Course Information

Course Title
Inquiry Inclusive Clasrm Instr

Subject code	Course Number	Academic Level
SEED	572	Graduate

Course Description
This capstone course will provide candidates the opportunity to conduct practitioner research in order to more deeply understand the relationship between inclusive practices and student engagement and achievement. Candidates will create a research study on inclusive educational practice in their own classroom including a review of literature and the collection and analysis of classroom data. Candidates will demonstrate an awareness of the systems of power that lead to discrimination such as ableism within education. Candidates will demonstrate how the outcomes of practitioner inquiry have influenced their classroom practices.

English and World Languages Department

ENGLISH

The Department of English & World Languages is a vibrant interdisciplinary community of faculty and students dedicated to the study of language, literature, text and writing. We offer Bachelor of Arts (B.A.) and Bachelor of Science in Education (B.S.E.) degrees in English with concentrations available in ESL/Linguistics and Writing Studies. We also offer minors in Spanish and Japanese, as well as minors in English disciplines.

We educate graduate students whose refined research, analytical, and writing skills enable them to advance into doctoral programs or other professional endeavors. We offer two graduate degrees, the Master of Arts and the Masters of Education. In addition, the department provides curriculum that leads to Certification for students who wish to become teachers, but who do not have a degree in education or in English. We also offer a Graduate Certificate in Writing to hone advanced writing skills that enhance career trajectories.

LANGUAGE & CULTURE STUDIES

Millersville University's Post-Baccalaureate Certification Program is designed for those applicants who already have a bachelor's degree and would like to be certified to teach in the State of Pennsylvania. It is not necessary to complete a second degree in order to be certified.

FACULTY LIST
Antolin, Marco; Associate Professor College of Arts, Humanities and Social Sciences B.A., University of Valladolid (Spain), 1992; M.A., Ibid., 1999; Ph.D., Ibid., 2002
Baldys, Emily; Associate Professor College of Arts, Humanities and Social Sciences B.A., Bryn Mawr College, 2005; M.A., The Pennsylvania State University, 2009; Ph.D., Ibid., 2017
Corkery, Caleb; Professor College of Arts, Humanities and Social Sciences B.A., Carnegie Mellon University, 1985; M.F.A., Brooklyn College, 1994; M.A., University of Maryland, 1999; Ph.D., Ibid., 2004
Farkas, Kerrie; Professor College of Arts, Humanities and Social Sciences B.A., The College of New Jersey, 1992; M.A., Ibid., 1994; Ph.D., Kent State University, 2003
Jakubiak, Katarzyna; Associate Professor College of Arts, Humanities and Social Sciences M.A., Jagiellonian University (Poland), 1997; M.A., University of Northern Iowa, 1999; Ph.D., Illinois State University, 2006
Mando, Justin; Department Chairperson, Associate Professor College of Arts, Humanities and Social Sciences B.A., University of Vermont, 2004; M.A., Carnegie Mellon University, 2011; Ph.D. Ibid., 2016
Mayers, Timothy; Associate Professor College of Arts, Humanities and Social Sciences B.A., University of Scranton, 1988.; M.A., SUNY at Binghamton, 1990; Ph.D., University of Rhode Island, 1998
McCollum-Clark, Kim; Associate Professor College of Arts, Humanities and Social Sciences B.A., Guilford College, 1988; M.A., The Pennsylvania State University, 1992; Ph.D., Ibid., 1995
Ording, Dominic; Assistant Professor College of Arts, Humanities and Social Sciences B.A., Michigan State University, 1985; M.A., Ibid., 1989; M.A., Ibid., 1997; Ph.D., Ibid., 2003
Pfannenstiel, A Nicole; Associate Professor College of Arts, Humanities and Social Sciences B.S. & B.A., Northern Arizona University, 2003; M.A., Arizona State University (2008); Ph.D., Ibid., 2013
Rea, Joshua; Assistant Professor College of Arts, Humanities and Social Sciences B.A., University of Mount Union, 2012; M.A., University of Louisville, 2015; Ph.D., University of South Florida, 2020
Zhang, Yufeng; Associate Professor College of Arts, Humanities and Social Sciences B.A., Shanghai International Studies University (China), 1994; M.A., University of Toledo, 2001; Ph.D., Purdue University, 2006

Programs

English, Post-Baccalaureate Certification

Overview

For post-baccalaureate information please see the "Post-Bacc Teacher Certification" section of the Graduate Course Catalog.

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Course Requirements for APS

Complete at least 1 of the following:

Option 1. Foundations Graduate Level

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

Major in English, Post-Bacc Certification

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL237 - Literary Research and Analysis
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Intro to Film or History of Film (0-3 credits)

Complete at least 1 of the following courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL481 - History Of Film

AND

Early, Late and World Literature

Fulfill ALL of the following requirements:

Early Literature Course (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL235 - American Literary Tradition I

AND

Late Literature Course (3 credits)

Complete at least 1 of the following courses:

- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL234 - Later British Literature
- ENGL236 - American Literary Tradition II

AND

World Literature Course (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2

One World Literature Course is required. It may be shared with the Early or Late Literature requirement as appropriate.

AND

Modern Syntax (3 credits)

Complete ALL of the following Courses:

- ENGL321 - Modern Syntax

AND

New Dimensions to World Lit (3 credits)

Complete ALL of the following Courses:

- ENGL336 - New Dimensions to World Lit

AND

Shakespeare (3 credits)

Complete ALL of the following Courses:

- ENGL405 - Shakespeare
  OR ENGL405H - Hnrs:Shakespeare

AND

American Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL421 - Early American Literature
- ENGL422 - The American Renaissance
- ENGL423 - Development of the Amer Novel
- ENGL424 - Realism and Naturalism to 1920
- ENGL425 - Modern Amer Fiction, 1920-1945
- ENGL426 - Modern American Drama
- ENGL427 - Modern American Poetry
- ENGL428 - Contemporary Amer Lit: 1945-P
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945

AND

Teaching Reading & Literature to Young Adults (3 credits)

Complete ALL of the following Courses:

- ENGL486 - Teaching Reading & Literature to Young Adults

AND

Seminar in Teaching Writing (3 credits)

Complete ALL of the following Courses:

- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing

ENGL 486 and ENGL 487 must be taken before APS-Professional Bloc.

AND

Electives

Fulfill ALL of the following requirements:

English Perspectives Elective

Complete ALL of the following Course Sets:

- Any ENGL course(s) with Perspectives (P) attribute

AND

English Elective 400-Level

Complete ALL of the following Course Sets:

- Any 4-level ENGL course(s)

AND

English Electives (6 credits)

Earn at least 6 credits from the following:

- Any ENGL course(s)

Generally, non-ENGL courses do not count for certification, exceptions/ equivalents may be some Journalism, Film Studies or Comparative Lit

Professional Education - Certification (33 credits)

Type
Completion Requirement

Foundations Bloc (6 credits)

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/EDFN241 Psyc Foundation of Teaching and please register for both courses in the same block.

APS - Professional Bloc

Fulfill ALL of the following requirements:

Instructional Technology, Design & Assessment (3 credits)

Complete at least 1 of the following courses:

- EDFN530 - Instructional Technology, Design and Assessment
- EDFN330 - Instructional Technology, Design & Assessment

AND

Issues in Secondary Education (3 credits)

Complete at least 1 of the following courses:

- SEED521 - Issues in Second Education
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education

AND

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Required Courses

Complete ALL of the following Courses:

- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc, but prior to Student Teaching.

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Access the Student teaching Website

Student Teaching Semester (9 credits)

Complete ALL of the following Courses:

- ENED461 - Student Teaching in English
- ENED462 - Student Teaching in English

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

Spanish Post-Baccalaureate Certification

Overview

For post-baccalaureate information please see the "Post-Bacc Teacher Certification" section of the Graduate Course Catalog.

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Course Requirements for APS: Foundations Courses (6 credits)

Complete at least 1 of the following:

Option 1. Foundations Graduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Major in Spanish, Post-Bacc Certification

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:
- SPAN201 - Intermediate Spanish 1
- SPAN202 - Intermediate Spanish 2

AND

Spanish Literature (6 credits)

Complete at least 2 of the following courses:
- SPAN311 - Survey of Literature 1
- SPAN312 - Survey of Literature 2
- SPAN313 - Survey of Span American Lit 1
- SPAN314 - Srvy of Span-Amer Lit 2

AND

Comp/Oral Express I (3 credits)

Complete ALL of the following Courses:
- SPAN351 - Composition and Oral Expression 1

AND

Comp/Oral Express II (3 credits)

Complete ALL of the following Courses:
- SPAN352 - Composition and Oral Expression 2

AND

Spanish Linguistics (1-3 credits)

Earn a minimum grade of B- in the following:
- SPAN470 - Spanish Linguistics

OR SPAN409 - Applied Linguistics
OR SPAN509 - Applied Linguistics
OR SPAN462 - Evolution of Spanish Language
OR SPAN531 - Evolution of Spanish Language

AND

Spanish Literature Course

Complete at least 1 course in the following course sets:
- Any SPAN 411-433 course(s)
- Any SPAN 481-487 course(s)
- Any SPAN 581-587 course(s)

AND

Civilization Course (3 credits)

Complete at least 1 of the following courses:
- SPAN331 - Spanish Civilization 1
- SPAN332 - Spanish Civlizatn & Culture 2
- SPAN333 - Spanish Am Civilization 1
- SPAN334 - Spanish Amer Civilization 2

AND

Spanish Electives

Earn at least 9 credits from the following:
- Any SPAN course(s)

AND

Foreign Language Testing Requirement

Fulfill ALL of the following requirements:

Written Proficiency Interview (WPT)

ACTFL OPI/OPIc must be taken prior to admission to the CERTIF Program. An Intermediate High rating or higher on the written proficiency interview is required. See advisor for details.

AND

Oral Proficiency Interview (OPI)

ACTFL OPI/OPIc must be taken prior to admission to the CERTIF Program. An Advanced Low level or higher on the oral proficiency interview is recommended. An Intermediate High rating or higher is required. See advisor for details.

Req Related for Spanish, Post-Bacc Certification (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study

AND

Anthropology, History, Geography or Latino/a Studies (3 credits)

Complete at least 1 of the following courses:

- ANTH223 - People and Cultures Of Mediter
- GEOG343 - Latin America & the Caribbean
- HIST283 - Colonial Latin America
- HIST284 - Modern Latin America
- HIST401 - Cultural Interactions across the Atlantic World, 1450-1820
- LAAS201 - Introduction to Latino Studies

Professional Education - Certification (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/EDFN241 Psyc Foundation of Teaching and please register for both courses in the same block.

AND

APS - Professional Bloc

Fulfill ALL of the following requirements:

Instructional Technology, Design & Assessment (3 credits)

Complete at least 1 of the following courses:

- EDFN530 - Instructional Technology, Design and Assessment
- EDFN330 - Instructional Technology, Design & Assessment

AND

Issues in Secondary Education (3 credits)

Complete at least 1 of the following courses:

- SEED521 - Issues in Second Education
- SEED321 - Issues in Secondary

Education
OR SEED321H - H: Issues in Secondary Education

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Teaching of Foreign Languages (3 credits)

Complete ALL of the following Courses:

- FORL480 - Tchg For Lang in Sec School

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc and but prior to Student Teaching.

AND

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Access the Student teaching Website

AND

Student Teaching Semester (9 credits)

Complete ALL of the following Courses:

- EDFL461 - Student Teaching Forgn Lang
- EDFL462 - Student Teaching Forgn Lang

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

English, M.A.

Overview

The Master of Arts degree program in English is designed to strengthen professional skills for all fields and prepare students for continuing graduate study. The English M.A. enhances the student's intellectual and aesthetic life through the intense study of literature, writing studies, literary theory, film studies and linguistics. The Master of Arts degree program may be completed fully online.
Some face-to-face courses may be available.

Earning a Master of Arts degree in English at Millersville University can hone your writing skills, strengthen your analytic abilities and sharpen your investigation skills. Earning a Master of Arts degree can help you change careers or enhance your current career. The English M.A. cultivates curiosity, openness and creativity as mindset approaches to support you as you develop skills and content knowledge. These mindset values, along with the skills obtained throughout a master's degree, strengthen your impact in the workplace.

Admission Requirements

Admission to the program is open to those applicants who possess a baccalaureate degree from an accredited college with an undergraduate major in English, or by special permission. Applicants must submit supporting documents as required for general admission to a graduate program (see *Admission Requirements* section). Applicants must submit a sample of scholarly work (an 8-15-page critical or research paper recently prepared).

An admissions decision is based upon an evaluation of all application documents by the graduate program coordinator. If probational admission is granted, the graduate program coordinator will stipulate the conditions to be met by the applicant before full admission is granted (e.g., satisfactory completion of prescribed undergraduate courses or completion of a certain number of graduate English courses with a satisfactory GPA).

Degree Candidacy

Admission to degree candidacy requires successful completion of 9-18 s.h. of departmentally approved graduate coursework with an overall B average and satisfaction of the foreign language requirement. This coursework should include at least 9 s.h. at Millersville University. Students need to complete both ENGL 614, The Profession of English Studies and ENGL 651, Literary Criticism, to achieve degree candidacy. A student who accumulates a maximum of 21 s.h. of graduate coursework and whose grade average falls below a B will be dropped from the degree program.

Upon completion of 18 s.h. of graduate coursework, a student must apply and be admitted to degree candidacy, after which he/she should, in consultation with the graduate program coordinator, develop a program which lists the requirements needed to complete the degree program. Once a student has completed 18 credits of graduate coursework, they may not proceed with their program until they have been approved by the department for degree candidacy.

Curriculum

Simple Requirements

Major in English, MA

Type
Completion Requirement

Graduate Core

Fulfill ALL of the following requirements:

The Profession of English Studies (3 credits)

Complete ALL of the following Courses:

- ENGL614 - The Profession of English Studies

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- ENGL651 - Literary Criticism

AND

Seminar: Rhetoric/Composition (3 credits)

Complete ALL of the following Courses:

- WRIT672 - Sem: Rhetoric/Composition

AND

Literature Course (3 credits)

Complete ALL of the following Course Sets:

- Any ENGL 601-645 course(s)

Note: This requirement may not be satisfied with ENGL614 The Profession of Engl Studies.

AND

Writing Course

Complete at least 1 of the following:

Option 1

Complete at least 1 course in the following course sets:

- Any WRIT 670-675 course(s)
- Any WRIT 692-695 course(s)

OR

Option 2

Complete ALL of the following Courses:

- WRIT682 - Genres in Nonfiction Writing

English Focus (12 credits)

Earn at least 6 credits from the following:

- Any 5-level ENGL course(s)
- Any 6-level ENGL course(s)
- Any 5-level WRIT course(s)
- Any 6-level WRIT course(s)

Capstone Project

Complete at least 1 of the following:

Option 1. Thesis Option

Complete ALL of the following Courses:

- ENGL699 - Thesis:

OR

Option 2. Curriculum Option

Complete ALL of the following Courses:

- ENGL691 - Independent Studies

OR

Option 3. ENGL 680

Earn a minimum grade of C- in the following:

- ENGL680 - Digital Portfolio Workshop

Upon completion of the capstone project, the student will meet with a committee for an oral exam of the project. Options include: Traditional or Creative Thesis, Curriculum Artifact, or successful completion (B or better) of ENGL680 Digital Portfolio Workshop.

English, M.Ed.

Overview

The Master of Education degree in English is designed to prepare students for continuing graduate study in English or related fields and to develop in students a substantial understanding of the subject matter of English (language, literature and composition) and related educational theory (philosophy, psychology and research). These understandings are intended to lead toward increased competence in teaching and curriculum development.

Admission Requirements

Admission to the program is open to those applicants who possess a baccalaureate degree from an accredited college with an undergrad major in English, or by special permission. Applicants must submit a sample of scholarly work (an 8-15-page critical or research paper recently prepared).

After reviewing all application documents, the graduate program coordinator may recommend unqualified admission or probational admission. If the department recommends probational admission, the conditions shall be clearly stipulated (e.g., the successful completion of a designated course (or courses) either at the graduate or undergraduate level).

Students applying for admission to the M.Ed. degree must be aware that the M.Ed. degree does not confer teaching certification. Hence, students who do not already have English certification when they apply to this program may have to complete various undergraduate courses if they wish to receive that certification. Students with this degree are qualified to teach English at community colleges. The M.Ed. serves as a complement to secondary English teachers' professional development.

Degree Candidacy

Admission to degree candidacy requires successful completion of 12-15 s.h. of departmentally approved graduate coursework with an overall B average. This coursework should include at least 9 s.h. at Millersville University. Students need to complete ENGL614 The Profession of Engl Studies, The Professon of English Studies and the M.Ed. professional core in order to achieve degree candidacy. A student who accumulates a maximum of 21 s.h. of graduate coursework and whose grade average falls below a B will be dropped from the degree program.

Upon completion of 18 s.h. of graduate coursework, a student must apply and be admitted to degree candidacy, after which he/she should, in consultation with the graduate program coordinator, develop a program which lists the requirements needed to complete the degree program.

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Professional Core

Complete ALL of the following Courses:

- EDFN601 - Research Methods

Med Core Option (9 credits)

Complete at least 2 of the following:

Option 1. Psychological Core (3 credits)

Earn at least 3 credits from the following:

- PSYC540 - Applied Behavior Analysis in a MTSS
- PSYC526 - Advanced Adolescent Psychology
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Social Foundations Core (3 credits)

Earn at least 3 credits from the following:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education

OR

Option 3. Specialty Area Core (3 credits)

Earn at least 3 credits from the following:

- ACTE630 - Current Technology for Online Instruction
- EDTE690 - Integrtve Lrning Exprntl Strgy
- EDSU701 - Administrative Supervision
- EDLD610 - Theory and Organizatnl Behavr

- EDUC563 - Linguistic and Cultural Diversity in the Classroom

Major in English Education, MED

Type
Completion Requirement

English Core (15 credits)

Fulfill ALL of the following requirements:

Profession of English Studies (3 credits)

Complete ALL of the following Courses:
- ENGL614 - The Profession of English Studies

AND

Required Courses (3 credits)

Complete ALL of the following Courses:
- ENGL651 - Literary Criticism

AND

Seminar: Rhetoric/Composition (3 credits)

Complete ALL of the following Courses:
- WRIT672 - Sem: Rhetoric/Composition

English Electives (6 credits)

Earn at least 6 credits from the following:
- Any Graduate ENGL course(s)

6 credits of any Graduate level English courses (ENGL) except for English Education Courses

English Education

Complete at least 2 of the following:

Option 1

Complete ANY of the following Courses:
- ENGL660 - Tchg ESL Listening and Speakng
- ENGL664 - Teaching of Eng as Sec Lang
- ENGL666 - Semnr in Tchng Lit to Adolesc
- ENGL667 - Seminar in Eng Curriculum
- ENGL668 - Sem Eng Ed:
- ENGL670 - Film and Media in Sec Classrm
- WRIT672 - Sem: Rhetoric/Composition

OR

Option 2

Complete ANY of the following Course Sets:
- Any ENGL 692-695 course(s)

Courses may be from both options or from a single option.

Capstone Project - Digital Portfolio (3 credits)

Earn a minimum grade of B in the following:
- ENGL680 - Digital Portfolio Workshop

Additional Comments:
Students must take at least six courses that are offered either as graduate only or graduate mostly course level.

Graduate Writing Certificate

Overview

This is an 18-credit program of study designed for postgraduate students or community members seeking advanced coursework to better conceptualize and effectively compose diverse genres of writing, with particular attention to *professional writing*—business and technical communication, digital communication, grant writing, writing for publication in various venues, including portfolio preparation—and *creative writing*, or producing poetry, memoirs, various kinds of fiction, drama and screenplays. In addition, committed to the professionalization of writing pedagogy, this graduate certificate will offer advanced coursework in the *teaching of writing*. The Graduate Certificate in Writing can be completed as a stand-alone program for any interested student with a bachelor's degree from an accredited four-year college or university. The degree need *not* be in English. This certificate program can also provide a specialization for Millersville University graduate students seeking an M.A. or M.Ed. in English; its requirements complement the demands of both degrees.

Curriculum

Simple Requirements

Requirements

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Select 15 credits (5 courses) of advanced writing coursework from the sub-fields below (Professional, Teaching or Creative).

- Professional Writing Courses
- Teaching of Writing Courses
- Creative Writing Courses

AND

Capstone Writing Workshop (3 credits)

Complete ALL of the following Courses:

- ENGL680 - Digital Portfolio Workshop

Culture Studies Minor

Overview

This program is designed for students who want to start studying a new language in college. This minor can be completed in two to three years. Up to half of the required credits can be taken in a Study Abroad program. 9 credits must be completed in residence at Millersville University.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Culture Studies (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Language Requirements

The minor in Culture Studies requires declaration of a specific language, we offer Spanish and Japanese.

Required Courses:

- FORL 101 Elementary Language 1
- FORL 102 Elementary Language 2
- FORL 201 Intermediate Language 1
- FORL 202 Intermediate Language 2

- 6:9 Credits in Culture Electives at the 300 or 400 level. (Note: Humanities (HUMN) courses in the respective language subject may be counted as culture electives.)

Creative Writing & Publishing Minor

Overview

This minor provides students a focused path towards success as a creative writer by emphasizing the steps that effective writers take on their journey to publication. While similar to the Writing Studies minor, this option should be selected by students who primarily want to focus on their development as creative writers.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Creative Writing and Publishing (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- WRIT274 - The Craft of Writing
- WRIT317 - Editing for Publication
- WRIT471 - Creative Writing

AND

Electives (6 credits)

Complete at least 2 of the following courses:

- ART331 - Book Arts
- COMM327 - Media Writing: Fiction
- WRIT274 - The Craft of Writing
- WRIT318 - Web Writing
  OR WRIT318H - Hon: Web Writing
- WRIT466 - Special Topics in Writing
- WRIT471 - Creative Writing
- DESN244 - Typography 2
- ENTR201 - The Art of Entrepreneurship

A 200- and 300- or 400-level writing intensive literature course offered in the ENGL department may be used as an elective advisor must approve via exception to graduation requirements or department chair must add course to elective listing.

AND

Capstone Course (3 credits)

Earn at least 3 credits from the following:

- ENGL300 - English Internship
- ENGL499 - Departmental Honors

American Literature Minor

Overview

A minor in American Literature gives you the opportunity to explore early, modern and contemporary American literature, the American Renaissance, realism, naturalism, American authors and more. While studying literature, you will also be introduced to literary theories and the development of languages. This minor is housed within the English and World Languages department, and is available to both English and non-English majors.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in American Literature (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ENGL237 - Literary Research and Analysis
- ENGL235 - American Literary Tradition I

AND

Later American Literature (3 credits)

Complete ALL of the following Courses:

- ENGL236 - American Literary Tradition II

AND

English Electives in American Literature (9 credits)

Complete at least 3 of the following courses:

- ENGL421 - Early American Literature
- ENGL422 - The American Renaissance
- ENGL423 - Development of the Amer Novel
- ENGL424 - Realism and Naturalism to 1920
- ENGL425 - Modern Amer Fiction, 1920-1945
- ENGL426 - Modern American Drama
- ENGL427 - Modern American Poetry
- ENGL428 - Contemporary Amer Lit: 1945-P
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL331 - Special Topics in Literature

ENGL331 Special Topics in Literature may be included when the primary focus is American Literature. This includes the following topics:

- Afro-Amer Lit
- Am Ethnic Lit
- Am Landscape
- Amer Wmn Wrtrs
- Ethnic Lit
- Lit of 1890'S America
- Special Topics:Amer Womn Wrtr

British Literature Minor

Overview

A minor in British Literature allows students to explore the evolution of British literature, facilitates a well-rounded study of various texts and encourages students to gain a global perspective. A minor in British Literature offers a focus for your study and a specialization to your growing expertise in your chosen major.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in British Literature (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL237 - Literary Research and Analysis
- ENGL405 - Shakespeare
  OR ENGL405H - Hnrs:Shakespeare

AND

English Electives in British Literature (6 credits)

Complete at least 2 of the following courses:

- ENGL403 - Chaucer
- ENGL404 - The English Renaissance
- ENGL406 - 17th Cen Lit Prior Restoration
- ENGL411 - Romantic Literature
- ENGL412 - Victorian Literature: Madwomen & Decadent Men
- ENGL413 - British Literature Since 1914
- ENGL414 - The British Novel
- ENGL415 - Seminar of British Writers

ENGL331 Special Topics in Literature and HUMN 401 may be included when the primary focus is British Literature.

English Minor

Overview

This minor with its humanistic focus gives students of all disciplines a background in linguistics, literature, rhetoric, and writing. One of the major aims of the program is to assist students in communicating effectively in any choice of profession or vocation.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in General English (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Language/Linguistics (3 credits)

Complete at least 1 of the following courses:

- ENGL220 - Introduction to Language Study
- ENGL221 - Intro to Linguistic Analysis
  OR ENGL221H - Hon: Intro to Linguistic Analysis
- ENGL321 - Modern Syntax
- ENGL322 - History of English
  OR ENGL322H - Hon: History of English

- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature
- ENGL462 - Dialects of American English
  OR ENGL462H - Hnrs:Dialects of American English
- ENGL363 - Applied Linguistics
  OR ENGL363H - H:Applied Linguistics
- ENGL364 - Teaching English as a Second Language
- ENGL465 - Special Topics in Lang: Sem

Choose one WRIT course

AND

Writing (3 credits)

Complete at least 1 course in the following course sets:

- Any WRIT course(s)

AND

Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL237 - Literary Research and Analysis
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL331 - Special Topics in Literature
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL337 - Women Writers in Middle Ages
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature
- ENGL403 - Chaucer
- ENGL404 - The English Renaissance
- ENGL405 - Shakespeare
  OR ENGL405H - Hnrs:Shakespeare
- ENGL406 - 17th Cen Lit Prior Restoration
- ENGL407 - Milton
  OR ENGL407H - Hnrs:Milton
- ENGL411 - Romantic Literature
- ENGL412 - Victorian Literature: Madwomen & Decadent Men
- ENGL413 - British Literature Since 1914
- ENGL414 - The British Novel
- ENGL415 - Seminar of British Writers
- ENGL416 - The Woman Writer
- ENGL421 - Early American Literature
- ENGL422 - The American Renaissance
- ENGL423 - Development of the Amer Novel
- ENGL424 - Realism and Naturalism to 1920
- ENGL425 - Modern Amer Fiction, 1920-1945
- ENGL426 - Modern American Drama
- ENGL427 - Modern American Poetry
- ENGL428 - Contemporary Amer Lit: 1945-P
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945
- ENGL431 - Comparative Literature
  OR ENGL431H - Hnrs: Comparative Literature
- ENGL441 - Poetry
  OR ENGL441H - Hnrs:Poetry
- ENGL442 - Drama
- ENGL343 - Fiction Seminar
- ENGL445 - Short Story:Hist,Devel,Genres
  OR ENGL445H - Hnrs: Short Story:Hist,Devel,Genres
- ENGL451 - Literary Criticism

AND

English Electives (9 credits)

Complete at least 3 of the following courses:

- ENGL220 - Introduction to Language Study
- ENGL221 - Intro to Linguistic Analysis
  OR ENGL221H - Hon: Intro to Linguistic Analysis
- ENGL321 - Modern Syntax
- ENGL322 - History of English
  OR ENGL322H - Hon: History of English
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature
- ENGL462 - Dialects of American English
  OR ENGL462H - Hnrs:Dialects of American English
- ENGL363 - Applied Linguistics
  OR ENGL363H - H:Applied Linguistics
- ENGL364 - Teaching English as a Second Language
- ENGL465 - Special Topics in Lang: Sem
- WRIT272 - Introduction to Writing Studies
- WRIT311 - Writing in Contexts
- WRIT312 - Technical Writing
- JOUR313 - Fundamentals of Journalism
- WRIT316 - Business Writing
- WRIT471 - Creative Writing
- WRIT472 - Digital Portfolio
- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL237 - Literary Research and Analysis
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL331 - Special Topics in Literature
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL337 - Women Writers in Middle Ages
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature
- ENGL403 - Chaucer
- ENGL404 - The English Renaissance
- ENGL405 - Shakespeare
  OR ENGL405H - Hnrs:Shakespeare
- ENGL406 - 17th Cen Lit Prior Restoration
- ENGL407 - Milton
  OR ENGL407H - Hnrs:Milton
- ENGL411 - Romantic Literature
- ENGL412 - Victorian Literature: Madwomen & Decadent Men
- ENGL413 - British Literature Since 1914
- ENGL414 - The British Novel
- ENGL415 - Seminar of British Writers
- ENGL416 - The Woman Writer
- ENGL421 - Early American Literature
- ENGL422 - The American Renaissance
- ENGL423 - Development of the Amer Novel
- ENGL424 - Realism and Naturalism to 1920
- ENGL425 - Modern Amer Fiction, 1920-1945
- ENGL426 - Modern American Drama
- ENGL427 - Modern American Poetry
- ENGL428 - Contemporary Amer Lit: 1945-P
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945
- ENGL431 - Comparative Literature
  OR ENGL431H - Hnrs: Comparative Literature
- ENGL441 - Poetry
  OR ENGL441H - Hnrs:Poetry
- ENGL442 - Drama
- ENGL343 - Fiction Seminar
- ENGL445 - Short Story:Hist,Devel,Genres
  OR ENGL445H - Hnrs: Short Story:Hist,Devel,Genres
- ENGL451 - Literary Criticism
- ENGL460 - Teach ESL Listening/Speaking

- ENGL482 - Film and American Society
- ENGL483 - Politics, Film & Electronic Media
  OR ENGL483H - H:Politics, Film & Electronic Media
- ENGL484 - Sci Fiction, Technology & Film
- ENGL486 - Teaching Reading & Literature to Young Adults
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing

English as a Second Language/ Linguistics Minor

Overview

English as a Second Language/Linguistics minors experience the breadth of the English field while dedicating themselves to the specific study of ESL and/or Linguistics. ESL/Linguistics courses at Millersville University include Introduction to Language Study, Introduction to Linguistic Analysis, Modern Syntax, Applied Linguistics, Teaching English as a Second Language, Teaching ESL Listening and Speaking, and History of the English Language.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in ESL/Linguistics (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL221 - Intro to Linguistic Analysis
  OR ENGL221H - Hon: Intro to Linguistic

Analysis

AND

English Electives in ESL/Linguistics (12 credits)

Earn at least 12 credits from the following:

- ENGL321 - Modern Syntax
- ENGL322 - History of English
  OR ENGL322H - Hon: History of English
- ENGL460 - Teach ESL Listening/Speaking
- ENGL462 - Dialects of American English
  OR ENGL462H - Hnrs:Dialects of American English
- ENGL363 - Applied Linguistics
  OR ENGL363H - H:Applied Linguistics
- ENGL364 - Teaching English as a Second Language
- ENGL465 - Special Topics in Lang: Sem

Film Studies Minor

Overview

A minor in Film Studies will expand students' knowledge of films, give them an understanding of film history and culture, and help them discuss films using appropriate technical vocabulary. This minor is housed within the English department, and is available to both English majors and non-English majors. In addition to courses available within the English department, students are encouraged to take film courses offered in other disciplines like Philosophy and Anthropology.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Film Studies

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL481 - History Of Film

- ENGL483 - Politics, Film & Electronic Media
  OR ENGL483H - H:Politics, Film & Electronic Media
- ENGL484 - Sci Fiction, Technology & Film

AND

Ethnicity in Film or Film and American Society (3 credits)

Complete at least 1 of the following courses:

- ENGL347 - Ethnicity in Film
- ENGL482 - Film and American Society

AND

Electives in Film Studies (3 credits)

Complete at least 1 of the following courses:

- ANTH227 - Culture Through Film
- ART201 - History and Aesthetics of Photography
  OR ART201H - H:History and Aesthetics of Photography
- ART306 - Intro Photography: Darkroom
  OR ART306H - H: Intro Photography: Darkroom
- DESN342 - Kinetic Design and Animation
- ART376 - Intro to Photo: Digital
- COMM337 - Documentary Film I: Concepts
- AENG110 - Communication and Information Systems
- PHIL327 - Philosophy in Film

Language Studies Minor

Overview

With a minor in Language Studies, students will gain greater confidence in communicating across languages, and demonstrate an appreciation of foreign cultures and an interest in the world beyond.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Language Studies (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

FORL 201 (3 credits)

Intermediate Language I

AND

FORL 202 (3 credits)

Intermediate Language II

AND

FORL 351 or FORL 352 (3 credits)

Choose either Composition & Oral Expresssion 1 or Composition & Oral Expresssion 2

AND

Electives (9 credits)

9 Credits of electives in the chosen language at the 300 or 400 level

* If a student tests above the Intermediate Language Level or had already taken 300-level language courses, upper level language courses must be substituted for 201 and/or 202.

Additional Comments:
The minor in Language Studies requires declaration of a specific language, we offer Spanish and Japanese.

Science Writing Minor

Overview

The multidisciplinary minor in Science Writing is grounded in the complexities of effective communication and thorough scientific understanding.

You will split your studies between Foundations in Writing and Foundations in Science. Foundations in Writing classes refine writing skills for various public audiences through the study of rhetoric and scientific communication. Foundations in Science classes explore your chosen focus of biology, physics, chemistry or earth sciences.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Science Writing

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- WRIT319 - Science Writing
  OR WRIT319H - Hon: Science Writing

AND

Special Topics in Science Writing (3 credits)

Complete ALL of the following Courses:

- WRIT466 - Special Topics in Writing

AND

Electives (9 credits)

Complete at least 3 of the following courses:

- BIOL204 - Human Biology
- BIOL207 - Human Sexuality
- BIOL256 - Nutrition
- BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness
- CHEM372 - History of Chem and Society
  OR CHEM372H - Hnrs:History of Chem and Society
- COMM461 - Health Communication
- JOUR250 - Journalism & Society
- JOUR313 - Fundamentals of Journalism
- WRIT317 - Editing for Publication
- WRIT318 - Web Writing
  OR WRIT318H - Hon: Web Writing
- ESSC350 - History of Meteorology
  OR ESSC350H - H:History of Meteorology
- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy
- ESSC245 - Environmental Meteorology
- ESCI202 - The Earth in Space
- GEOG101 - The Global Environment
- GEOG202 - Environmental Sustainability
- GEOG307 - US Environmental Policy
- GEOG336 - Climate And Society
- GEOG407 - Glbl Envrnmtl Policy/Negotiatn
- AENG301 - Technology and Humans
  OR AENG301H - Hnrs:Technology and Humans
- AENG302 - Futurology
  OR AENG302H - H: Futurology
- AENG304 - Energy, Sustainability
  OR AENG304H - Hon: Energy, Sustainability
- PHIL314 - Philosophy of Science
- PHIL345 - Humanity and Environment
- PHYS302 - Physics and Evolution of Western Civilization

AND

Capstone: Internship or Writing Workshop (3 credits)

Complete ALL of the following Courses:

- ENGL300 - English Internship
- WRIT472 - Digital Portfolio

Writing Studies Minor

Overview

Through extensive writing practice informed by historical, rhetorical, linguistic, and theoretical foundations, students who minor in Writing Studies will be prepared to respond effectively to writing situations across disciplines and in various professions.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Writing Studies

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- WRIT272 - Introduction to Writing Studies

AND

Capstone Course (3 credits)

Complete at least 1 of the following:

Option 1. Capstone Course (3 credits)

Complete at least 1 of the following courses:

- ENGL300 - English Internship
- ENGL400 - English Internship
- WRIT472 - Digital Portfolio

OR

Option 2. Capstone Course (3 credits)

Cooperative Education or Writing Workshop

AND

Electives (12 credits)

Complete at least 4 of the following courses:

- COMM317 - Intercultural Communication **OR** COMM317H - Hon: Intercultural Communication
- WRIT343 - Rhetorics of Marginalized Communities
- COMM441 - Political Communication
- WRIT273 - Writing and Gaming
- WRIT274 - The Craft of Writing
- WRIT280 - Intro to Rhetoric for Writers
- ENGL300 - English Internship
- WRIT311 - Writing in Contexts
- WRIT312 - Technical Writing
- JOUR313 - Fundamentals of Journalism
- WRIT316 - Business Writing
- WRIT317 - Editing for Publication
- WRIT318 - Web Writing **OR** WRIT318H - Hon: Web Writing
- WRIT319 - Science Writing **OR** WRIT319H - Hon: Science Writing
- JOUR327 - Feature Writing and Magazine Journalism
- WRIT340 - Rhetorical Analysis
- WRIT342 - Reading/Writing for Civic Chng
- WRIT466 - Special Topics in Writing
- WRIT471 - Creative Writing

AND

400-level Elective (3 credits)

Complete at least 1 of the following courses:

- COMM441 - Political Communication
- WRIT466 - Special Topics in Writing
- WRIT471 - Creative Writing

At least one of the elective courses must be taken at the 400-level.

AND

English Electives (6 credits)

Complete at least 2 of the following courses:

- WRIT273 - Writing and Gaming
- WRIT274 - The Craft of Writing
- WRIT280 - Intro to Rhetoric for Writers
- ENGL300 - English Internship
- WRIT311 - Writing in Contexts
- WRIT312 - Technical Writing
- JOUR313 - Fundamentals of Journalism
- WRIT316 - Business Writing
- WRIT317 - Editing for Publication
- WRIT318 - Web Writing
  OR WRIT318H - Hon: Web Writing
- WRIT319 - Science Writing
  OR WRIT319H - Hon: Science Writing
- JOUR327 - Feature Writing and Magazine Journalism
- WRIT340 - Rhetorical Analysis
- WRIT342 - Reading/Writing for Civic Chng
- WRIT466 - Special Topics in Writing
- WRIT471 - Creative Writing

Two of the elective courses must be taken in the English Department.

English, B.A.

Overview

Our liberal arts-based English program, with its humanistic focus, is designed to give B.A. students a background in literature, language, writing, and related fields of study, as well as knowledge of themselves. Students are exposed to both the rich cultural heritage of the past and the most promising creative work of the present. One of the major aims of the program is to assist students in communicating effectively and logically in any choice of profession or vocation. Upon completion of this course of study, English majors from Millersville should be qualified for admission to graduate schools and other professional training programs, and they should be well prepared for careers that require writing and research skills.

Curriculum

Simple Requirements

Major in English, BA

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Core Courses (12 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL237 - Literary Research and Analysis
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- WRIT280 - Intro to Rhetoric for Writers

AND

BA English Requirements - No Option

Fulfill ALL of the following requirements:

Literary Foundations

Fulfill ALL of the following requirements:

Global Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1

- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL241H - H:Explorations in World Lit

AND

American Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL347 - Ethnicity in Film

AND

British Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature

AND

Early Period Literary Foundations

One course from the Literary Foundations area must be from the earlier period, ENGL231 World Literature 1, ENGL233 Early British Literature or ENGL235 American Literary Tradition I.

AND

Media Literacy Elective (0-3 credits)

Complete at least 1 of the following courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL481 - History Of Film
- ENGL482 - Film and American Society
- ENGL483 - Politics, Film & Electronic Media
  OR ENGL483H - H:Politics, Film & Electronic Media
- ENGL484 - Sci Fiction, Technology & Film

AND

Advanced Study in Literature and Film

Complete ALL of the following Course Sets:

- Any 3-level ENGL course(s)
  OR Any 4-level ENGL course(s)
- Any 3-level ENGL course(s)
  OR Any 4-level ENGL course(s)
- Any 3-level ENGL course(s)
  OR Any 4-level ENGL course(s)
- Any 3-level ENGL course(s)
  OR Any 4-level ENGL course(s)
  OR Any 3-level WRIT course(s)
  OR Any 4-level WRIT course(s)

Min 2 courses 400-level

AND

Pre-Professional Experiences

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ENGL300 - English Internship

AND

Capstone (1-3 credits)

Complete at least 1 of the following courses:

- ENGL400 - English Internship
- WRIT472 - Digital Portfolio
- ENGL489 - Honors Course

- ENGL499 - Departmental Honors
- ENGL498 - Independent Study in English

Accelerated English BA MA

Overview

The Accelerated Bachelor's Master's allows English BA undergraduate students the opportunity to pursue graduate studies in English beginning in their Junior year as undergraduates. This program allows students the opportunity for early acceptance into the MA English. Accepted students may complete up to 12 credits or 4 courses of Literature, Rhetoric, and Creative Writing graduate course work during their undergraduate program, and extends through the Master of Arts in English.

Students accepted into the Accelerated English program will be billed for undergraduate tuition for the 12 credits of graduate work that meet both degree requirements. Students in the accelerated program must adhere to Graduate Academic Standing policy available in the Graduate Catalog for all graduate coursework completed.

Curriculum

Simple Requirements

Accelerated English BA MA Requirements (36 credits)

Type
Completion Requirement

Core (9 credits)

Complete ALL of the following Courses:

- ENGL651 - Literary Criticism
- WRIT672 - Sem: Rhetoric/Composition
- ENGL614 - The Profession of English Studies

Electives (24 credits)

- 9 credits Narrative courses
- 9 credits Writing Studies courses
- 3 credits elective

Capstone (3 credits)

Complete ALL of the following Courses:

- ENGL699 - Thesis:
- ENGL680 - Digital Portfolio Workshop

English, B.A. - English as a Second Language/Linguistics

Overview

English as a Second Language students experience the breadth of the English field while dedicating themselves to the specific study of ESL. You will explore the history of language, practice literary analysis, develop an understanding of world literature and more through a diverse selection of English electives. ESL courses at Millersville University include Introduction to Language Study; Transformational Grammar; Applied Linguistics; and Teaching English to Speakers of Other Languages.

Curriculum

Simple Requirements

Major in English, BA

Type
Completion Requirement

Option in English as a Second Language/Linguistics

See separate block

Requirements

Fulfill ALL of the following requirements:

English Core Courses (12 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL237 - Literary Research and Analysis
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- WRIT280 - Intro to Rhetoric for Writers

AND

BA English Requirements

Fulfill ALL of the following requirements:

Literary Foundations

Fulfill ALL of the following requirements:

Global Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL241H - H:Explorations in World Lit

AND

American Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL347 - Ethnicity in Film

AND

British Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature

AND

Early Period Literary Foundations

One course from the Literary Foundations area must be from the earlier period.

AND

Media Literacy Elective (0-3 credits)

Complete at least 1 of the following courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL481 - History Of Film
- ENGL482 - Film and American Society
- ENGL483 - Politics, Film & Electronic Media
  OR ENGL483H - H:Politics, Film & Electronic Media
- ENGL484 - Sci Fiction, Technology & Film

AND

Advanced Study in Literature and Film

Complete at least 4 courses in the following course sets:

- Any 3-level ENGL course(s)
- Any 4-level ENGL course(s)
- Any 3-level WRIT course(s)
- Any 4-level WRIT course(s)

Min 2 courses 400-level

AND

Pre-Professional Experiences

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ENGL300 - English Internship

AND

Capstone (1-3 credits)

Complete at least 1 of the following courses:

- ENGL400 - English Internship
- WRIT472 - Digital Portfolio
- ENGL489 - Honors Course
- ENGL499 - Departmental Honors
- ENGL498 - Independent Study in English

Option in ESL/Linguistics

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Electives for ESL/Linguistics Concentration (12 credits)

Earn at least 12 credits from the following:

- ENGL221 - Intro to Linguistic Analysis
  OR ENGL221H - Hon: Intro to Linguistic Analysis
- ENGL321 - Modern Syntax
- ENGL322 - History of English
  OR ENGL322H - Hon: History of English
- ENGL460 - Teach ESL Listening/Speaking
- ENGL462 - Dialects of American English
  OR ENGL462H - Hnrs:Dialects of American English
- ENGL363 - Applied Linguistics
  OR ENGL363H - H:Applied Linguistics
- ENGL364 - Teaching English as a Second Language
- ENGL465 - Special Topics in Lang: Sem

English, B.A. - Film Studies Option

Overview

The Film Studies option in English enables students to develop skills and proficiency in the developing discipline of film studies, including its history, aesthetics, terminology, methods of analysis, theoretical issues, and social impact/ interactions.

Curriculum

Simple Requirements

Major in English, BA

Type
Completion Requirement

Option in Film Studies

See separate block

Requirements

Fulfill ALL of the following requirements:

English Core Courses (12 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL237 - Literary Research and Analysis
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- WRIT280 - Intro to Rhetoric for Writers

AND

BA English Requirements

Fulfill ALL of the following requirements:

Literary Foundations

Fulfill ALL of the following requirements:

Global Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL241H - H:Explorations in World Lit

AND

American Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL347 - Ethnicity in Film

AND

British Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature

AND

Early Period Literary Foundations

One course from the Literary Foundations area must be from the earlier period.

AND

Media Literacy Elective (0-3 credits)

Complete at least 1 of the following courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL481 - History Of Film
- ENGL482 - Film and American Society
- ENGL483 - Politics, Film & Electronic

Media
OR ENGL483H - H:Politics, Film & Electronic Media
- ENGL484 - Sci Fiction, Technology & Film

AND

Advanced Study in Literature and Film

Complete at least 4 courses in the following course sets:
- Any 3-level ENGL course(s)
- Any 4-level ENGL course(s)
- Any 3-level WRIT course(s)
- Any 4-level WRIT course(s)

Min 2 courses 400-level

AND

Pre-Professional Experiences

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:
- ENGL300 - English Internship

AND

Capstone (1-3 credits)

Complete at least 1 of the following courses:
- ENGL400 - English Internship
- WRIT472 - Digital Portfolio
- ENGL489 - Honors Course
- ENGL499 - Departmental Honors
- ENGL498 - Independent Study in English

Intro to Film (3 credits)

Complete ALL of the following Courses:
- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film

AND

Required Courses (3 credits)

Complete ALL of the following Courses:
- ENGL481 - History Of Film

AND

Film Studies Electives (6 credits)

Complete at least 2 of the following courses:
- ENGL347 - Ethnicity in Film
- ENGL482 - Film and American Society
- ENGL483 - Politics, Film & Electronic Media
  OR ENGL483H - H:Politics, Film & Electronic Media
- ENGL484 - Sci Fiction, Technology & Film
- PHIL327 - Philosophy in Film

Option in Film Studies (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English, B.A. - Writing Studies

Overview

The Writing Studies option in the English B.A. allows students to pursue concentrated study in the discipline of writing, specializing in sub-fields such as the history of rhetoric and composition, literacy, theories of writing pedagogy, and writing and multi-media.

Curriculum

Simple Requirements

Major in English, BA (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Option in Writing Studies

See separate block

Students may elect to declare an option in Comparative Literature and ESL/Linguistics and Film Studies and or Writing Studies. This is not required.

AND

English Core Courses (12 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL237 - Literary Research and Analysis
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- WRIT280 - Intro to Rhetoric for Writers

Option in Writing Studies

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- WRIT272 - Introduction to Writing Studies

AND

Core Courses

Fulfill ALL of the following requirements:

The Craft of Writing: Argumentation & Stylistics (3 credits)

Complete ALL of the following Courses:

- WRIT274 - The Craft of Writing

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- WRIT317 - Editing for Publication

AND

Rhetorical Analysis or Reading/Writing for Civic Change (3 credits)

Complete ALL of the following Courses:

- WRIT340 - Rhetorical Analysis
- WRIT342 - Reading/Writing for Civic Chng

AND

Rhetoric and Games or Rhetoric of Marginalized Communities (3 credits)

Complete at least 1 of the following courses:

- WRIT273 - Writing and Gaming
- WRIT343 - Rhetorics of Marginalized Communities

AND

Creative Writing or Literature Course

Fulfill ANY of the following requirements:

Option 1

Complete ANY of the following Courses:

- WRIT471 - Creative Writing

OR

Option 2

Complete ANY of the following Course Sets:

- Any 3-level ENGL course(s)
- Any 4-level ENGL course(s)

AND

Elective in Writing Studies (3 credits)

Complete at least 1 of the following courses:

- WRIT273 - Writing and Gaming
- WRIT340 - Rhetorical Analysis
- WRIT342 - Reading/Writing for Civic Chng
- WRIT343 - Rhetorics of Marginalized Communities
- WRIT312 - Technical Writing
- WRIT318 - Web Writing
  OR WRIT318H - Hon: Web Writing
- WRIT319 - Science Writing
  OR WRIT319H - Hon: Science Writing
- WRIT471 - Creative Writing
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing

AND

Pre-Professional and Capstone

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ENGL300 - English Internship
- WRIT466 - Special Topics in Writing

AND

Digital Portfolio, Internship or Thesis (1-3 credits)

Complete at least 1 of the following courses:

- WRIT472 - Digital Portfolio
- ENGL400 - English Internship
- ENGL489 - Honors Course
- ENGL498 - Independent Study in English
- ENGL499 - Departmental Honors

The internship (ENGL400 English Internship) is in addition to the required 3-credit internship and can be selected as a Capstone course after fulfilling the 3-credit internship requirement.

English, B.S.Ed.

Overview

Students whose goal is to become a teacher have a program of coursework that has been nationally recognized by the National Council of Teachers of English (NCTE) and the National Association of Professional Development Schools (NAPDS). Students take courses both in the College of Arts, Humanities and Social Sciences and in the College of Education and Human Services.

To stay on schedule, English B.S.Ed. students should take their “foundations block,” EDFN 211 Foundations Modern Education and EDFN 241 Psychological Foundations of Teaching, in their sophomore year. Registering for these classes requires students to process and submit background checks and clearances. Transfer students should plan ahead for these courses.

B.S.Ed. students should apply for admission to Advanced Professional Studies (APS) in their junior year, in preparation for Professional Development School. APS requirements are listed on students’ degree audits; students should strive to maintain a 3.0 cumulative GPA for admission into APS.

Millersville’s Professional Development School (PDS) is a full-year internship experience that immerses future teachers in a school setting. This senior-year apprenticeship with a master teacher allows English B.S.Ed. students to shift their focus from simply learning about teaching to implementing their learning in the classroom.

Curriculum

Simple Requirements

Major in English, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Linguistic Foundations (6 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL321 - Modern Syntax

AND

Literature Surveys

Fulfill ALL of the following requirements:

Early Lit Survey (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL235 - American Literary Tradition I
- ENGL241H - H:Explorations in World Lit

AND

Later Lit Survey (3 credits)

Complete at least 1 of the following courses:

- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL234 - Later British Literature
- ENGL236 - American Literary Tradition II

AND

Non-Western Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL336 - New Dimensions to World Lit
- ENGL379 - Experimental

AND

Text Analysis Foundations

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ENGL237 - Literary Research and Analysis
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Visual Media Literacy (3 credits)

Complete at least 1 of the following courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL481 - History Of Film

AND

Advanced Literature and Pedagogy (15 credits)

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ENGL405 - Shakespeare
  OR ENGL405H - Hnrs:Shakespeare

AND

400-level American Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL421 - Early American Literature
- ENGL422 - The American Renaissance
- ENGL423 - Development of the Amer Novel
- ENGL424 - Realism and Naturalism to 1920
- ENGL425 - Modern Amer Fiction, 1920-1945
- ENGL426 - Modern American Drama
- ENGL427 - Modern American Poetry
- ENGL428 - Contemporary Amer Lit: 1945-P
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945

AND

English Pedagogy Courses (9 credits)

Complete ALL of the following Courses:

- ENGL486 - Teaching Reading & Literature to Young Adults
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English

AND

English Major Electives (May Declare an Option to Fulfill Electives) (6 credits)

Earn at least undefined credits from the following:

Course Options

Earn at least 12 credits from the following:

- Any ENGL course(s)
- Any WRIT course(s)
- Any JOUR course(s)

May also take PHIL327 Philosophy in Film.

Note: This requirement may not be satisfied with ENGL 110, WRIT 311, ENGL 461, ENGL 486, ENGL 487, or ENGL 488.

Take your Perspectives (P) course in your Electives if you don't want to take an extra course to fulfill this requirement.

AND

English Major Competencies (6 credits)

Fulfill ALL of the following requirements:

World Literature Competency (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL241H - H:Explorations in World Lit

AND

Minority & Female Authors Competency (3 credits)

Complete at least 1 of the following courses:

- WRIT280 - Intro to Rhetoric for Writers
- ENGL331 - Special Topics in Literature
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL337 - Women Writers in Middle Ages
- ENGL347 - Ethnicity in Film
- ENGL416 - The Woman Writer
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945
- ENGL435 - Journlsm Thru Women's Prspctvs
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:

Competencies are fulfilled by selections that you make in other categories, like surveys, electives, and your 400-level American selection. At least one survey must be in world literature. At least one course must have a substantial focus on minority and female authors.

Professional Education (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (12 credits)

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- EDFN330 - Instructional Technology, Design & Assessment
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- ENED461 - Student Teaching in English

Advanced Professional Studies, BSE (12 credits)

Type
Completion Requirement

APS Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

English, BS.Ed. - English as a Second Language/Linguistics

Overview

English as a Second Language students experience the breadth of the English field while dedicating themselves to the specific study of ESL. You will explore the history of language, practice literary analysis, develop an understanding of world literature and more through a diverse selection of English electives. ESL courses at Millersville University include Introduction to Language Study; Transformational Grammar; Applied Linguistics; and Teaching English to Speakers of Other Languages.

Curriculum

Simple Requirements

Major in English and BSE (39 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Linguistic Foundations (6 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL321 - Modern Syntax

AND

Literature Surveys (9 credits)

Fulfill ALL of the following requirements:

Early Lit Survey (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL235 - American Literary Tradition I
- ENGL241H - H:Explorations in World Lit

AND

Later Lit Survey (3 credits)

Complete at least 1 of the following courses:

- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL234 - Later British Literature
- ENGL236 - American Literary Tradition II

AND

Non-Western Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL336 - New Dimensions to World Lit
- ENGL379 - Experimental

AND

Text Analysis Foundations (9 credits)

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ENGL237 - Literary Research and Analysis
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Visual Media Literacy (3 credits)

Complete at least 1 of the following courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL481 - History Of Film

AND

Advanced Literature and Pedagogy (15 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete at least 1 of the following courses:

- ENGL405 - Shakespeare
  OR ENGL405H - Hnrs:Shakespeare
- ENGL486 - Teaching Reading &

Literature to Young Adults
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English

AND

400-level American Literature (3 credits)

Complete at least 1 of the following courses:
- ENGL421 - Early American Literature
- ENGL422 - The American Renaissance
- ENGL423 - Development of the Amer Novel
- ENGL424 - Realism and Naturalism to 1920
- ENGL425 - Modern Amer Fiction, 1920-1945
- ENGL426 - Modern American Drama
- ENGL427 - Modern American Poetry
- ENGL428 - Contemporary Amer Lit: 1945-P
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945

AND

English Electives

See separate block

AND

Competency Requirements

See separate block

Option in ESL/Linguistics (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Electives for ESL/Linguistics Concentration (12 credits)

Earn at least 12 credits from the following:
- ENGL221 - Intro to Linguistic Analysis
  OR ENGL221H - Hon: Intro to Linguistic Analysis
- ENGL321 - Modern Syntax
- ENGL322 - History of English
  OR ENGL322H - Hon: History of English
- ENGL460 - Teach ESL Listening/Speaking
- ENGL462 - Dialects of American English
  OR ENGL462H - Hnrs:Dialects of American English
- ENGL363 - Applied Linguistics
  OR ENGL363H - H:Applied Linguistics
- ENGL364 - Teaching English as a Second Language
- ENGL465 - Special Topics in Lang: Sem

English Major Electives (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Electives (May Declare an Option to Fulfill Electives)

Complete ALL of the following Course Sets:
- Any ENGL course(s)
- Any WRIT course(s)
- Any JOUR course(s)

May also take PHIL327 Philosophy in Film.

Note: This requirement may not be satisfied with ENGL110 Intro to College Writing and WRIT311 Writing in Contexts and ENGL 461 and ENGL486 Tchg Rdg and Lit with Yng Adlt and ENGL487 Seminar in Teaching Writing or ENGL488 Teaching Sec School English.

Additional Comments:
Take your Perspectives (P) course in your Electives if you don't want to take an extra course to fulfill this requirement.

English Major Competencies (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

World Literature Competency (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL241H - H:Explorations in World Lit

AND

Minority & Female Authors Competency (3 credits)

Complete at least 1 of the following courses:

- WRIT280 - Intro to Rhetoric for Writers
- ENGL331 - Special Topics in Literature
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL337 - Women Writers in Middle Ages
- ENGL347 - Ethnicity in Film
- ENGL416 - The Woman Writer
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945
- ENGL435 - Journlsm Thru Women's Prspctvs
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:

Additional Comments:
Competencies are fulfilled by selections that you make in other categories, like surveys, electives, and your 400-level American selection. At least one survey must be in world literature. At least one course must have a substantial focus on minority and female authors.

Professional Education (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (12 credits)

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- EDFN330 - Instructional Technology, Design & Assessment
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for

Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:
- SEED471 - Student Teaching Seminar
- ENED461 - Student Teaching in English

Advanced Professional Studies, BSE

Type
Completion Requirement

APS Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:
- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Required Courses (9 credits)

Complete ALL of the following Courses:
- ENGL486 - Teaching Reading & Literature to Young Adults
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

English, B.S.Ed. - Film Studies Option

Overview

The film studies option enables English B.A. or B.S.Ed. majors to develop skills and proficiency in the discipline of film studies, including its history, aesthetics, terminology, methods of analysis, theoretical frameworks and interrelationships with society/culture. B.S.Ed. students may want to take this option to teach film studies in high school.

Curriculum

Simple Requirements

Major in English, BSE (60 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Option in Film Studies

See separate block

AND

Linguistic Foundations (6 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL321 - Modern Syntax

AND

Literature Surveys

Fulfill ALL of the following requirements:

Early Lit Survey (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL235 - American Literary Tradition I
- ENGL241H - H:Explorations in World Lit

AND

Later Lit Survey (3 credits)

Complete at least 1 of the following courses:

- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL234 - Later British Literature
- ENGL236 - American Literary Tradition II

AND

Non-Western Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL336 - New Dimensions to World Lit
- ENGL379 - Experimental

AND

Text Analysis Foundations

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ENGL237 - Literary Research and Analysis
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Visual Media Literacy (3 credits)

Complete at least 1 of the following courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL481 - History Of Film

AND

Advanced Literature and Pedagogy (15 credits)

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete at least 1 of the following courses:

- ENGL405 - Shakespeare
  OR ENGL405H - Hnrs:Shakespeare

AND

400-level American Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL421 - Early American Literature
- ENGL422 - The American Renaissance
- ENGL423 - Development of the Amer Novel
- ENGL424 - Realism and Naturalism to 1920
- ENGL425 - Modern Amer Fiction, 1920-1945
- ENGL426 - Modern American Drama
- ENGL427 - Modern American Poetry
- ENGL428 - Contemporary Amer Lit: 1945-P
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945

AND

English Pedagogy Courses (9 credits)

Complete ALL of the following Courses:

- ENGL486 - Teaching Reading & Literature to Young Adults
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English

AND

English Major Electives (May Declare an Option to Fulfill Electives) (12 credits)

Earn at least 12 credits from the following:

- Any ENGL course(s)
- Any WRIT course(s)
- Any JOUR course(s)

May also take PHIL327 Philosophy in Film.

Note: This requirement may not be satisfied with ENGL 110, WRIT 311, ENGL 461, ENGL 486, ENGL 487, or ENGL 488. Take your Perspectives (P) course in your Electives if you don't want to take an extra course to fulfill this requirement.

AND

English Major Competencies (6 credits)

Fulfill ALL of the following requirements:

World Literature Competency (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL241H - H:Explorations in World Lit

AND

Minority & Female Authors Competency (3 credits)

Complete at least 1 of the following courses:

- WRIT280 - Intro to Rhetoric for Writers
- ENGL331 - Special Topics in Literature
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL337 - Women Writers in Middle Ages
- ENGL347 - Ethnicity in Film
- ENGL416 - The Woman Writer
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945

- ENGL435 - Journlsm Thru Women's Prspctvs
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:

Competencies are fulfilled by selections that you make in other categories, like surveys, electives, and your 400-level American selection. At least one survey must be in world literature. At least one course must have a substantial focus on minority and female authors.

Option in Film Studies (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Intro to Film (3 credits)

Complete ALL of the following Courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- ENGL481 - History Of Film

AND

Film Studies Electives (6 credits)

Complete at least 2 of the following courses:

- ENGL347 - Ethnicity in Film
- ENGL482 - Film and American Society
- ENGL483 - Politics, Film & Electronic Media
  OR ENGL483H - H:Politics, Film & Electronic Media
- ENGL484 - Sci Fiction, Technology & Film
- PHIL327 - Philosophy in Film

Professional Education (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (12 credits)

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- EDFN330 - Instructional Technology, Design & Assessment
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- ENED461 - Student Teaching in English

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Required Courses (9 credits)

Complete ALL of the following Courses:

- ENGL486 - Teaching Reading & Literature to Young Adults
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

English, B.S.Ed. - Writing Studies Option

Overview

The writing studies option enables English majors to pursue focused study in the discipline of writing, which draws from subfields such as the history of rhetoric and composition, literacy, theories of writing pedagogy, and writing and multimedia.

Curriculum

Simple Requirements

Major in English, BSE (57 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Option in Writing Studies

See separate block

AND

Linguistic Foundations (6 credits)

Complete ALL of the following Courses:

- ENGL220 - Introduction to Language Study
- ENGL321 - Modern Syntax

AND

Literature Surveys

Fulfill ALL of the following requirements:

Early Lit Survey (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL235 - American Literary Tradition I
- ENGL241H - H:Explorations in World Lit

AND

Later Lit Survey (3 credits)

Complete at least 1 of the following courses:

- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL234 - Later British Literature
- ENGL236 - American Literary Tradition II

AND

Non-Western Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL336 - New Dimensions to World Lit
- ENGL379 - Experimental

AND

Text Analysis Foundations

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ENGL237 - Literary Research and Analysis
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:

AND

Visual Media Literacy (3 credits)

Complete at least 1 of the following courses:

- ENGL240 - The Art of Film
  OR ENGL240H - Hnrs:The Art of Film
- ENGL481 - History Of Film

AND

Advanced Literature and Pedagogy (15 credits)

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ENGL405 - Shakespeare
  OR ENGL405H - Hnrs:Shakespeare

AND

400-level American Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL421 - Early American Literature
- ENGL422 - The American Renaissance
- ENGL423 - Development of the Amer Novel
- ENGL424 - Realism and Naturalism to 1920
- ENGL425 - Modern Amer Fiction, 1920-1945
- ENGL426 - Modern American Drama
- ENGL427 - Modern American Poetry
- ENGL428 - Contemporary Amer Lit: 1945-P
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945

AND

English Pedagogy Courses (9 credits)

Complete ALL of the following Courses:

- ENGL486 - Teaching Reading & Literature to Young Adults
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English

English Major Electives (May Declare an Option to Fulfill Electives) (12 credits)

Earn at least 12 credits from the following:

- Any ENGL course(s)
- Any WRIT course(s)
- Any JOUR course(s)

May also take PHIL327 Philosophy in Film.

Note: This requirement may not be satisfied with ENGL 110, WRIT 311, ENGL 461, ENGL 486, ENGL 487, or ENGL 488. Take your Perspectives (P) course in your Electives if you don't want to take an extra course to fulfill this requirement.

English Major Competencies (6 credits)

Fulfill ALL of the following requirements:

World Literature Competency (3 credits)

Complete at least 1 of the following courses:

- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL241H - H:Explorations in World Lit

AND

Minority & Female Authors Competency (3 credits)

Complete at least 1 of the following courses:

- WRIT280 - Intro to Rhetoric for Writers
- ENGL331 - Special Topics in Literature
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL337 - Women Writers in Middle Ages
- ENGL347 - Ethnicity in Film
- ENGL416 - The Woman Writer
- ENGL430 - Ethnic American Lit Since 1945
  OR ENGL430H - Hon: Ethnic American Lit Since 1945
- ENGL435 - Journlsm Thru Women's Prspctvs
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:

Competencies are fulfilled by selections that you make in other categories, like surveys, electives, and your 400-level American selection. At least one survey must be in world literature. At least one course must have a substantial focus on minority and female authors.

Option in Writing Studies (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- WRIT272 - Introduction to Writing Studies

AND

English Elective (3 credits)

Complete at least 1 of the following courses:

- WRIT280 - Intro to Rhetoric for Writers
- WRIT312 - Technical Writing
- JOUR313 - Fundamentals of Journalism
- WRIT316 - Business Writing
- WRIT340 - Rhetorical Analysis
- WRIT342 - Reading/Writing for Civic Chng
- WRIT466 - Special Topics in Writing
- WRIT471 - Creative Writing
- WRIT472 - Digital Portfolio

AND

Communication/English Elective (3 credits)

Complete at least 1 of the following courses:

- COMM317 - Intercultural Communication **OR** COMM317H - Hon: Intercultural Communication
- WRIT343 - Rhetorics of Marginalized Communities
- COMM403 - Persuasion & Social Media Infl
- WRIT280 - Intro to Rhetoric for Writers
- WRIT312 - Technical Writing
- JOUR313 - Fundamentals of Journalism
- WRIT316 - Business Writing
- WRIT340 - Rhetorical Analysis
- WRIT342 - Reading/Writing for Civic Chng
- WRIT466 - Special Topics in Writing
- WRIT471 - Creative Writing
- WRIT472 - Digital Portfolio

AND

400-level elective requirement (3 credits)

Complete at least 1 of the following courses:

- COMM403 - Persuasion & Social Media Infl
- WRIT466 - Special Topics in Writing
- WRIT471 - Creative Writing
- WRIT472 - Digital Portfolio

AND

Thesis or Co-op Education Experience (3 credits)

Earn at least 3 credits from the following:

- ENGL300 - English Internship
- ENGL400 - English Internship
- ENGL489 - Honors Course
- ENGL499 - Departmental Honors

Professional Education (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (12 credits)

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- EDFN330 - Instructional Technology, Design & Assessment
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- ENED461 - Student Teaching in English

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Required Courses (9 credits)

Complete ALL of the following Courses:

- ENGL486 - Teaching Reading & Literature to Young Adults
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Mathematics

Two Mathematics courses are required for BSE

students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Rhetoric and Digital Writing Certificate

Overview

This online certificate program allows students to gain critical advanced skills in the area of digital writing. The courses in the online certificate program build a foundation in rhetorical theory, then include courses in digital writing. Courses emphasize current digital writing spaces like social media, blogs, websites, and more to prepare students for digital writing in workplaces, nonprofits, schools, and more. The foundation in rhetorical theory helps students develop skills that will adapt to technological changes and advances in the decades to come.

Curriculum

Simple Requirements

Rhetoric and Digital Writing

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- WRIT280 - Intro to Rhetoric for Writers
- WRIT273 - Writing and Gaming
- WRIT318 - Web Writing
  OR WRIT318H - Hon: Web Writing

AND

Rhetoric and Digital Writing Electives (3 credits)

Complete at least 1 of the following courses:

- WRIT340 - Rhetorical Analysis
- WRIT343 - Rhetorics of Marginalized Communities
- COMM380 - Digital Media Writing

Courses

EDFL461 - Student Teaching Forgn Lang

Course Information

Course Title
Student Teaching Forgn Lang

Subject code	Course Number	Academic Level
EDFL	461	Undergraduate

Course Description
Student Teaching Forgn Lang

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN330 or EDFN530 and SEED321 or SEED321H or SEED521 and FORL480 and SPED346 or SPED546

Complete ALL of the following Courses:

- EDFN330 - Instructional Technology, Design & Assessment
  OR EDFN530 - Instructional Technology, Design and Assessment
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
  OR SEED521 - Issues in Second Education
- FORL480 - Tchg For Lang in Sec School
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings
  OR SPED546 - Sec Stdnts w Disab Inclu Sttgs

EDFL462 - Student Teaching Forgn Lang

Course Information

Course Title
Student Teaching Forgn Lang

Subject code	Course Number	Academic Level
EDFL	462	Undergraduate

Course Description
Student Teaching Forgn Lang

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN330 or EDFN530 and SEED321 or SEED321H or SEED521 and SPED346 or SPED546

Complete ALL of the following Courses:

- EDFN330 - Instructional Technology, Design & Assessment
  OR EDFN530 - Instructional Technology, Design and Assessment
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
  OR SEED521 - Issues in Second Education
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings
  OR SPED546 - Sec Stdnts w Disab Inclu Sttgs

ENED461 - Student Teaching in English

Course Information

Course Title
Student Teaching in English

Subject code	Course Number	Academic Level
ENED	461	Undergraduate

Course Description
Student Teaching in English

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN330 or EDFN530 and EDSE321 or EDSE321H or EDSE521 and ENGL 488 or ENGL 488H and ENGL 487 or ENGL 487H or ENGL 668 and EDSE340 or EDSE540 and SPED346 or SPED546

Complete ALL of the following Courses:

- EDFN330 - Instructional Technology, Design & Assessment
  OR EDFN530 - Instructional Technology, Design and Assessment
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
  OR SEED521 - Issues in Second Education
- ENGL488 - Teaching Secondary School English
  OR ENGL488H - H: Teaching Secondary School English
- ENGL487 - Seminar in Teaching Writing
  OR ENGL487H - Hon: Seminar in Teaching Writing
  OR ENGL668 - Sem Eng Ed:
- SEED340 - Content Area Literacy for Diverse Classrooms
  OR SEED540 - Cntnt Area Litrcy Divers Class
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings
  OR SPED546 - Sec Stdnts w Disab Inclu Sttgs

ENGL110 - Introduction to College Writing

Course Information

Course Title
Introduction to College Writing

Subject code	Course Number	Academic Level
ENGL	110	Undergraduate

Course Description
Required course in Cornerstone stage of general education. Provides students with strategies for effective writing and composing processes to write successfully in academic contexts. Students will learn several modes of writing, including expository and argumentative, become familiar with ethical writing and research practices, engage in conventions of academic writing, and become more reflective about their own writing processes. A grade of C- or higher is required to denote student readiness to achieve success in writing in college settings.

Cornerstone Stage Labels
Introductory Writing (IW)

Requisites
A required course for all majors, Introduction to College Writing provides students with strategies for effective writing and composing processes so they will write successfully in academic contexts. Students will learn several modes of writing, including expository and argumentative, become familiar with ethical writing and research practices, engage in conventions of academic writing, and become more reflective about their own writing processes. A grade of C- or higher is required to denote student readiness to achieve success in writing in college settings.

ENGL110H - Hnrs:Introduction to College Writing

Course Information

Course Title
Hnrs:Introduction to College Writing

Subject code	Course Number	Academic Level
ENGL	110H	Undergraduate

Course Description
Develops research and analytical skills; presumes basic writing competence. Students who demonstrate competency in ENGL 110 may be exempt from this requirement with written approval of the honors program director.

Cornerstone Stage Labels
Introductory Writing (IW)

Requisites
A required course for all majors, Introduction to College Writing provides students with strategies for effective writing and composing processes so they will write successfully in academic contexts. Students will learn several modes of writing, including expository and argumentative, become familiar with ethical writing and research practices, engage in conventions of academic writing, and become more reflective about their own writing processes. A grade of C- or higher is required to denote student readiness to achieve success in writing in college settings.

ENGL111 - English Composition Lab

Course Information

Course Title
English Composition Lab

Subject code	Course Number	Academic Level
ENGL	111	Undergraduate

Course Description
Assists students through workshop/lab format with assignments in accompanying English Composition course. Co-requisite ENGL 110.

Simple Requirements

Course Corequisites

Type
Corequisite

ENGL 110 or ENGL 110H

Enroll in the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

ENGL179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ENGL	179	Undergraduate

Course Description
Experimental

ENGL220 - Introduction to Language Study

Course Information

Course Title
Introduction to Language Study

Subject code	Course Number	Academic Level
ENGL	220	Undergraduate

Course Description
Study of the historical development and present characteristics of the English language, the process of language learning, social and geographical dialects and semantics. An overview of linguistic investigation.

Gateway Stage Labels
Information Literacies (IL)

ENGL221 - Intro to Linguistic Analysis

Course Information

Course Title
Intro to Linguistic Analysis

Subject code	Course Number	Academic Level
ENGL	221	Undergraduate

Course Description
Studies the structure, function, and meaning of language in use from social and corpus-based approaches. Prereq: ENGL 110.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL221H - Hon: Intro to Linguistic Analysis

Course Information

Course Title
Hon: Intro to Linguistic Analysis

Subject code	Course Number	Academic Level
ENGL	221H	Undergraduate

Course Description
Honors Introduction to Linguistic Analysis

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL230 - Introduction to Literature

Course Information

Course Title
Introduction to Literature

Subject code	Course Number	Academic Level
ENGL	230	Undergraduate

Course Description
Reading, analysis and interpretation of various literary genres (poetry, fiction and drama) selected from different periods with emphasis on cultural contexts. Not for English major credit.

ENGL231 - World Literature 1

Course Information

Course Title
World Literature 1

Subject code	Course Number	Academic Level
ENGL	231	Undergraduate

Course Description
Survey of literary development from earliest records to 1650. Emphasis on historical, aesthetic and philosophical aspects of world literature.

Gateway Stage Labels
Creative Exploration (CE)

ENGL232 - World Literature 2

Course Information

Course Title
World Literature 2

Subject code	Course Number	Academic Level
ENGL	232	Undergraduate

Course Description
Continuation of ENGL 231 from 1650 to present.

ENGL232H - Hnrs: World Literature 2

Course Information

Course Title
Hnrs: World Literature 2

Subject code	Course Number	Academic Level
ENGL	232H	Undergraduate

ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens

Course Information

Course Title
Early British Literature: Dragons, Knights & Faerie Queens

Subject code	Course Number	Academic Level
ENGL	233	Undergraduate

Course Description
Survey of British literature from Anglo-Saxon times to 1800. Texts studied span early tales like Beowulf and King Arthur legends through Shakespeare's plays up to the rise of the novel. Texts studied in context, including social problems and big questions about the nature of faith and heroism, love and life, the monstrous and magical. Readings selected to include works by women writers, writers of color, and writers speaking from the margins of British society.

Gateway Stage Labels
Creative Exploration (CE), Ethical Action & Citizenship (EAC)

ENGL234 - Later British Literature

Course Information

Course Title
Later British Literature

Subject code	Course Number	Academic Level
ENGL	234	Undergraduate

Course Description
Survey of British literature including works from the early Romantic period through the early 21st century. Explores historical context and thematic connections as students examine how authors such as Jane Austen, Charles Dickens, Virginia Woolf, and Zadie Smith respond and contribute to the vast social changes attending a period that spans the industrial revolution, two world wars, the expansion of civil liberties, and the rise of postmodernism. Readings selected to include works by women writers, writers of color, and writers speaking from the margins of British society. ENGL 233 is not a prerequisite.

Gateway Stage Labels
Creative Exploration (CE), Ethical Action & Citizenship (EAC)

ENGL235 - American Literary Tradition I

Course Information

Course Title
American Literary Tradition I

Subject code	Course Number	Academic Level
ENGL	235	Undergraduate

Course Description
This survey-style course looks to the literary foundations of America from Native American oral literatures to early Americans various writings through the 1860s and explores issues, conflicts, preoccupations, and themes during this period.

Gateway Stage Labels
Creative Exploration (CE), Ethical Action & Citizenship (EAC)

ENGL236 - American Literary Tradition II

Course Information

Course Title
American Literary Tradition II

Subject code	Course Number	Academic Level
ENGL	236	Undergraduate

Course Description
Survey of American literature from 1865 to present. ENGL 235 is not a prerequisite.

Gateway Stage Labels
Creative Exploration (CE), Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110H or ENGL 110

Complete ANY of the following Courses:

- ENGL110H - Hnrs:Introduction to College Writing
- ENGL110 - Introduction to College Writing

ENGL237 - Literary Research and Analysis

Course Information

Course Title
Literary Research and Analysis

Subject code	Course Number	Academic Level
ENGL	237	Undergraduate

Course Description
Textual, critical and rhetorical analyses of literary genres. Designed to familiarize the student with literary theory and interpretation of genres through research and analytical writing. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL240 - The Art of Film

Course Information

Course Title
The Art of Film

Subject code	Course Number	Academic Level
ENGL	240	Undergraduate

Course Description
Interpretation of film as an art form, including technical and artistic aspects of film making. Explores theoretical approaches to cinema.

Gateway Stage Labels
Creative Exploration (CE)

ENGL240H - Hnrs:The Art of Film

Course Information

Course Title
Hnrs:The Art of Film

Subject code	Course Number	Academic Level
ENGL	240H	Undergraduate

Course Description
Honors Introduction to Film

ENGL241H - H:Explorations in World Lit

Course Information

Course Title
H:Explorations in World Lit

Subject code	Course Number	Academic Level
ENGL	241H	Undergraduate

Course Description
Investigates connections among a selection of representative literary works from at least three different linguistic traditions and various historical periods in both Western and non-Western cultures. Prereq: ENGL 110, Member University Honors College or 3.35 GPA.

Gateway Stage Labels
Creative Exploration (CE)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

University Honors College or 3.35 GPA

Must be a member of the the University Honors College or have a 3.35 GPA.

ENGL242 - Reading Our World:

Course Information

Course Title
Reading Our World:

Subject code	Course Number	Academic Level
ENGL	242	Undergraduate

Course Description
Applies critical lenses from fields of English Studies to a selection of texts on a particular theme. Engages students in interpreting current themes across cultures and/or time periods. Students will explore the topic from different perspectives by learning methods for critiquing texts, including new media. Themes/topics determined by instructor.

Gateway Stage Labels
Creative Exploration (CE), Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL242H - Hnrs: Reading Our World:

Course Information

Course Title
Hnrs: Reading Our World:

Subject code	Course Number	Academic Level
ENGL	242H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL250H - Hon: Press & Society

Course Information

Course Title
Hon: Press & Society

Subject code	Course Number	Academic Level
ENGL	250H	Undergraduate

ENGL279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ENGL	279	Undergraduate

Course Description
Experimental

ENGL292 - Science Fiction

Course Information

Course Title
Science Fiction

Subject code	Course Number	Academic Level
ENGL	292	Undergraduate

Course Description
The nature and development of science fiction from Jules Verne and H. G. Wells to major writers of the present, with emphasis on methods of extrapolation - descriptions of consistent, altered frames of references based on scientific knowledge and historical, social or cultural patterns. Emphasis on multiple lines of inquiry or analysis. Prereq: ENGL 110.

Gateway Stage Labels
Creative Exploration (CE)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL292H - Hon: Science Fiction

Course Information

Course Title
Hon: Science Fiction

Subject code	Course Number	Academic Level
ENGL	292H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL300 - English Internship

Course Information

Course Title
English Internship

Subject code	Course Number	Academic Level
ENGL	300	Undergraduate

Course Description
A variety of options are available for English majors to apply their fields of study in professional contexts. Prereq: ENGL 110, 24 s.h. and permission of COOP coordinator.An (AW) indicates that the course counts toward the advanced writing part of the general education requirements.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion

Earn at least 24 credits

COOP Coordinator Permission

Must have permission of COOP Coordinator.

ENGL315 - Advanced Reporting

Course Information

Course Title
Advanced Reporting

Subject code	Course Number	Academic Level
ENGL	315	Undergraduate

Course Description
A course in reporting news and features that emphasizes experience in the field completing authentic journalistic assignments. Includes the study of traditional and nontraditional journalistic forms. Prereq: ENGL 313.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL321 - Modern Syntax

Course Information

Course Title
Modern Syntax

Subject code	Course Number	Academic Level
ENGL	321	Undergraduate

Course Description
Analysis of the syntax of American English. Prereq: ENGL 110 and 220 or 221 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL 220 or ENGL 221 or ENGL 221H

Complete ANY of the following Courses:
- ENGL220 - Introduction to Language Study
- ENGL221 - Intro to Linguistic Analysis
- ENGL221H - Hon: Intro to Linguistic Analysis

Or must have permission of instructor.

ENGL322 - History of English

Course Information

Course Title
History of English

Subject code	Course Number	Academic Level
ENGL	322	Undergraduate

Course Description
Examines language change and its effects on the development of English phonology, morphology, syntax and semantics. Prereq: ENGL 110.

Gateway Stage Labels
Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL322H - Hon: History of English

Course Information

Course Title
Hon: History of English

Subject code	Course Number	Academic Level
ENGL	322H	Undergraduate

Gateway Stage Labels
Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL331 - Special Topics in Literature

Course Information

Course Title
Special Topics in Literature

Subject code	Course Number	Academic Level
ENGL	331	Undergraduate

Course Description
Thematic investigation of a significant literary topic, major author, or literary style. May be taken more than once for credit since the topic varies. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL333 - African-American Literature 1

Course Information

Course Title
African-American Literature 1

Subject code	Course Number	Academic Level
ENGL	333	Undergraduate

Course Description
Major writers and genres to circa 1935, with emphasis on the cultural roots and aesthetics within the American literary tradition. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL333H - Hnrs:African-American Literature 1

Course Information

Course Title
Hnrs:African-American Literature 1

Subject code	Course Number	Academic Level
ENGL	333H	Undergraduate

Course Description
Honors African American Literature 1

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL334 - African American Literature 2

Course Information

Course Title
African American Literature 2

Subject code	Course Number	Academic Level
ENGL	334	Undergraduate

Course Description
Major writers from circa 1935 to the present, with emphasis on literary movements, critical discourses and the relationship between literature and its historical contexts. May use thematic approach. Covers various genres, including oral tradition. Considers the black experience in the U.S. in an interdisciplinary context that analyzes cultural production. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL334H - Hnrs:African American Literature 2

Course Information

Course Title
Hnrs:African American Literature 2

Subject code	Course Number	Academic Level
ENGL	334H	Undergraduate

Course Description
Honors African American Literature 2

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL336 - New Dimensions to World Lit

Course Information

Course Title
New Dimensions to World Lit

Subject code	Course Number	Academic Level
ENGL	336	Undergraduate

Course Description
Introduces students to non-Western literary traditions through a theme selected by the instructor. Students will increase their awareness and appreciation of cultural differences and the art of literature. ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL337 - Women Writers in Middle Ages

Course Information

Course Title
Women Writers in Middle Ages

Subject code	Course Number	Academic Level
ENGL	337	Undergraduate

Course Description
Investigates the work of women who lived and wrote in the medieval period, primarily (though not entirely) in Europe. Prereq: COMM 100, ENGL 110, junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ENGL338 - Folklore and Literature

Course Information

Course Title
Folklore and Literature

Subject code	Course Number	Academic Level
ENGL	338	Undergraduate

Course Description
Folklore, with emphasis on literature, history, region, gender and class. Ballads, tales, riddles, legends, proverbs and other forms from American, English and international sources. Includes field collection projects. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL338H - H:Folklore and Literature

Course Information

Course Title
H:Folklore and Literature

Subject code	Course Number	Academic Level
ENGL	338H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL343 - Fiction Seminar

Course Information

Course Title
Fiction Seminar

Subject code	Course Number	Academic Level
ENGL	343	Undergraduate

Course Description
Seminar with emphasis on fiction as a literary genre. Examines fictional narratives, including the novel, creative nonfiction, novella and short story. Reflects comparative and/or transnational perspectives. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL347 - Ethnicity in Film

Course Information

Course Title
Ethnicity in Film

Subject code	Course Number	Academic Level
ENGL	347	Undergraduate

Course Description
Examines issues of ethnicity in cinema. Designed to enhance understanding of the relationships between the ethnic experience and film's representations of it. Studied ethnicities (African Americans, Latinx, etc.) vary by semester. Prereq: COMM 100, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM100 or COMM100H and WRIT 311 or WRIT 312 or WRIT 316

Complete ALL of the following Courses:

- COMM100 - Fundamentals of Speech
  OR COMM100H - Hnrs:Fundamentals of Speech
- WRIT311 - Writing in Contexts
  OR WRIT312 - Technical Writing
  OR WRIT316 - Business Writing

ENGL363 - Applied Linguistics

Course Information

Course Title
Applied Linguistics

Subject code	Course Number	Academic Level
ENGL	363	Undergraduate

Course Description
Studies the development and use of language in the real world, focusing on language-related issues and ways to improve on these issues in a range of contexts. Prereq: ENGL 110

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL110 Or ENGL110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL363H - H:Applied Linguistics

Course Information

Course Title
H:Applied Linguistics

Subject code	Course Number	Academic Level
ENGL	363H	Undergraduate

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL110 Or ENGL110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL364 - Teaching English as a Second Language

Course Information

Course Title
Teaching English as a Second Language

Subject code	Course Number	Academic Level
ENGL	364	Undergraduate

Course Description
Approaches, methods and techniques appropriate to teaching standard English to speakers of other languages. Includes international tutoring opportunities. Prereq: ENGL 110 and permission of instructor. This course counts towards the ESL/Linguistics minor and option programs offered by the Department of English and World Languages; however, it does not count towards EMEE (Early, Middle, and Exceptional Education) students' ELD/ESL pedagogy requirement or the ESL minor program offered by the Department of EMEE.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL110 Or ENGL110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ENGL	379	Undergraduate

Course Description
Experimental

ENGL400 - English Internship

Course Information

Course Title
English Internship

Subject code	Course Number	Academic Level
ENGL	400	Undergraduate

Course Description
A variety of options are available for English majors to apply their fields of study in professional contexts. Prereq: ENGL 110, 24 s.h. and permission of COOP coordinator.An (AW) indicates that the course counts toward the advanced writing part of the general education requirements.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion

Earn at least 24 credits

COOP Coordinator Permission

Must have permission of COOP Coordinator.

ENGL401 - Old Eng Lang and Literature

Course Information

Course Title
Old Eng Lang and Literature

Subject code	Course Number	Academic Level
ENGL	401	Undergraduate

Course Description
An introduction to the structure of the Old English language and to Old English prose and poetry. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL402 - Middle Eng Lang and Literature

Course Information

Course Title
Middle Eng Lang and Literature

Subject code	Course Number	Academic Level
ENGL	402	Undergraduate

Course Description
An introduction to the structure of the Middle English language and to Middle English prose and poetry exclusive of Chaucer. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL403 - Chaucer

Course Information

Course Title
Chaucer

Subject code	Course Number	Academic Level
ENGL	403	Undergraduate

Course Description
Chaucer's life, times and important works; study of the language and pronunciation. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL404 - The English Renaissance

Course Information

Course Title
The English Renaissance

Subject code	Course Number	Academic Level
ENGL	404	Undergraduate

Course Description
Nondramatic literature during the late 15th and 16th centuries from "Morte d'Artur" through the early 17th century, prose and verse during threigns of Lancaster, York, Tudor. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL405 - Shakespeare

Course Information

Course Title
Shakespeare

Subject code	Course Number	Academic Level
ENGL	405	Undergraduate

Course Description
A study of several of Shakespeares plays and some of his non-dramatic poetry, set in the historical, cultural, social, and literary context of the Renaissance, with special attention to the enduring, abiding concerns of human nature. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL405H - Hnrs:Shakespeare

Course Information

Course Title
Hnrs:Shakespeare

Subject code	Course Number	Academic Level
ENGL	405H	Undergraduate

Course Description
Shakespeare's life, works and times; detailed consideration of major plays. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL406 - 17th Cen Lit Prior Restoration

Course Information

Course Title
17th Cen Lit Prior Restoration

Subject code	Course Number	Academic Level
ENGL	406	Undergraduate

Course Description
Metaphysical and cavalier poetry and other nondramatic literature from 1600 to 1660, exclusive of Miltons poetry. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:
- ENGL 110 and ENGL 237

ENGL407 - Milton

Course Information

Course Title
Milton

Subject code	Course Number	Academic Level
ENGL	407	Undergraduate

Course Description
A study of Miltons major poetry and selected prose works against the background of the Puritan Revolution. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL407H - Hnrs:Milton

Course Information

Course Title
Hnrs:Milton

Subject code	Course Number	Academic Level
ENGL	407H	Undergraduate

Course Description
A study of Milton's major poetry and selected prose works against the background of the Puritan Revolution. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL411 - Romantic Literature

Course Information

Course Title
Romantic Literature

Subject code	Course Number	Academic Level
ENGL	411	Undergraduate

Course Description
Rise of romanticism in later 18th century to the beginning of Victorianism. Emphasis on poetry and criticism between 1798 and 1832. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:
- ENGL 110 and ENGL 237

ENGL412 - Victorian Literature: Madwomen & Decadent Men

Course Information

Course Title
Victorian Literature: Madwomen & Decadent Men

Subject code	Course Number	Academic Level
ENGL	412	Undergraduate

Course Description
Literary figures and their works against social and political backgrounds from the start of Victorias reign through the start of World War I, a period marked by rapid social change impelled by industrialism and imperial expansion. Examines canonical authors (e.g. the Bronts, Charles Darwin, Christina Rossetti, and Oscar Wilde) as well as lesser-known writers (e.g. the early feminist new women and writers who documented the consequences of colonialism). Explores how authors negotiate nineteenth-century anxieties regarding class conflict and the industrial condition of England; shifting conceptions of gender and sexuality; tensions between science and religion; the ethics of imperialism; and evolving theories of the modern arts. Prereq ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL413 - British Literature Since 1914

Course Information

Course Title
British Literature Since 1914

Subject code	Course Number	Academic Level
ENGL	413	Undergraduate

Course Description
Literary figures and works against the background of crisis in the 20th century from the onset of World War I to the present. New movements, attitudes and experimental techniques. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL414 - The British Novel

Course Information

Course Title
The British Novel

Subject code	Course Number	Academic Level
ENGL	414	Undergraduate

Course Description
Studies in the British novel. The course emphasis will vary from semester to semester, focusing on 18th-, 19th- 20th- and/or 21st-century novels. May be taken more than once for credit since the content of the course varies. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL415 - Seminar of British Writers

Course Information

Course Title
Seminar of British Writers

Subject code	Course Number	Academic Level
ENGL	415	Undergraduate

Course Description
Intensive study of the works of selected British writers. May be taken more than once for credit since the content varies. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL416 - The Woman Writer

Course Information

Course Title
The Woman Writer

Subject code	Course Number	Academic Level
ENGL	416	Undergraduate

Course Description
Chronological study of British women writers of poetry, prose, criticism and/or drama. Authors studied varies. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL421 - Early American Literature

Course Information

Course Title
Early American Literature

Subject code	Course Number	Academic Level
ENGL	421	Undergraduate

Course Description
Examination of colonial and federal literature, with some discussion of the beginnings of Romanticism. Special attention to Bradstreet, Taylor, Edwards, Franklin, Wheatley, Brockden Brown, Irving and Cooper. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:
- ENGL 110 and ENGL 237

ENGL422 - The American Renaissance

Course Information

Course Title
The American Renaissance

Subject code	Course Number	Academic Level
ENGL	422	Undergraduate

Course Description
Focuses on Transcendentalism and authors including Hawthorne, Poe, Thoreau, Melville, Emerson, Whitman and Dickinson. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL423 - Development of the Amer Novel

Course Information

Course Title
Development of the Amer Novel

Subject code	Course Number	Academic Level
ENGL	423	Undergraduate

Course Description
Narrative fiction from early and middle parts of 19th century to fin de sicle. Emphasizes the Romance, the Gothic tale and the rise of the novel. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL424 - Realism and Naturalism to 1920

Course Information

Course Title
Realism and Naturalism to 1920

Subject code	Course Number	Academic Level
ENGL	424	Undergraduate

Course Description
Studies stylistic, thematic and philosophic issues relating to literary realism and naturalism. Selections from writers including Twain, Howells, James, Crane, Norris, London and Dreiser. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL425 - Modern Amer Fiction, 1920-1945

Course Information

Course Title
Modern Amer Fiction, 1920-1945

Subject code	Course Number	Academic Level
ENGL	425	Undergraduate

Course Description
Important American fiction writers of the twentieth century with emphasis on major developments in ideas and techniques. Special attention to Anderson, Fitzgerald, Hemingway, Faulkner, Steinbeck and others. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL426 - Modern American Drama

Course Information

Course Title
Modern American Drama

Subject code	Course Number	Academic Level
ENGL	426	Undergraduate

Course Description
American drama from World War I to the present, with emphasis on significant developments in styles and techniques explored by such dramatists as O'Neill, Hellman, Williams, Miller, Albee and others. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL427 - Modern American Poetry

Course Information

Course Title
Modern American Poetry

Subject code	Course Number	Academic Level
ENGL	427	Undergraduate

Course Description
Study of major American poets, including Eliot, Pound, Frost, Stevens, Williams and others; or of a school such as the Imagists, the Fugitives and others. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL428 - Contemporary Amer Lit: 1945-P

Course Information

Course Title
Contemporary Amer Lit: 1945-P

Subject code	Course Number	Academic Level
ENGL	428	Undergraduate

Course Description
Major trends in poetry, fiction and drama since World War II. Emphasizes prominent authors including Barth, Bellow, Mailer, Oates, Updike, Plath, Olson, Shepard, Mamet and others. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL429 - Smnr Sel Am Auth:

Course Information

Course Title
Smnr Sel Am Auth:

Subject code	Course Number	Academic Level
ENGL	429	Undergraduate

Course Description
Intensive study of the works of selected American authors. May be taken more than once for credit. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL429H - Hnrs:Smnr Sel Am Auth:

Course Information

Course Title
Hnrs:Smnr Sel Am Auth:

Subject code	Course Number	Academic Level
ENGL	429H	Undergraduate

Course Description
Hnrs:Sem in Select Amer Authrs

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL430 - Ethnic American Lit Since 1945

Course Information

Course Title
Ethnic American Lit Since 1945

Subject code	Course Number	Academic Level
ENGL	430	Undergraduate

Course Description
Examines representative works of various ethnic groups in contemporary America. Develops an appreciation for and a critical understanding of multiculturalism and social tension reflected in contemporary ethnic literature. Discusses complex issues, such as race, ethnicity, power, gender and identity, that are involved in the process of Americanization. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ENGL430H - Hon: Ethnic American Lit Since 1945

Course Information

Course Title
Hon: Ethnic American Lit Since 1945

Subject code	Course Number	Academic Level
ENGL	430H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ENGL431 - Comparative Literature

Course Information

Course Title
Comparative Literature

Subject code	Course Number	Academic Level
ENGL	431	Undergraduate

Course Description
Explores works from several literary traditions in world literature, using comparative and/or transnational perspectives. Examines correspondences between literary works in their historical and cultural contexts. May focus on a theme, a historical period or an aesthetic movement.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL431H - Hnrs: Comparative Literature

Course Information

Course Title
Hnrs: Comparative Literature

Subject code	Course Number	Academic Level
ENGL	431H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL435 - Journlsm Thru Women's Prspctvs

Course Information

Course Title
Journlsm Thru Women's Prspctvs

Subject code	Course Number	Academic Level
ENGL	435	Undergraduate

Course Description
Literary journalism, a genre that combines literary techniques with journalistic techniques, that focuses on the circumstances of women from a variety of cultures as writers and subjects of the genre. Offered infrequently. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ENGL441 - Poetry

Course Information

Course Title
Poetry

Subject code	Course Number	Academic Level
ENGL	441	Undergraduate

Course Description
Seminar with emphasis on poetry as a genre. Topics may include prosody, poetry in translation, contemporary trends in verse and schools of poetry. Reflects comparative and/or transnational perspectives. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL441H - Hnrs:Poetry

Course Information

Course Title
Hnrs:Poetry

Subject code	Course Number	Academic Level
ENGL	441H	Undergraduate

Course Description
Seminar with emphasis on poetry as a genre. Topics may include prosody, poetry in translation, contemporary trends in verse and schools of poetry. Reflects comparative perspective. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL442 - Drama

Course Information

Course Title
Drama

Subject code	Course Number	Academic Level
ENGL	442	Undergraduate

Course Description
Seminar with emphasis on drama as a literary genre. Emphasis on masterpieces of drama in the Western world. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:
- ENGL 110 and ENGL 237

ENGL445 - Short Story:Hist,Devel,Genres

Course Information

Course Title
Short Story:Hist,Devel,Genres

Subject code	Course Number	Academic Level
ENGL	445	Undergraduate

Course Description
Covers history, development and genres of the short story, with a focus on matters of style, interdisciplinary dimensions, historico-cultural context and critical approaches. Offered annually. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL445H - Hnrs: Short Story:Hist,Devel,Genres

Course Information

Course Title
Hnrs: Short Story:Hist,Devel,Genres

Subject code	Course Number	Academic Level
ENGL	445H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL451 - Literary Criticism

Course Information

Course Title
Literary Criticism

Subject code	Course Number	Academic Level
ENGL	451	Undergraduate

Course Description
Seminar on major critics and theorists from Plato and Aristotle to selected modern critics. Explores representative critical trends and controversies. Prereq: ENGL 110, 237.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 237

Complete ALL of the following Course Sets:

- ENGL 110 and ENGL 237

ENGL460 - Teach ESL Listening/ Speaking

Course Information

Course Title
Teach ESL Listening/Speaking

Subject code	Course Number	Academic Level
ENGL	460	Undergraduate

Course Description
Gain a deeper understanding of the nature of spoken English and investigate current approaches to the teaching of ESL listening and speaking skills. Learn effective techniques and ideas for teaching ESL listening and speaking; also learn to integrate listening and speaking with other language skills in ESL teaching. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL462 - Dialects of American English

Course Information

Course Title
Dialects of American English

Subject code	Course Number	Academic Level
ENGL	462	Undergraduate

Course Description
Study of the origin and the features of the regional and social dialects of American English. Prereq: COMM 100, ENGL 110 and junior status, and one course in linguistics or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Linguistics Course or Instructor Permission

Complete one course in linguistics or permission from instructor.

ENGL462H - Hnrs:Dialects of American English

Course Information

Course Title
Hnrs:Dialects of American English

Subject code	Course Number	Academic Level
ENGL	462H	Undergraduate

Course Description
Honors Dialects of American English

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Linguistics Course or Instructor Permission

Complete one course in linguistics or permission from instructor.

ENGL465 - Special Topics in Lang: Sem

Course Information

Course Title
Special Topics in Lang: Sem

Subject code	Course Number	Academic Level
ENGL	465	Undergraduate

Course Description
Investigation of topics in linguistic science, may include generative metrics, morphophonics, tagmemic analysis; investigation of English language problems selected by students in conference with instructor. May be taken more than once for credit as topic varies. Prereq: ENGL 110 and 3 hours in English language study or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

English Language Study Credits

Earn at least 3 credits
Or must have permission of instructor.

ENGL479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ENGL	479	Undergraduate

Course Description
Experimental

ENGL481 - History Of Film

Course Information

Course Title
History Of Film

Subject code	Course Number	Academic Level
ENGL	481	Undergraduate

Course Description
Viewing/discussion of influential narrative films from early silents to recent independents. Technology-intensive course. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL482 - Film and American Society

Course Information

Course Title
Film and American Society

Subject code	Course Number	Academic Level
ENGL	482	Undergraduate

Course Description
Viewing/discussion of significant American films in relation to social and historical context. Technology-intensive course. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL483 - Politics, Film & Electronic Media

Course Information

Course Title
Politics, Film & Electronic Media

Subject code	Course Number	Academic Level
ENGL	483	Undergraduate

Course Description
Exploration of the relationships between media, history, politics and people during the 20th and 21st centuries. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ENGL483H - H:Politics, Film & Electronic Media

Course Information

Course Title
H:Politics, Film & Electronic Media

Subject code	Course Number	Academic Level
ENGL	483H	Undergraduate

Course Description
Honors Politics, Film and Electronic Media

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ENGL484 - Sci Fiction, Technology & Film

Course Information

Course Title
Sci Fiction, Technology & Film

Subject code	Course Number	Academic Level
ENGL	484	Undergraduate

Course Description
Explores the relationships between film, technology, the environment, and society during the twentieth and twenty-first centuries. Discusses technological changes and human reactions to them, including the shifting relationships between technology, race, class, gender, and power. Prereq: COMM 100 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

ENGL486 - Teaching Reading & Literature to Young Adults

Course Information

Course Title
Teaching Reading & Literature to Young Adults

Subject code	Course Number	Academic Level
ENGL	486	Undergraduate

Course Description
Inquiries into reading and literature in middle and high school classrooms. Special emphases on strategies for motivation, engagement and support in reading; creating appropriate learning contexts; expanding student choice and book selection; and alternative methods of assessing reading/ literature achievement. Required for B.S.Ed. in English. Course should be taken prior to Advanced Professional Studies block (preferably as juniors or seniors). Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL487 - Seminar in Teaching Writing

Course Information

Course Title
Seminar in Teaching Writing

Subject code	Course Number	Academic Level
ENGL	487	Undergraduate

Course Description
Explores the nature of writing instruction by balancing three stances: that of the writer, teacher and researcher. Engages students in a writers workshop, developing inquiry through thoughtful discussions about writing pedagogy and by exploring new teaching processes in a case study of an adolescent writer. Must be taken prior to APS semester. Prereq or Coreq: ENGL 110, 311.

Simple Requirements

Completed Course Prerequisites or Corequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and WRIT 311 or WRIT 311

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- WRIT311 - Writing in Contexts
  OR WRIT311 - Writing in Contexts

ENGL487H - Hon: Seminar in Teaching Writing

Course Information

Course Title
Hon: Seminar in Teaching Writing

Subject code	Course Number	Academic Level
ENGL	487H	Undergraduate

Course Description
Honors Seminar in Teaching Writing

Simple Requirements

Completed Course Prerequisites or Corequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and WRIT 311 or WRIT 311

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- WRIT311 - Writing in Contexts
  OR WRIT311 - Writing in Contexts

ENGL488 - Teaching Secondary School English

Course Information

Course Title
Teaching Secondary School English

Subject code	Course Number	Academic Level
ENGL	488	Undergraduate

Course Description
Specialized problems of English instruction. Required for B.S.Ed. in English. Prereq: ENGL 486, 487, successful completion of the social and psychological foundations block and admission to Advanced Professional Studies. Must be taken during semester immediately prior to SEED 461, Student Teaching and Seminar. Must be taken concurrently with SEED 321.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 486 and ENGL 487 or ENGL 487H

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- ENGL486 - Teaching Reading & Literature to Young Adults
- ENGL487 - Seminar in Teaching Writing **OR** ENGL487H - Hon: Seminar in Teaching Writing

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Other Requirement

Successful completion of the social and psychological foundations block.

Course Corequisites

Type
Corequisite

SEED 321

Enroll in the following Courses:
- SEED321 - Issues in Secondary Education

ENGL488H - H: Teaching Secondary School English

Course Information

Course Title
H: Teaching Secondary School English

Subject code	Course Number	Academic Level
ENGL	488H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ENGL 486 and ENGL 487 or ENGL 487H

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- ENGL486 - Teaching Reading & Literature to Young Adults
- ENGL487 - Seminar in Teaching Writing **OR** ENGL487H - Hon: Seminar in Teaching Writing

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Other Requirement

Successful completion of the social and psychological foundations block.

Course Corequisites

Type
Corequisite

SEED 321

Enroll in the following Courses:
- SEED321 - Issues in Secondary Education

ENGL489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ENGL	489	Undergraduate

Course Description
For information on independent study and departmental honors, see your adviser.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL498 - Independent Study in English

Course Information

Course Title
Independent Study in English

Subject code	Course Number	Academic Level
ENGL	498	Undergraduate

Course Description
For information on independent study and departmental honors, see your adviser.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
ENGL	499	Undergraduate

Course Description
For information on independent study and departmental honors, see your adviser.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL500 - Internship in English

Course Information

Course Title
Internship in English

Subject code	Course Number	Academic Level
ENGL	500	Graduate

Course Description
Co-Op Ed Experience in English

ENGL579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ENGL	579	Graduate

Course Description
Experimental

ENGL581 - Genres in Poetry Writing

Course Information

Course Title
Genres in Poetry Writing

Subject code	Course Number	Academic Level
ENGL	581	Graduate

Course Description
An immersion in poetry writing, often in workshop format, with special attention to the theories and practices of poetry's construction, for example how and why verse is generated in distinctive ways. Instructors will choose the genre that will be the focus of each section.

ENGL586 - Special Topics in English

Course Information

Course Title
Special Topics in English

Subject code	Course Number	Academic Level
ENGL	586	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods to be used will vary according to the needs of the students and faculty involved. Offered periodically.

ENGL587 - Special Topics in English

Course Information

Course Title
Special Topics in English

Subject code	Course Number	Academic Level
ENGL	587	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods to be used will vary according to the needs of the students and faculty involved. Offered periodically.

ENGL588 - Special Topics in English

Course Information

Course Title
Special Topics in English

Subject code	Course Number	Academic Level
ENGL	588	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods to be used will vary according to the needs of the students and faculty involved. Offered periodically.

ENGL589 - Special Topics in English

Course Information

Course Title
Special Topics in English

Subject code	Course Number	Academic Level
ENGL	589	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods to be used will vary according to the needs of the students and faculty involved. Offered periodically.

ENGL601 - Old English Language and Lit

Course Information

Course Title
Old English Language and Lit

Subject code	Course Number	Academic Level
ENGL	601	Graduate

Course Description
An introduction to the structure of Old English and reading in Old English prose and poetry. Offered periodically.

ENGL602 - Middle English

Course Information

Course Title
Middle English

Subject code	Course Number	Academic Level
ENGL	602	Graduate

Course Description
Language and literature of England from 1100 to 1500, exclusive of Chaucer, with attention to changes in the language, literature and culture, especially between 1066 and 1509. Offered periodically.

ENGL603 - Chaucer

Course Information

Course Title
Chaucer

Subject code	Course Number	Academic Level
ENGL	603	Graduate

Course Description
Important works by Chaucer, with attention to the religious, philosophical, political and literary characteristics of his time; study of the language, pronunciation and versification; and important criticism. Offered annually.

ENGL604 - Renaissance in English

Course Information

Course Title
Renaissance in English

Subject code	Course Number	Academic Level
ENGL	604	Graduate

Course Description
Renaissance spirit in England, demonstrated by nondramatic literature. Offered biennially.

ENGL605 - Shakespeare

Course Information

Course Title
Shakespeare

Subject code	Course Number	Academic Level
ENGL	605	Graduate

Course Description
Critical and historical examination of Shakespeares plays and poetry, and introduction to major critics and sources. Offered every semester.

ENGL606 - Eng Lit in the Early 17th Cent

Course Information

Course Title
Eng Lit in the Early 17th Cent

Subject code	Course Number	Academic Level
ENGL	606	Graduate

Course Description
Major English works, with attention to prose style, forms and style in verse; political events and developments in religious thought; intellectual climate of period 1600-1660. Offered biennially.

ENGL607 - Milton

Course Information

Course Title
Milton

Subject code	Course Number	Academic Level
ENGL	607	Graduate

Course Description
Miltons poetry and prose, in relation to religious, philosophical and critical tendencies of the Puritan period. Offered annually.

ENGL609 - English Novel of the 18th Cent

Course Information

Course Title
English Novel of the 18th Cent

Subject code	Course Number	Academic Level
ENGL	609	Graduate

Course Description
Emphasis on the rise of the English novel as an art form. Reading list varies. Offered periodically.

ENGL610 - British Novel of the 19th Cent

Course Information

Course Title
British Novel of the 19th Cent

Subject code	Course Number	Academic Level
ENGL	610	Graduate

Course Description
Study of the Victorian novel as an art form and as expression of the general culture of a period. Reading list varies. Offered periodically.

ENGL611 - Romantic Movement in England

Course Information

Course Title
Romantic Movement in England

Subject code	Course Number	Academic Level
ENGL	611	Graduate

Course Description
Main currents in the literature of the Romantic Age. Emphasis on Wordsworth, Coleridge, Byron, Shelley and Keats. Attention paid to Burns, Blake and major prose writers of the period. Offered periodically.

ENGL612 - Literature of Victorian Englnd

Course Information

Course Title
Literature of Victorian Englnd

Subject code	Course Number	Academic Level
ENGL	612	Graduate

Course Description
Victorian culture as interpreted by leading poets and prose writers who came to prominence between 1830 and 1900. Emphasis will be placed on such figures as Carlyle, Mill, Newman, Tennyson, Browning, Arnold, Ruskin, the Rossettis, Swinburne, Carroll, Hopkins, Hardy and Wilde. Offered periodically.

ENGL613 - Modern British Fiction

Course Information

Course Title
Modern British Fiction

Subject code	Course Number	Academic Level
ENGL	613	Graduate

Course Description
Examination of the novel and story since 1900. Focus on experimental narrative techniques in the fiction of Conrad, Joyce, Lawrence, Forster, Woolf and Ford. Offered periodically.

ENGL614 - The Profession of English Studies

Course Information

Course Title
The Profession of English Studies

Subject code	Course Number	Academic Level
ENGL	614	Graduate

Course Description
English studies represents a wide range of scholarly and pedagogical interests and practices. This course will focus on the history and present state of English studies as an academic discipline or field.

ENGL615 - Sem Sel Brit Writ:

Course Information

Course Title
Sem Sel Brit Writ:

Subject code	Course Number	Academic Level
ENGL	615	Graduate

Course Description
Intensive study of selected figures; investigation of primary and secondary sources; special problems in scholarly research. Writers studied will vary. Offered periodically.

ENGL616 - The Documentary

Course Information

Course Title
The Documentary

Subject code	Course Number	Academic Level
ENGL	616	Graduate

Course Description
This course examines the art of interpreting, understanding, appreciating, and analyzing nonfiction film. It examines both rhetorical and narrative devices in nonfiction film as well as ethical considerations and ways to interpret a range of nonfiction cinematic genres. Auteur studies as well as film theories contribute to participants' understanding of this important medium.

ENGL621 - Early American Lit to 1830

Course Information

Course Title
Early American Lit to 1830

Subject code	Course Number	Academic Level
ENGL	621	Graduate

Course Description
Examination of Colonial and Federal literature, with some discussion of the beginnings of Romanticism. Special attention to Bradstreet, Taylor, Edwards, Franklin, Wheatley, Brockden, Brown, Irving and Cooper. Offered annually.

ENGL622 - The Amer Renaissance: 1830-85

Course Information

Course Title
The Amer Renaissance: 1830-85

Subject code	Course Number	Academic Level
ENGL	622	Graduate

Course Description
Focus on Transcendentalism and such figures as Hawthorne, Poe, Thoreau, Melville, Emerson, Whitman and Dickinson. Offered annually.

ENGL623 - Dev of the Amer Novel: 19th C

Course Information

Course Title
Dev of the Amer Novel: 19th C

Subject code	Course Number	Academic Level
ENGL	623	Graduate

Course Description
Narrative fiction from early and middle parts of 19th century to fin de sicle; emphasis on the Romance, the Gothic tale, and the rise of the novel. Offered periodically.

ENGL624 - Realism and Naturalism to 1920

Course Information

Course Title
Realism and Naturalism to 1920

Subject code	Course Number	Academic Level
ENGL	624	Graduate

Course Description
A study of stylistic, thematic and philosophic issues relating to literary realism and naturalism. Selections from writers such as Twain, Howells, Wharton, James, Crane, Norris, London and Dreiser. Offered periodically.

ENGL625 - Modern Amer Fiction, 1920-1945

Course Information

Course Title
Modern Amer Fiction, 1920-1945

Subject code	Course Number	Academic Level
ENGL	625	Graduate

Course Description
Important American fiction writers of the 20th century, with emphasis on major developments in ideas and techniques. Special attention to Anderson, Cather, Wright, Hurston, Fitzgerald, Hemingway, Faulkner, Steinbeck and others. Offered annually.

ENGL626 - Modern American Drama

Course Information

Course Title
Modern American Drama

Subject code	Course Number	Academic Level
ENGL	626	Graduate

Course Description
American drama from World War I to the present, with emphasis on significant developments in the styles and techniques explored by such dramatists as ONeill, Hellman, Williams, Miller, Albee, Hansberry and others. Offered annually.

ENGL627 - Modern American Poetry

Course Information

Course Title
Modern American Poetry

Subject code	Course Number	Academic Level
ENGL	627	Graduate

Course Description
In-depth study of several major American poets, including Eliot, Pound, Millay, Moore, Hughes, Frost, Stevens, Williams and others. Offered periodically.

ENGL628 - Contemporary Amer Lit: 1945-Pr

Course Information

Course Title
Contemporary Amer Lit: 1945-Pr

Subject code	Course Number	Academic Level
ENGL	628	Graduate

Course Description
Major trends in poetry, fiction and drama since World War II, with emphasis on such prominent figures as Barth, Bellow, Mailer, Oates, Updike, Plath, Olson, Shepard, Mamet and others. Offered annually.

ENGL629 - Smnr Sel Am Auth:

Course Information

Course Title
Smnr Sel Am Auth:

Subject code	Course Number	Academic Level
ENGL	629	Graduate

Course Description
Intensive study of the works of selected American authors. May be taken more than once for credit. Offered periodically.

ENGL630 - American Ethnic Literature

Course Information

Course Title
American Ethnic Literature

Subject code	Course Number	Academic Level
ENGL	630	Graduate

Course Description
A study of the representative literary works of various ethnic groups in contemporary America. Designed to develop an appreciation for and a critical understanding of multiculturalism, the course will examine the cultural plurality and social tension reflected in contemporary ethnic literature and discuss complex issues, such as race, ethnlcity, power, gender, and identity that are involved in the process of Americanization.

ENGL631 - Comparative Literature 1

Course Information

Course Title
Comparative Literature 1

Subject code	Course Number	Academic Level
ENGL	631	Graduate

Course Description
Foundations of modernism in world literature. Symbolism, Aestheticism, Decadence. Comparative approach to the study of literature, from Poe to Baudelaire to Pater, Sartre, Tolstoy, T.S. Eliot, Lorca, Unamuno and others. Offered periodically.

ENGL641 - Poetry

Course Information

Course Title
Poetry

Subject code	Course Number	Academic Level
ENGL	641	Graduate

Course Description
The nature of poetry as genre: content as an extension of form; form as an extension of content. Approached through creative writing processes and practices. Offered periodically.

ENGL642 - Drama

Course Information

Course Title
Drama

Subject code	Course Number	Academic Level
ENGL	642	Graduate

Course Description
Drama as a literary genre; detailed study of specimens of drama of all types and periods. Approached through creative writing processes and practices. Offered periodically.

ENGL643 - Fiction

Course Information

Course Title
Fiction

Subject code	Course Number	Academic Level
ENGL	643	Graduate

Course Description
Fiction as a literary genre; in-depth study of specific works of various types and periods; emphasis on specimens of fiction from around the world. Approached through creative writing processes and practices. Offered periodically.

ENGL644 - Modern British Poetry

Course Information

Course Title
Modern British Poetry

Subject code	Course Number	Academic Level
ENGL	644	Graduate

Course Description
Forms, techniques and schools of 20th-century British poetry. Emphasis on the major poets and representative contemporary poets. Offered periodically.

ENGL645 - The Short Story

Course Information

Course Title
The Short Story

Subject code	Course Number	Academic Level
ENGL	645	Graduate

Course Description
The rise and development of the short story as a literary genre. Approached through creative writing processes and practices. Offered periodically.

ENGL651 - Literary Criticism

Course Information

Course Title
Literary Criticism

Subject code	Course Number	Academic Level
ENGL	651	Graduate

Course Description
Origin and development of literary criticism; the splintering of critical approaches and methodologies (e.g., psychological, sociological, linguistic, archetypal and mythopoeic approaches); current developments such as phenomenology and structuralism; deconstruction; feminist criticism, etc. Offered annually.

ENGL660 - Tchg ESL Listening and Speakng

Course Information

Course Title
Tchg ESL Listening and Speakng

Subject code	Course Number	Academic Level
ENGL	660	Graduate

Course Description
Gain a deeper understanding of the nature of spoken English and investigate current approaches to the teaching of ESL listening and speaking skills. Learn effective techniques and teaching ideas for ESL listening and speaking. Also learn the integration of listening and speaking with other language skills in ESL teaching. Note: This course counts toward the M.A. or M.Ed. degree in English, but not toward the ESL certification or the BSE Chapter 49-2 ESL requirement. Prereq: ENGL 110. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

ENGL661 - Semnr in Transformational Ling

Course Information

Course Title
Semnr in Transformational Ling

Subject code	Course Number	Academic Level
ENGL	661	Graduate

Course Description
An introduction to the transformational-generative approach to language analysis. The primary focus of the course is syntax, although the semantic and phonological components of grammar are also examined. Offered periodically.

ENGL662 - Dialects of American English

Course Information

Course Title
Dialects of American English

Subject code	Course Number	Academic Level
ENGL	662	Graduate

Course Description
An investigation of the nature of dialectal and stylistic variation in American English, focusing on selected problems and issues of recent research in linguistic geography and sociolinguistics. Offered periodically.

ENGL663 - Applied Linguistics

Course Information

Course Title
Applied Linguistics

Subject code	Course Number	Academic Level
ENGL	663	Graduate

Course Description
Applications of current linguistic theory to the study and teaching of a variety of language-related subject matters, including grammar, composition, spelling, second language acquisition, reading and literature. Offered periodically.

ENGL664 - Teaching of Eng as Sec Lang

Course Information

Course Title
Teaching of Eng as Sec Lang

Subject code	Course Number	Academic Level
ENGL	664	Graduate

Course Description
Examination of leading theoretical approaches to second language learning. Methods and techniques useful in developing listening, speaking, reading and writing skills. Opportunities for peer teaching and related application projects. Offered periodically.

ENGL666 - Semnr in Tchng Lit to Adolesc

Course Information

Course Title
Semnr in Tchng Lit to Adolesc

Subject code	Course Number	Academic Level
ENGL	666	Graduate

Course Description
Study of a considerable body of literature suitable for adolescents of varying abilities and backgrounds, and of techniques useful in improving reading skills and developing positive attitudes toward reading. For M.Ed. majors. Offered annually.

ENGL667 - Seminar in Eng Curriculum

Course Information

Course Title
Seminar in Eng Curriculum

Subject code	Course Number	Academic Level
ENGL	667	Graduate

Course Description
Principles and processes of curriculum development and a study of exemplary curricula for English in the middle and secondary schools. For M.Ed. majors. Offered periodically.

ENGL668 - Sem Eng Ed:

Course Information

Course Title
Sem Eng Ed:

Subject code	Course Number	Academic Level
ENGL	668	Graduate

Course Description
Recent research and new directions in English education. Individualized research and study. Seminar presentation of independent investigation. For M.Ed. majors. Offered periodically.

ENGL670 - Film and Media in Sec Classrm

Course Information

Course Title
Film and Media in Sec Classrm

Subject code	Course Number	Academic Level
ENGL	670	Graduate

Course Description
Examination of structures, genres and purposes of both fiction and nonfiction film, television and advertising in the context of the secondary classroom and the ways viewers should read and interpret those media. Students will learn how the effective understanding and analysis of these forms can assist them in a deeper comprehension and construction of print texts. Emphasis will be placed on interpreting these texts as a means of developing 21st-century literacies. Offered in summer.

ENGL677 - Writing Pedagogy

Course Information

Course Title
Writing Pedagogy

Subject code	Course Number	Academic Level
ENGL	677	Graduate

Course Description
Participants learn about writing instruction by engaging in a writers' workshop, via discussions, by studying adolescent writers, by exploring new teaching processes in a case study, and by reading about writing instruction. The purpose is to provide the opportunity for students to become thoughtful and effective teachers of writing, whether in a secondary context, a college or university context or an adult education context. Students work toward this goal by situating themselves in a flexible vantage point: that of the teacher-writer-researcher.

ENGL678 - The Teacher as Writer

Course Information

Course Title
The Teacher as Writer

Subject code	Course Number	Academic Level
ENGL	678	Graduate

Course Description
This course is designed for teachers K-12 who would like to grow as writers. It consists of structured participation in an on-going writing workshop where participants become increasingly sophisticated in their use of writing process strategies, conference and response skills, various genres and styles. The course includes mini-workshops from local writers and is a place where we form a community of writers as we share, listen and grow. Participants experiment with new genres and submit at least one of their pieces for publication.

ENGL679 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ENGL	679	Graduate

Course Description
Experimental

ENGL680 - Digital Portfolio Workshop

Course Information

Course Title
Digital Portfolio Workshop

Subject code	Course Number	Academic Level
ENGL	680	Graduate

Course Description
The Digital Portfolio Workshop requires students to create a professional portfolio using writing and coursework. Students will craft a portfolio that meets their individual and career goals. The workshop includes content strategies that maximize the efficacy of the Digital Portfolio schema.

ENGL686 - Topics In English

Course Information

Course Title
Topics In English

Subject code	Course Number	Academic Level
ENGL	686	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods to be used will vary according to the needs of the students and faculty involved. Offered periodically.

ENGL687 - Topics In English

Course Information

Course Title
Topics In English

Subject code	Course Number	Academic Level
ENGL	687	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods to be used will vary according to the needs of the students and faculty involved. Offered periodically.

ENGL688 - Special Topics in English

Course Information

Course Title
Special Topics in English

Subject code	Course Number	Academic Level
ENGL	688	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods to be used will vary according to the needs of the students and faculty involved. Offered periodically.

ENGL689 - Special Topics In English

Course Information

Course Title
Special Topics In English

Subject code	Course Number	Academic Level
ENGL	689	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not normally covered in regular courses. Special topics to be covered and methods to be used will vary according to the needs of the students and faculty involved. Offered periodically.

ENGL691 - Independent Studies

Course Information

Course Title
Independent Studies

Subject code	Course Number	Academic Level
ENGL	691	Graduate

Course Description
Intensive study of a particular field, curriculum area, or problem in English or English education. Student must petition the chairperson of the English department in writing for permission to take this course and may register for it only twice. Offered periodically.

ENGL692 - Writing Institute

Course Information

Course Title
Writing Institute

Subject code	Course Number	Academic Level
ENGL	692	Graduate

ENGL693 - Writing Institute

Course Information

Course Title
Writing Institute

Subject code	Course Number	Academic Level
ENGL	693	Graduate

ENGL694 - Writing Institute

Course Information

Course Title
Writing Institute

Subject code	Course Number	Academic Level
ENGL	694	Graduate

ENGL695 - Writing Institute

Course Information

Course Title
Writing Institute

Subject code	Course Number	Academic Level
ENGL	695	Graduate

ENGL698 - Research Report

Course Information

Course Title
Research Report

Subject code	Course Number	Academic Level
ENGL	698	Graduate

Course Description
Research Report

ENGL699 - Thesis:

Course Information

Course Title
Thesis:

Subject code	Course Number	Academic Level
ENGL	699	Graduate

Course Description
Thesis

FORL179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
FORL	179	Undergraduate

Course Description
Experimental

FORL279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
FORL	279	Undergraduate

Course Description
Experimental

FORL300 - Co-Op Ed Experience in For Lan

Course Information

Course Title
Co-Op Ed Experience in For Lan

Subject code	Course Number	Academic Level
FORL	300	Undergraduate

Course Description
Co-Op Ed Experience in For Lan

FORL480 - Tchg For Lang in Sec School

Course Information

Course Title
Tchg For Lang in Sec School

Subject code	Course Number	Academic Level
FORL	480	Undergraduate

Course Description
Study of current theories of second language acquisition and methods of teaching foreign languages in elementary and secondary schools. Students will develop techniques for teaching language for proficiency in all skill areas; planning lessons and units; selecting, adapting and developing materials; assessment; and the use of new technologies. Must be taken simultaneously with SEED 321, SEED 340, EDFN 330 and SPED 346. Offered in fall. Prereq: admission to Advanced Professional Studies, SPAN 470 or FREN 470 or GERM 470.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GERM 470 or GERM 470H or FREN 470 or SPAN 470 or SPAN470H

Complete ANY of the following Courses:
- GERM470 - German Linguistics (Inactive)
- GERM470H - H:German Linguistics (Inactive)
- FREN470 - French Linguistics (Inactive)
- SPAN470 - Spanish Linguistics
- SPAN470H - H:Spanish Linguistics

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

SEED 321 or SEED 321H and SEED 340 and EDFN 330 and SPED 346

Enroll in the following Courses:
- SEED321 - Issues in Secondary Education **OR** SEED321H - H: Issues in Secondary Education
- SEED340 - Content Area Literacy for Diverse Classrooms
- EDFN330 - Instructional Technology, Design & Assessment
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings

FORL498 - FORL Independent Study

Course Information

Course Title
FORL Independent Study

Subject code	Course Number	Academic Level
FORL	498	Undergraduate

Course Description
Independent Study for Foreign Languages (no specific language)

FYEX100 - First Year Seminar

Course Information

Course Title
First Year Seminar

Subject code	Course Number	Academic Level
FYEX	100	Undergraduate

Course Description
First-Year Seminar (FYEX) courses are designed to support students' successful transition to university life. These courses use at least one high-impact educational practice to develop and foster skills that will lead to success in college, career, and personal life. Each seminar focuses on a different topic/theme of strong interest to faculty and students. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

HUMN110 - French Fairy Tales

Course Information

Course Title
French Fairy Tales

Subject code	Course Number	Academic Level
HUMN	110	Undergraduate

Course Description
An exploration of a major literary and cultural tradition still greatly influential in modern literature and films. Class will focus on Charles Perrault, the seventeenth century recorder of a number of well-known fairy tales such as Little Riding Hood, Cinderella, and Sleeping Beauty; Madame d'Aulnoy, one of the most prolific French fairy-tale writers of the seventeenth century; and Madame le prince de Beaumont, author of the Beauty and the Beast. Modern adaptations of Perrault's fairy tales in films, literature, music and/or art will be discussed. Finally students will be asked to read articles chosen to represent a wide variety of critical approaches to fairy tales. Class will consist of lectures and interactive activities.

HUMN163 - Latin and Greek Terminology

Course Information

Course Title
Latin and Greek Terminology

Subject code	Course Number	Academic Level
HUMN	163	Undergraduate

Course Description
Latin and Greek components in English words. Study of prefixes, suffixes and roots integrated with the combinative principles, orthography and pronunciation of general and scientific vocabulary. Attention given to the history of the classical element in English. No prior knowledge of Latin and Greek required. Offered infrequently.

HUMN179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
HUMN	179	Undergraduate

Course Description
Experimental

HUMN202 - Classical Mythology

Course Information

Course Title
Classical Mythology

Subject code	Course Number	Academic Level
HUMN	202	Undergraduate

Course Description
Major mythological materials from Greek and Roman civilization. Analysis and interpretation of myth together with its symbolic, allegorical and psychological implications, and its treatment in art and literature from classical to modern times. Offered annually.

HUMN210 - French Literature in English

Course Information

Course Title
French Literature in English

Subject code	Course Number	Academic Level
HUMN	210	Undergraduate

Course Description
Outstanding masterpieces taught in English by an instructor of French. Designed primarily as an elective for nonmajors desirous of enriching their knowledge of foreign literature. Offered periodically. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HUMN210H - Hnrs:French Literature in English

Course Information

Course Title
Hnrs:French Literature in English

Subject code	Course Number	Academic Level
HUMN	210H	Undergraduate

Course Description
Hnrs:French Lit in Translatn

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HUMN220 - German Literature in Transltn

Course Information

Course Title
German Literature in Transltn

Subject code	Course Number	Academic Level
HUMN	220	Undergraduate

Course Description
German masterpieces taught in English by an instructor of German. Designed primarily as an elective for nonmajors with interest in foreign literature. May be selected by B.A. majors with consent of adviser to fulfill humanities course requirements. Offered in fall, spring. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HUMN220H - Hnrs:German Literature in Transltn

Course Information

Course Title
Hnrs:German Literature in Transltn

Subject code	Course Number	Academic Level
HUMN	220H	Undergraduate

Course Description
Hnrs:German Lit in Translatn

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HUMN230 - Amish and Other PA Dutch

Course Information

Course Title
Amish and Other PA Dutch

Subject code	Course Number	Academic Level
HUMN	230	Undergraduate

Course Description
The Amish and other Pennsylvania Germans, their history, culture, language and lifestyle, with emphasis on Lancaster County, PA. Student written and oral reports on historical sites, museums and other subjects. Offered infrequently.

HUMN280 - Spanish Literature in English

Course Information

Course Title
Spanish Literature in English

Subject code	Course Number	Academic Level
HUMN	280	Undergraduate

Course Description
Outstanding Spanish and Spanish-American literary works. Course taught in English by an instructor of Spanish. Offered periodically.

HUMN280H - Hnrs:Spanish Literature in English

Course Information

Course Title
Hnrs:Spanish Literature in English

Subject code	Course Number	Academic Level
HUMN	280H	Undergraduate

Course Description
Hnrs:Spanish Lit in English

HUMN380 - Latino Issues of Identity

Course Information

Course Title
Latino Issues of Identity

Subject code	Course Number	Academic Level
HUMN	380	Undergraduate

Course Description
Critically examines a variety of poetry, fiction, short stories and essays produced by U.S. Latino/a writers and artists. Analysis of films and newspaper clippings related to the Latino experience will be discussed. Texts examined will be approached not as isolated words on a page, but as part of a living culture with a rich historical context. Interdisciplinary in nature, combining literature with history and cultural studies, but also comparative, since the diversity of cultures will be explored under the rubric of Latino, which includes Chicanos, Puerto Ricans, Cubans and Dominicans, among others. Knowledge of Spanish not necessary. Offered periodically. Prereq: COMM 100, ENGL 110, junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

HUMN391 - Topics:

Course Information

Course Title
Topics:

Subject code	Course Number	Academic Level
HUMN	391	Undergraduate

Course Description
In-depth investigation and development of a topic of current interest not covered in regularly scheduled courses. The topics will vary according to the needs and interest of the students and the faculty involved. Specific topics will be identified by the subtitles each time the course is offered. Course may be taken for credit each time the content (subtitle) is different. Offered periodically. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HUMN391H - Topics:

Course Information

Course Title
Topics:

Subject code	Course Number	Academic Level
HUMN	391H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HUMN479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
HUMN	479	Undergraduate

Course Description
Experimental

HUMN498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
HUMN	498	Undergraduate

Course Description
Independent Study for Humanities (Foreign Languages) - non-language area study.

JAPN101 - Elementary Japanese 1

Course Information

Course Title
Elementary Japanese 1

Subject code	Course Number	Academic Level
JAPN	101	Undergraduate

Course Description
Introduction to language and culture. Fundamentals of grammar and syntax. Oral practice, short readings and practice in aural comprehension. Emphasis on learning useful everyday phrases and working toward accuracy in pronunciation. Offered infrequently.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

JAPN102 - Elementary Japanese 2

Course Information

Course Title
Elementary Japanese 2

Subject code	Course Number	Academic Level
JAPN	102	Undergraduate

Course Description
Continuation of JAPN 101; emphasis on more complex syntactical structures while working toward greater proficiency in both productive (speaking and writing) and receptive (reading and listening) skills. Prereq: JAPN 101 or equivalent.

Simple Requirements

Course Prerequisites

Type
Prerequisite

JAPN 101 or equivalent

Complete ANY of the following Courses:
- JAPN101 - Elementary Japanese 1

JAPN179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
JAPN	179	Undergraduate

Course Description
Experimental

JAPN201 - Intermediate Japanese 1

Course Information

Course Title
Intermediate Japanese 1

Subject code	Course Number	Academic Level
JAPN	201	Undergraduate

Course Description
Continuation of JAPN 102. Further development of syntactical and phonological structures. Thematic basis for oral and written communication. Builds on proficiency attained in 101-102 sequence. Prereq: JAPN 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

JAPN 102

Complete ALL of the following Courses:
- JAPN102 - Elementary Japanese 2

JAPN202 - Intermediate Japanese 2

Course Information

Course Title
Intermediate Japanese 2

Subject code	Course Number	Academic Level
JAPN	202	Undergraduate

Course Description
Continuation of JAPN 201. Further development of syntactical and phonological structures. Thematic basis for oral and written communication. Builds on proficiency attained in JAPN 201. Prereq: JAPN 201.

Simple Requirements

Course Prerequisites

Type
Prerequisite

JAPN 201

Complete ALL of the following Courses:
- JAPN201 - Intermediate Japanese 1

LACL490 - Sr Seminar: Lang & Cult Study

Course Information

Course Title
Sr Seminar: Lang & Cult Study

Subject code	Course Number	Academic Level
LACL	490	Undergraduate

Course Description
The Language and Culture Studies Senior Seminar gives senior French, German, and Spanish majors with the Culture Studies option the opportunity to compare and contrast various cultural topics from multiple interdisciplinary perspectives. Students from the various majors will research, discuss, and compare specific cultural topics germane to one or more of the countries in which their target language is spoken. The course will be taught in English and at the end of the course each student will submit a research paper and present their findings orally to a general audience. Prerequisite is 24 credits in the major. For FORL majors only.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Minimum Major Credits

Earn at least 24 credits

Degree/Major/Field of Study Restrictions

Type
Prerequisite

FORL Major Restriction

Must be a FORL major.

LACL501 - Linguistic Studies

Course Information

Course Title
Linguistic Studies

Subject code	Course Number	Academic Level
LACL	501	Graduate

Course Description
The study of the basics of linguistics as the scientific, principled analysis of language and of the applications oflinguistics to a variety of fields of human activity, including language teaching, translation and interpretation, and the study of language use in professional contexts. The course is taught in English, but examples and some of the coursework will be dedicated to French, German, and Spanish, the languages of the Languages and Cultures program.

LACL502 - Interpretive Strategies

Course Information

Course Title
Interpretive Strategies

Subject code	Course Number	Academic Level
LACL	502	Graduate

Course Description
Students will develop advanced critical and analytical skills to be applied to texts of different genres and cultures in the target language of study. The course is taught in English, but examples and some parts of the coursework will be dedicated to French, German, and Spanish, the languages of the Languages and Cultures program.

LACL503 - Cultural Studies

Course Information

Course Title
Cultural Studies

Subject code	Course Number	Academic Level
LACL	503	Graduate

Course Description
Explores practical applications of cultural criticism to the study of cultural context, practice and production. Students will analyze cultural production and practice in their areas of specialization.

SPAN101 - Elementary Spanish 1

Course Information

Course Title
Elementary Spanish 1

Subject code	Course Number	Academic Level
SPAN	101	Undergraduate

Course Description
Introduction to language and culture. Fundamentals of grammar and syntax. Oral and written practice, short readings and practice in aural comprehension. Emphasis is placed on learning useful everyday phrases and working toward accuracy in pronunciation.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

SPAN102 - Elementary Spanish 2

Course Information

Course Title
Elementary Spanish 2

Subject code	Course Number	Academic Level
SPAN	102	Undergraduate

Course Description
Continuation of SPAN 101; emphasis on more complex syntactical structures while working toward greater proficiency in both productive (speaking and writing) and receptive (reading and listening) skills. Prereq: SPAN 101 or 2 years of high school Spanish.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 101

Complete ALL of the following Courses:
- SPAN101 - Elementary Spanish 1

Or 2 years of high school Spanish.

SPAN179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SPAN	179	Undergraduate

Course Description
Experimental

SPAN201 - Intermediate Spanish 1

Course Information

Course Title
Intermediate Spanish 1

Subject code	Course Number	Academic Level
SPAN	201	Undergraduate

Course Description
Emphasis is placed on further developing receptive and productive skills through varied realistic exercises and in authentic real-life situations. Contemporary cultural and literary texts provide the thematic basis for oral and written communication. Systematic treatment of grammar. Prereq: SPAN 102 or placement exam.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 102 or placement exam

Complete ANY of the following Courses:
- SPAN102 - Elementary Spanish 2

SPAN202 - Intermediate Spanish 2

Course Information

Course Title
Intermediate Spanish 2

Subject code	Course Number	Academic Level
SPAN	202	Undergraduate

Course Description
Continuation of SPAN 201. Communication in speech and writing; grammar and vocabulary are studied in greater depth and breadth. Increased emphasis on developing a cross-cultural perspective. Treatment of grammar and reading comprehension. Prereq: SPAN 201 or placement exam.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 201 or placement exam

Complete ANY of the following Courses:
- SPAN201 - Intermediate Spanish 1

SPAN211 - Spanish for Business 1

Course Information

Course Title
Spanish for Business 1

Subject code	Course Number	Academic Level
SPAN	211	Undergraduate

Course Description
The Spanish language and culture needed to perform basic business transactions in Spanish-speaking countries. Prereq: SPAN 102 or placement exam.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 102 or placement exam

Complete ANY of the following Courses:
- SPAN102 - Elementary Spanish 2

SPAN212 - Spanish for Business 2

Course Information

Course Title
Spanish for Business 2

Subject code	Course Number	Academic Level
SPAN	212	Undergraduate

Course Description
Continuation of SPAN 211. Emphasis on business terminology, commercial correspondence, similarities and differences in business transactions and international procedures. Prereq: SPAN 201 or 211, or placement exam.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 201 or SPAN 211 or placement exam

Complete ANY of the following Courses:

- SPAN201 - Intermediate Spanish 1
- SPAN211 - Spanish for Business 1

SPAN279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SPAN	279	Undergraduate

Course Description
Experimental

SPAN300 - Co-Op Ed Experience in Spanish

Course Information

Course Title
Co-Op Ed Experience in Spanish

Subject code	Course Number	Academic Level
SPAN	300	Undergraduate

Course Description
Co-Op Ed Experience in Spanish

SPAN301 - Commercial Spanish

Course Information

Course Title
Commercial Spanish

Subject code	Course Number	Academic Level
SPAN	301	Undergraduate

Course Description
Commercial vocabulary and stylistics. Presentation of the parts of the business letter. General types of business correspondence such as letters requesting and offering information, mail orders, sales letters, applications for employment, complaints, claims, collection, credit, etc. Prereq: SPAN 202 or 351, or placement exam.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 202 or SPAN 351

Complete ANY of the following Courses:

- SPAN202 - Intermediate Spanish 2
- SPAN351 - Composition and Oral Expression 1

Or placement exam.

SPAN303 - Spanish for Heritage Speakers

Course Information

Course Title
Spanish for Heritage Speakers

Subject code	Course Number	Academic Level
SPAN	303	Undergraduate

Course Description
This course is for students who were raised speaking Spanish, but who have not studied Spanish formally and are unsure of grammar and spelling, but would like to perfect their command of the language. The course will prepare the students to be able to continue successfully their Spanish studies at the 300-level and so more easily get a minor or major in Spanish, or simply to be ready to use Spanish on the job or in any formal context. It is different from courses like SPAN 101-202 where much of the focus is on building basic vocabulary for non-Spanish speakers and on encouraging students to speak, as well as teaching correct pronunciation. Students in SPAN 203 already know how to speak and pronounce Spanish; this course concentrates on grammar, writing, stylistics, and reading, as well as advanced vocabulary building. This will be done through reading, writing, and discussing such topics as customs peculiar to Spanish-speaking countries, the experiences of Hispanic immigrants to the United States, traditional and modern art and architecture in Spain and Latin American countries, global warming and conservation, and coming-of-age experiences. Focus is on being able to describe places, people and events, narrating a past event, stating an opinion and defending it. In larger terms, the class will: 1. examine, analyze, and critically evaluate the Spanish spoken by each member of the class and the heritage that that Spanish reflects and 2. compare and contrast it with what is considered "standard" Spanish; 3. express orally and in writing the differences and similarities between formal and informal speech and among Latin American, Latino, Spanish, and Anglo-American speech and customs; 4. increase critical thinking, oral and written communication skills; 5. describe orally and in writing the content of Spanish newspaper articles, short stories, films and a novel; 6. express orally and in writing opinions about the content of Spanish newspaper articles, short stories, films and a novel.

SPAN311 - Survey of Literature 1

Course Information

Course Title
Survey of Literature 1

Subject code	Course Number	Academic Level
SPAN	311	Undergraduate

Course Description
Life and works of outstanding literary figures and movements in Spain through the 17th century. Lectures, outside readings and reports. Prereq: SPAN 351 or 352.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 or SPAN 352

Complete ANY of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- SPAN352 - Composition and Oral Expression 2

SPAN312 - Survey of Literature 2

Course Information

Course Title
Survey of Literature 2

Subject code	Course Number	Academic Level
SPAN	312	Undergraduate

Course Description
Life and works of outstanding literary figures and movements in Spain from 1700 forward. Lectures, outside readings and reports. Prereq: SPAN 351 or 352.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 or SPAN 352

Complete ANY of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- SPAN352 - Composition and Oral Expression 2

SPAN313 - Survey of Span American Lit 1

Course Information

Course Title
Survey of Span American Lit 1

Subject code	Course Number	Academic Level
SPAN	313	Undergraduate

Course Description
Life and works of outstanding literary figures and movements in Spanish America from its discovery and colonization to the present. Emphasis given to the Latin American contribution to universal literature. Prereq: SPAN 351 or 352.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 or SPAN 352

Complete ANY of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- SPAN352 - Composition and Oral Expression 2

SPAN314 - Srvy of Span-Amer Lit 2

Course Information

Course Title
Srvy of Span-Amer Lit 2

Subject code	Course Number	Academic Level
SPAN	314	Undergraduate

Course Description
A panoramic journey through Latin American literature from the beginning of the 20th century to the present. Attention will be given to the development of cultural and aesthetic movements in the socio-historical contexts of Spanish America. Prereq: SPAN 351 or 352.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 or SPAN 352

Complete ANY of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- SPAN352 - Composition and Oral Expression 2

SPAN331 - Spanish Civilization 1

Course Information

Course Title
Spanish Civilization 1

Subject code	Course Number	Academic Level
SPAN	331	Undergraduate

Course Description
History and development of Spain from prehistoric times to 1700. Includes the civilization, art and influence of the Romans, Visigoths and Moslems; unification of the country and the Hapsburgs. A study of the art of each period. Considerable use of slides and films. Prereq: SPAN 202 or 351.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 202 or SPAN 351

Complete ANY of the following Courses:

- SPAN202 - Intermediate Spanish 2
- SPAN351 - Composition and Oral Expression 1

SPAN332 - Spanish Civlizatn & Culture 2

Course Information

Course Title
Spanish Civlizatn & Culture 2

Subject code	Course Number	Academic Level
SPAN	332	Undergraduate

Course Description
Spanish history and culture from 1700 forward from the beginning of the Bourbon dynasty through the present. Emphasis on the intellectual, social, cultural and political aspects of life in Spain. Outside readings, class reports. Considerable use of slides and films. Prereq: SPAN 202 or 351.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 202 or SPAN 351

Complete ANY of the following Courses:

- SPAN202 - Intermediate Spanish 2
- SPAN351 - Composition and Oral Expression 1

SPAN333 - Spanish Am Civilization 1

Course Information

Course Title
Spanish Am Civilization 1

Subject code	Course Number	Academic Level
SPAN	333	Undergraduate

Course Description
History of pre-Columbian Americans; the conquest, exploration and colonization of the New World to the Wars of Independence. Includes a history of Spanish American cultures, societies and institutions. Use of audiovisual material to emphasize the differences among pre-Columbian civilizations. Prereq: SPAN 202 or 351.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 202 or SPAN 351

Complete ANY of the following Courses:

- SPAN202 - Intermediate Spanish 2
- SPAN351 - Composition and Oral Expression 1

SPAN334 - Spanish Amer Civilization 2

Course Information

Course Title
Spanish Amer Civilization 2

Subject code	Course Number	Academic Level
SPAN	334	Undergraduate

Course Description
History and culture of the Spanish Americas from 1824 to contemporary times. The formation and development of the new Spanish American countries once they reached their independence from Spain will be explored and analyzed. Emphasis will be given to the traits that make each one of these countries unique as well as part of the Spanish American world. Prereq: SPAN 202 or 351.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 202 or SPAN 351

Complete ANY of the following Courses:
- SPAN202 - Intermediate Spanish 2
- SPAN351 - Composition and Oral Expression 1

SPAN351 - Composition and Oral Expression 1

Course Information

Course Title
Composition and Oral Expression 1

Subject code	Course Number	Academic Level
SPAN	351	Undergraduate

Course Description
Systematic practice in the language, designed to hone students grammar, oral and written skills to a level of proficiency enabling them to express themselves with accuracy and fluency. Extensive grammar review. Prereq for SPAN 351: SPAN 202 or placement exam. Prereq for SPAN 352: SPAN 351, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 202 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:
- SPAN202 - Intermediate Spanish 2
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

SPAN 202 or placement exam.

SPAN352 - Composition and Oral Expression 2

Course Information

Course Title
Composition and Oral Expression 2

Subject code	Course Number	Academic Level
SPAN	352	Undergraduate

Course Description
Systematic practice in the language, designed to hone students grammar, oral and written skills to a level of proficiency enabling them to express themselves with accuracy and fluency. Extensive grammar review. Prereq for SPAN 351: SPAN 202 or placement exam. Prereq for SPAN 352: SPAN 351, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

SPAN361 - Oral Spanish 1

Course Information

Course Title
Oral Spanish 1

Subject code	Course Number	Academic Level
SPAN	361	Undergraduate

Course Description
Intensive experience with the spoken language. Taped exercises in comprehension. Conversations concerning everyday life, with emphasis on appropriate vocabulary. Emphasis on modern society and customs: schools, sports, holidays, literature, etc. Remedial treatment of phonetics and grammar. Prereq: SPAN 351, 352, or equivalent.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 or SPAN 352 or equivalent

Complete ANY of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- SPAN352 - Composition and Oral Expression 2

SPAN361H - Hon: Oral Spanish 1

Course Information

Course Title
Hon: Oral Spanish 1

Subject code	Course Number	Academic Level
SPAN	361H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 or SPAN 352 or equivalent

Complete ANY of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- SPAN352 - Composition and Oral Expression 2

SPAN362 - Oral Spanish 2

Course Information

Course Title
Oral Spanish 2

Subject code	Course Number	Academic Level
SPAN	362	Undergraduate

Course Description
Intensive experience with the spoken language. Taped exercises in comprehension. Conversations concerning everyday life, with emphasis on appropriate vocabulary. Emphasis on modern society and customs: schools, sports, holidays, literature, etc. Remedial treatment of phonetics and grammar. Prereq: SPAN 351 or equivalent.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 or equivalent

Complete ANY of the following Courses:

- SPAN351 - Composition and Oral Expression 1

SPAN371 - Spanish in the US

Course Information

Course Title
Spanish in the US

Subject code	Course Number	Academic Level
SPAN	371	Undergraduate

Course Description
The history and sociolinguistic aspects of the use of Spanish in the United States, analyzing issues related to language maintenance and loss, contact with English and the identification of varieties of Spanish in the U.S. Emphasis will be given to language attitudes and implications for identity and interethnic relations. Prereq: SPAN 352 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 352 or permission of instructor

Complete ANY of the following Courses:

- SPAN352 - Composition and Oral Expression 2

SPAN379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SPAN	379	Undergraduate

Course Description
Experimental

SPAN400 - Co-Op Ed Experience in Spanish

Course Information

Course Title
Co-Op Ed Experience in Spanish

Subject code	Course Number	Academic Level
SPAN	400	Undergraduate

Course Description
Co-Op Ed Experience in Spanish

SPAN409 - Applied Linguistics

Course Information

Course Title
Applied Linguistics

Subject code	Course Number	Academic Level
SPAN	409	Undergraduate

Course Description
CR. Applied Linguistics

SPAN411 - Spanish Poetry 1

Course Information

Course Title
Spanish Poetry 1

Subject code	Course Number	Academic Level
SPAN	411	Undergraduate

Course Description
Development of principal types of Spanish or Spanish American poetry from the early Kharjas and Cantar de Mio Cid to the Renaissance. Study of the main works of representative poets. Class discussions, lectures, outside readings and reports. Prereq: any two of SPAN 311, 312, 313 or 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN311 or SPAN312 or SPAN313 or SPAN314

Complete at least 2 of the following courses:

- SPAN311 - Survey of Literature 1
- SPAN312 - Survey of Literature 2
- SPAN313 - Survey of Span American Lit 1
- SPAN314 - Srvy of Span-Amer Lit 2

SPAN412 - Spanish Poetry 2

Course Information

Course Title
Spanish Poetry 2

Subject code	Course Number	Academic Level
SPAN	412	Undergraduate

Course Description
Continuing development of Spanish or Spanish American poetry from the Golden Age to the end of the 19th century. Main works of representative poets are studied. Class discussions, lectures, outside readings and reports. Prereq: any two of SPAN 311, 312, 313 or 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN311 or SPAN312 or SPAN313 or SPAN314

Complete at least 2 of the following courses:

- SPAN311 - Survey of Literature 1
- SPAN312 - Survey of Literature 2
- SPAN313 - Survey of Span American Lit 1
- SPAN314 - Srvy of Span-Amer Lit 2

SPAN421 - Spanish Drama 1

Course Information

Course Title
Spanish Drama 1

Subject code	Course Number	Academic Level
SPAN	421	Undergraduate

Course Description
Traces the development of Spanish drama from its beginnings, with a study of representative plays of Spains Golden Age. Lectures, discussions, outside readings and reports. Prereq: any two of SPAN 311, 312, 313 or 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN311 or SPAN312 or SPAN313 or SPAN314

Complete at least 2 of the following courses:

- SPAN311 - Survey of Literature 1
- SPAN312 - Survey of Literature 2
- SPAN313 - Survey of Span American Lit 1
- SPAN314 - Srvy of Span-Amer Lit 2

SPAN422 - Spanish Drama 2

Course Information

Course Title
Spanish Drama 2

Subject code	Course Number	Academic Level
SPAN	422	Undergraduate

Course Description
A study of the Spanish theatre from 1700 through the 19th century. Includes the neoclassic, romantic and realist dramatists such as Echegaray, Tamayo y Baus and Zomilla. Lectures, discussions, outside readings and reports. Prereq: any two of SPAN 311, 312, 313 or 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN311 or SPAN312 or SPAN313 or SPAN314

Complete at least 2 of the following courses:

- SPAN311 - Survey of Literature 1
- SPAN312 - Survey of Literature 2
- SPAN313 - Survey of Span American Lit 1
- SPAN314 - Srvy of Span-Amer Lit 2

SPAN431 - Spanish Prose 1

Course Information

Course Title
Spanish Prose 1

Subject code	Course Number	Academic Level
SPAN	431	Undergraduate

Course Description
Development of narrative in Spain from the 13th-century origins of these forms to the end of the 17th century. Includes historical, didactic, narrative, pastoral, picaresque, mystic and novels of chivalry. Lectures, discussions, outside readings and reports. Prereq: any two of SPAN 311, 312, 313 or 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN311 or SPAN312 or SPAN313 or SPAN314

Complete at least 2 of the following courses:

- SPAN311 - Survey of Literature 1
- SPAN312 - Survey of Literature 2
- SPAN313 - Survey of Span American Lit 1
- SPAN314 - Srvy of Span-Amer Lit 2

SPAN432 - Spanish Prose 2

Course Information

Course Title
Spanish Prose 2

Subject code	Course Number	Academic Level
SPAN	432	Undergraduate

Course Description
Study of Spanish narrative forms from the 18th century to the present day. Lectures, discussions, outside readings and reports. Prereq: any two of SPAN 311, 312, 313 or 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN311 or SPAN312 or SPAN313 or SPAN314

Complete at least 2 of the following courses:

- SPAN311 - Survey of Literature 1
- SPAN312 - Survey of Literature 2
- SPAN313 - Survey of Span American Lit 1
- SPAN314 - Srvy of Span-Amer Lit 2

SPAN433 - Latin American Prose

Course Information

Course Title
Latin American Prose

Subject code	Course Number	Academic Level
SPAN	433	Undergraduate

Course Description
A study of Spanish American prose forms history of discovery, conquest, exploration and colonization, romanticism, realism, naturalism, the essay and fiction to the present day. Lectures, outside readings and reports. Prereq: any two of SPAN 311, 312, 313 or 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN311 or SPAN312 or SPAN313 or SPAN314

Complete at least 2 of the following courses:

- SPAN311 - Survey of Literature 1
- SPAN312 - Survey of Literature 2
- SPAN313 - Survey of Span American Lit 1
- SPAN314 - Srvy of Span-Amer Lit 2

SPAN443 - Composition and Stylistics

Course Information

Course Title
Composition and Stylistics

Subject code	Course Number	Academic Level
SPAN	443	Undergraduate

Course Description
CR. Composition and Stylistics

SPAN444 - Translation and Interpretation

Course Information

Course Title
Translation and Interpretation

Subject code	Course Number	Academic Level
SPAN	444	Undergraduate

Course Description
CR. Translation and Interpretation

SPAN445 - Adv Oral Practice and Self-Exp

Course Information

Course Title
Adv Oral Practice and Self-Exp

Subject code	Course Number	Academic Level
SPAN	445	Undergraduate

Course Description
CR. Advanced Oral Practice and Self- Expression

SPAN446 - History of Spanish Civilizatn

Course Information

Course Title
History of Spanish Civilizatn

Subject code	Course Number	Academic Level
SPAN	446	Undergraduate

Course Description
CR. History of Spanish Civilization

SPAN447 - Hist Spanish Amer Civilization

Course Information

Course Title
Hist Spanish Amer Civilization

Subject code	Course Number	Academic Level
SPAN	447	Undergraduate

Course Description
CR. History of Spanish- American Civilization

SPAN451 - Geography of Spain

Course Information

Course Title
Geography of Spain

Subject code	Course Number	Academic Level
SPAN	451	Undergraduate

Course Description
CR. Geography of Spain, Physical and Economic

SPAN460 - Translation and Interpretation

Course Information

Course Title
Translation and Interpretation

Subject code	Course Number	Academic Level
SPAN	460	Undergraduate

Course Description
Intended for students with a firm oral and written command of Spanish who need expert guidance for avoiding the pitfalls inherent in transposing thought from one language to another. Emphasis on idiomatic translation of newspaper and magazine articles. Prereq: SPAN 351 and 352.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 and SPAN 352

Complete ALL of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- SPAN352 - Composition and Oral Expression 2

SPAN461 - History of Hispanic Art

Course Information

Course Title
History of Hispanic Art

Subject code	Course Number	Academic Level
SPAN	461	Undergraduate

Course Description
CR. History of Hispanic Art

SPAN462 - Evolution of Spanish Language

Course Information

Course Title
Evolution of Spanish Language

Subject code	Course Number	Academic Level
SPAN	462	Undergraduate

Course Description
CR. Evolution of the Spanish Language

SPAN470 - Spanish Linguistics

Course Information

Course Title
Spanish Linguistics

Subject code	Course Number	Academic Level
SPAN	470	Undergraduate

Course Description
Introduction to Spanish phonetics. Comparative study of the morphology and the syntactic structures of Spanish and English. To be taken before FORL 480. Prereq: SPAN 351 and 352. Recommended: SPAN 361.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 and SPAN 352

Complete ALL of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- SPAN352 - Composition and Oral Expression 2

Recommended: SPAN 361.

SPAN470H - H:Spanish Linguistics

Course Information

Course Title
H:Spanish Linguistics

Subject code	Course Number	Academic Level
SPAN	470H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPAN 351 and SPAN 352

Complete ALL of the following Courses:

- SPAN351 - Composition and Oral Expression 1
- SPAN352 - Composition and Oral Expression 2

Recommended: SPAN 361.

SPAN471 - Contemporary Spain

Course Information

Course Title
Contemporary Spain

Subject code	Course Number	Academic Level
SPAN	471	Undergraduate

Course Description
CR. Aspects of Contemporary Spain

SPAN472 - Contemporary Latin America

Course Information

Course Title
Contemporary Latin America

Subject code	Course Number	Academic Level
SPAN	472	Undergraduate

Course Description
CR. Aspects of Contemporary Latin America

SPAN479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SPAN	479	Undergraduate

Course Description
Experimental

SPAN481 - Medieval Spanish Literature

Course Information

Course Title
Medieval Spanish Literature

Subject code	Course Number	Academic Level
SPAN	481	Undergraduate

Course Description
CR. Seminar in Medieval Spanish Literature

SPAN482 - Renaissance Literature

Course Information

Course Title
Renaissance Literature

Subject code	Course Number	Academic Level
SPAN	482	Undergraduate

Course Description
CR. Seminar in Renaissance Literature

SPAN482H - H:Renaissance Literature

Course Information

Course Title
H:Renaissance Literature

Subject code	Course Number	Academic Level
SPAN	482H	Undergraduate

SPAN485 - 19th Century Literature

Course Information

Course Title
19th Century Literature

Subject code	Course Number	Academic Level
SPAN	485	Undergraduate

Course Description
CR. Seminar in Nineteenth- Century Literature

SPAN486 - 20th Century Literature

Course Information

Course Title
20th Century Literature

Subject code	Course Number	Academic Level
SPAN	486	Undergraduate

Course Description
CR. Seminar in Twentieth- Century Literature

SPAN487 - Spanish-American Literature

Course Information

Course Title
Spanish-American Literature

Subject code	Course Number	Academic Level
SPAN	487	Undergraduate

Course Description
CR. Seminar in Spanish- American Literature

SPAN489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
SPAN	489	Undergraduate

Course Description
Honors Course

SPAN491 - Current Topics

Course Information

Course Title
Current Topics

Subject code	Course Number	Academic Level
SPAN	491	Undergraduate

Course Description
CR. Current Topics

SPAN498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
SPAN	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section.

SPAN499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
SPAN	499	Undergraduate

Course Description
Departmental Honors

SPAN500 - Co-Op Ed Experience in Spanish

Course Information

Course Title
Co-Op Ed Experience in Spanish

Subject code	Course Number	Academic Level
SPAN	500	Graduate

Course Description
Co-Op Ed Experience in Spanish

SPAN509 - Applied Linguistics

Course Information

Course Title
Applied Linguistics

Subject code	Course Number	Academic Level
SPAN	509	Graduate

Course Description
Analysis of the language as behavior and emphasis on the priority of the spoken language in a systematic study of its structure. Comparison with English to explain and avoid errors of pronunciation and syntax resulting from intrusion of ones native language. Required for degree.

SPAN512 - Introductory Phonetics

Course Information

Course Title
Introductory Phonetics

Subject code	Course Number	Academic Level
SPAN	512	Graduate

Course Description
A combination of theoretical lessons with practical exercises aimed at imparting native or near-native accents. Includes study of diction and intonation. Students are required to give readings and dramatic presentations in class and before the student body. Required for M.A.degree.

SPAN522 - Composition

Course Information

Course Title
Composition

Subject code	Course Number	Academic Level
SPAN	522	Graduate

Course Description
Systematic practice in the language designed to hone students grammar and written skills to a level of proficiency that enables students to write with accuracy and fluency.

SPAN523 - Composition and Stylistics

Course Information

Course Title
Composition and Stylistics

Subject code	Course Number	Academic Level
SPAN	523	Graduate

Course Description
Designed to give students a feeling for Spanish style in writing, a sense of shades of meaning, and a mastery of certain difficulties of Spanish grammar and syntax. Writing of original compositions, prcis writing and translation from English to Spanish. Required for degree.

SPAN524 - Translation and Interpretation

Course Information

Course Title
Translation and Interpretation

Subject code	Course Number	Academic Level
SPAN	524	Graduate

Course Description
Intended for students who already have a firm oral and written command of Spanish, but need expert guidance in learning to avoid the pitfalls inherent in transposing thought from one language to another. Emphasis on the importance of style, exactness of expression and use of the dictionary. Practical exercises in technical, scientific, commercial, journalistic and political language.

SPAN525 - Advanced Oral Practice

Course Information

Course Title
Advanced Oral Practice

Subject code	Course Number	Academic Level
SPAN	525	Graduate

Course Description
For advanced students who already possess fluency, but need practice in acquiring the habit-forming processes and spontaneous assimilation of spoken-language patterns necessary for mature self-expression. Oral reports and guided discussion. Students in the course will be expected to assume leadership roles in activities of the school, such as public speaking, dramatics, newspaper, etc.

SPAN530 - Spanish Linguistics

Course Information

Course Title
Spanish Linguistics

Subject code	Course Number	Academic Level
SPAN	530	Graduate

Course Description
An introduction to basic concepts and major divisions of modern linguistics as it pertains to the description of modern Spanish, including phonetics, phonology, morphology, syntax and semantics.

SPAN531 - Evolution of Spanish Language

Course Information

Course Title
Evolution of Spanish Language

Subject code	Course Number	Academic Level
SPAN	531	Graduate

Course Description
Historical survey of the development of the Spanish language from its Latin beginnings and its later influences to the languages of today. Particularly recommended for students within a summer or two of their comprehensive examinations.

SPAN532 - Spanish Pragmatics

Course Information

Course Title
Spanish Pragmatics

Subject code	Course Number	Academic Level
SPAN	532	Graduate

Course Description
Application of philosophical, sociological, and linguistic theory to the use of language in the professional workplace. Interdisciplinary analyses of how and why Spanish speakers choose to use particular language forms that convey different linguistic possibilities and different meanings in different cultural contexts.

SPAN541 - History Spanish Civilization 1

Course Information

Course Title
History Spanish Civilization 1

Subject code	Course Number	Academic Level
SPAN	541	Graduate

Course Description
A study of Spain, with special emphasis on the historical development of its intellectual, social and cultural life.

SPAN542 - Hist Spanish-American Civil

Course Information

Course Title
Hist Spanish-American Civil

Subject code	Course Number	Academic Level
SPAN	542	Graduate

Course Description
Traces the main currents of Latin American civilization from its prehistoric beginnings to the present.

SPAN551 - Geography of Spain

Course Information

Course Title
Geography of Spain

Subject code	Course Number	Academic Level
SPAN	551	Graduate

Course Description
Emphasizes the role of Spains geography in her economic and cultural development.

SPAN561 - History of Hispanic Art

Course Information

Course Title
History of Hispanic Art

Subject code	Course Number	Academic Level
SPAN	561	Graduate

Course Description
Broad treatment of the contributions to civilization made by the Spanish-speaking peoples in the domains of art, music and architecture. Considerable use of visual materials and recordings.

SPAN571 - Contemporary Spain

Course Information

Course Title
Contemporary Spain

Subject code	Course Number	Academic Level
SPAN	571	Graduate

Course Description
Presents a selected view of current developments in Spain of significance to its inhabitants. May include internal politics, foreign affairs, economy, educational system, sociological changes, arts and sciences.

SPAN572 - Contemporary Latin America

Course Information

Course Title
Contemporary Latin America

Subject code	Course Number	Academic Level
SPAN	572	Graduate

Course Description
Selected view of significant, current developments in a number of Latin American countries. May include internal politics, foreign affairs, economy, educational system, sociological changes, arts and sciences.

SPAN579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SPAN	579	Graduate

Course Description
Experimental

SPAN581 - Medieval Spanish Literature

Course Information

Course Title
Medieval Spanish Literature

Subject code	Course Number	Academic Level
SPAN	581	Graduate

Course Description
CR. Seminar in Medieval Spanish Literature

SPAN582 - Renaiss Lit:

Course Information

Course Title
Renaiss Lit:

Subject code	Course Number	Academic Level
SPAN	582	Graduate

Course Description
CR. Seminar in Renaissance Literature

SPAN583 - Golden Age Literature

Course Information

Course Title
Golden Age Literature

Subject code	Course Number	Academic Level
SPAN	583	Graduate

Course Description
CR. Seminar in Golden- Age Literature

SPAN584 - 18th Century Literature

Course Information

Course Title
18th Century Literature

Subject code	Course Number	Academic Level
SPAN	584	Graduate

Course Description
CR. Seminar in Eighteenth- Century Literature

SPAN585 - 19th Century Literature

Course Information

Course Title
19th Century Literature

Subject code	Course Number	Academic Level
SPAN	585	Graduate

Course Description
CR. Seminar in Nineteenth- Century Literature

SPAN586 - 20th Century Literature

Course Information

Course Title
20th Century Literature

Subject code	Course Number	Academic Level
SPAN	586	Graduate

Course Description
CR. Seminar in Twentieth- Century Literature

SPAN587 - Spanish-American Literature

Course Information

Course Title
Spanish-American Literature

Subject code	Course Number	Academic Level
SPAN	587	Graduate

Course Description
In-depth study of the literature of twentieth century Spanish American poetry, novel and drama through reading, analysis and commentary of works from each of the most prestigious authors and more influential texts.

SPAN589 - Current Topics

Course Information

Course Title
Current Topics

Subject code	Course Number	Academic Level
SPAN	589	Graduate

Course Description
In-depth investigation and development of a topic of current interest not normally covered in regular courses. Special topics to be covered will vary to meet the challenge of timeliness and appropriateness.

SPAN698 - Research Report

Course Information

Course Title
Research Report

Subject code	Course Number	Academic Level
SPAN	698	Graduate

SPAN699 - Thesis

Course Information

Course Title
Thesis

Subject code	Course Number	Academic Level
SPAN	699	Graduate

Course Description
Thesis

WRIT272 - Introduction to Writing Studies

Course Information

Course Title
Introduction to Writing Studies

Subject code	Course Number	Academic Level
WRIT	272	Undergraduate

Course Description
Focuses on some of the major areas of scholarship related to the practice of writing: literacy practices; historical accounts of writing instruction; the relationship of classical rhetoric to contemporary writing; writing across the curriculum; studies of professional and workplace writing; computers and writing; social, political and economic dimensions of writing; and others. Prereq: ENGL 110.

Gateway Stage Labels
Creative Exploration (CE)

Simple Requirements

Completed Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

WRIT273 - Writing and Gaming

Course Information

Course Title
Writing and Gaming

Subject code	Course Number	Academic Level
WRIT	273	Undergraduate

Course Description
Explores games, board games, videogames and world building to broaden students' understanding of writing, writing practices, and rhetoric. This course explores how the games we play help define our cultural identity and the way we approach lived experiences. This course will include writing practice, analytic practice, and production of games.

Prerequisite ENGL 110

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

WRIT274 - The Craft of Writing

Course Information

Course Title
The Craft of Writing

Subject code	Course Number	Academic Level
WRIT	274	Undergraduate

Course Description
Explores writing as a varied set of deliberate, artful choices in regard to designing and stylizing diverse persuasive texts, all crafted for specific audiences-emphasizing a mindful focus upon language for students at all levels of preparation. The course invites students to experience, in texts of all kinds, the interplay of argumentative structure and style that impacts readers: both rhetorical awareness and stylistic agility. As a topics course, ENGL 274 will permit instructors to select various genres of writing and styles to challenge students' practice. Prereq ENGL 110, repeatable up to 6 credits.

Gateway Stage Labels
Creative Exploration (CE)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

WRIT280 - Intro to Rhetoric for Writers

Course Information

Course Title
Intro to Rhetoric for Writers

Subject code	Course Number	Academic Level
WRIT	280	Undergraduate

Course Description
Introduces students to rhetorical theory and concepts useful to their lives as writers broadly defined. We will explore how people argue, persuade and identify with one another by analyzing texts across genres and historical periods. Prereq: ENGL 110, 30 credit hours

Gateway Stage Labels
Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion

Earn at least 30 credits

WRIT311 - Writing in Contexts

Course Information

Course Title
Writing in Contexts

Subject code	Course Number	Academic Level
WRIT	311	Undergraduate

Course Description
Exploring, analyzing, and writing in diverse and dynamic writing contexts to create rhetorically sophisticated texts. Rhetorical practices will be developed through an instructor-chosen theme. Prereq: ENGL 110 or equivalent, 55 s.h.

Keystone Stage Labels
Advanced Writing (AW)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or equivalent

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 55 credits

WRIT312 - Technical Writing

Course Information

Course Title
Technical Writing

Subject code	Course Number	Academic Level
WRIT	312	Undergraduate

Course Description
Analyzing technical writing situations and communicating complex information clearly and concisely to specific audiences via common technical genres such as reports, articles, procedural writing, and others. Prereq: ENGL 110 or equivalent, 55 s.h.

Keystone Stage Labels
Advanced Writing (AW)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or equivalent

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 55 credits

WRIT316 - Business Writing

Course Information

Course Title
Business Writing

Subject code	Course Number	Academic Level
WRIT	316	Undergraduate

Course Description
Analyzing writing in workplace settings and communicating professionally and strategically for a variety of purposes via common professional genres such as correspondence, proposals, reports, and others. Prereq: ENGL 110 or equivalent, 55 s.h.

Keystone Stage Labels
Advanced Writing (AW)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or equivalent

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 55 credits

WRIT317 - Editing for Publication

Course Information

Course Title
Editing for Publication

Subject code	Course Number	Academic Level
WRIT	317	Undergraduate

Course Description
Focuses on the role of the editor in publishing. Developing skills to improve copy for publication, designing content for websites and blogs as well as creating photographic, audio and video material for use on the web. Prereq: ENGL 110 or equivalent

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or equivalent

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

WRIT318 - Web Writing

Course Information

Course Title
Web Writing

Subject code	Course Number	Academic Level
WRIT	318	Undergraduate

Course Description
Explores concepts, techniques and strategies for authoring, managing and publishing reusable web content. Covers content strategy frameworks and writing techniques used in interactive experience projects. Prerequisite: ENGL 110, 55 credit hours.

Keystone Stage Labels
Advanced Writing (AW)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 55 credits

WRIT318H - Hon: Web Writing

Course Information

Course Title
Hon: Web Writing

Subject code	Course Number	Academic Level
WRIT	318H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

WRIT319 - Science Writing

Course Information

Course Title
Science Writing

Subject code	Course Number	Academic Level
WRIT	319	Undergraduate

Course Description
Analyzing the communication strategies of scientists and science writers and communicating scientific research to expert and non-expert audiences in a variety of contexts via genres such as reviews, research articles, and news articles. Prereq: ENGL 110, 55 s.h.

Keystone Stage Labels
Advanced Writing (AW)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 55 credits

WRIT319H - Hon: Science Writing

Course Information

Course Title
Hon: Science Writing

Subject code	Course Number	Academic Level
WRIT	319H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

WRIT340 - Rhetorical Analysis

Course Information

Course Title
Rhetorical Analysis

Subject code	Course Number	Academic Level
WRIT	340	Undergraduate

Course Description
Analyze the rhetorical strategies of public writing, argument, and textual production. Students will apply theories of rhetoric and use rhetorical analysis to investigate genres of writing.

WRIT342 - Reading/Writing for Civic Chng

Course Information

Course Title
Reading/Writing for Civic Chng

Subject code	Course Number	Academic Level
WRIT	342	Undergraduate

Course Description
An introduction to the theory and practice of public discourse, with emphasis on civic discourse. Focuses on exploring the nature and function of being a citizen within a community and developing discourse skills to effect change in communities. Prereq: ENGL 311 or 312 or 313 or 316 or 318 or 319.

Simple Requirements

Course Prerequisites

Type
Prerequisite

WRIT 311 or WRIT 312 or WRIT 316 or WRIT 318 or WRIT 318H or WRIT 319 or WRIT 319H

Complete ANY of the following Courses:

- WRIT311 - Writing in Contexts
- WRIT312 - Technical Writing
- WRIT316 - Business Writing
- WRIT318 - Web Writing
- WRIT318H - Hon: Web Writing
- WRIT319 - Science Writing
- WRIT319H - Hon: Science Writing

WRIT343 - Rhetorics of Marginalized Communities

Course Information

Course Title
Rhetorics of Marginalized Communities

Subject code	Course Number	Academic Level
WRIT	343	Undergraduate

Course Description
Explores the rhetorical practices of marginalized communities – may focus on women, African American speakers, LGBTQ+ groups, non-western rhetorics, counter-cultural groups, or other communities. The course focuses on how communities use rhetorical practices to effect social change in written, oral, and digital media, and connects earlier rhetorical traditions to contemporary examples. This course includes discussion, collaboration, essay writing, and the development of a final project. Prereq: ENGL 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

WRIT466 - Special Topics in Writing

Course Information

Course Title
Special Topics in Writing

Subject code	Course Number	Academic Level
WRIT	466	Undergraduate

Course Description
In-depth investigation of topics in writing studies theory. May be taken more than once for credit with varied topic. Prereq: ENGL 311 or 312 or 313 or 316 or 318 or 319 or WRIT 311 or 312 or 316 or 318 or 319..

Simple Requirements

Completed Course Prerequisites

Type
Prerequisite

WRIT 311 or WRIT 312 or WRIT 316 or WRIT 318 or WRIT 318H or WRIT 319 or WRIT 319H or WRIT 311 or WRIT 312 or WRIT 316 or WRIT 318 or WRIT 318H or WRIT 319 or WRIT 319H

Complete ANY of the following Courses:

- WRIT311 - Writing in Contexts
  OR WRIT312 - Technical Writing
  OR WRIT316 - Business Writing
  OR WRIT318 - Web Writing
  OR WRIT318H - Hon: Web Writing
  OR WRIT319 - Science Writing
  OR WRIT319H - Hon: Science Writing
  OR WRIT311 - Writing in Contexts
  OR WRIT312 - Technical Writing
  OR WRIT316 - Business Writing
  OR WRIT318 - Web Writing
  OR WRIT318H - Hon: Web Writing
  OR WRIT319 - Science Writing
  OR WRIT319H - Hon: Science Writing

WRIT471 - Creative Writing

Course Information

Course Title
Creative Writing

Subject code	Course Number	Academic Level
WRIT	471	Undergraduate

Course Description
Extensive practice in writing fiction and poetry. Inquiry into the social functions and purposes of fictional and poetic writing. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

WRIT472 - Digital Portfolio

Course Information

Course Title
Digital Portfolio

Subject code	Course Number	Academic Level
WRIT	472	Undergraduate

Course Description
Extensive written work focused on the creation of a professional, digital portfolio to showcase interests, experience and accomplishments to be used for application to graduate school or future employment. Critiques and considerable discussion of other student papers. Prereq: ENGL 311 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

WRIT 311

Complete ALL of the following Courses:

- WRIT311 - Writing in Contexts

Or must have permission of instructor.

WRIT671 - Special Topics in Rhetoric

Course Information

Course Title
Special Topics in Rhetoric

Subject code	Course Number	Academic Level
WRIT	671	Graduate

Course Description
Explores the context and effect of persuasive strategies as seen through the lens of a particular topic or period of history. Provides advanced examination of rhetorical principles relevant to the topic.

WRIT672 - Sem: Rhetoric/Composition

Course Information

Course Title
Sem: Rhetoric/Composition

Subject code	Course Number	Academic Level
WRIT	672	Graduate

Course Description
Classical and modern theories of rhetoric and their application to the teaching of writing. Effective instructional methods and materials will be examined. Offered periodically.

WRIT673 - Professional Writing Workshop

Course Information

Course Title
Professional Writing Workshop

Subject code	Course Number	Academic Level
WRIT	673	Graduate

Course Description
Focus upon the rhetoric(s) of professional communication within the contexts of students' own on-the-job writing: how to thoughtfully select language, visual and audial texts, and deliberately designed formats to accommodate writers' intentions as creative problem-solvers and to meet the needs of diverse audiences. This course is designed for both practicing professionals and working people aspiring to new professional positions. In a workshop format and, at times, working in teams, students will compose modes of discourse typical of professional writing, including but not limited to electronic and/or print ad copy, web content, brochures, non-profit pamphlets, letters, informal reports, formal reports, promotional campaigns, and/or recommendations; social media writing for websites, wikis and blogs; students' own websites, wikis, and blogs.

WRIT674 - New Media Rhetoric

Course Information

Course Title
New Media Rhetoric

Subject code	Course Number	Academic Level
WRIT	674	Graduate

Course Description
Gain a rhetorical and theoretical understanding of how texts operate in our increasingly sophisticated online media culture. Examine these new media texts as they appear on the Internet with a particular emphasis on social media as well as old media that is being transformed by/in/to the digital. Learn to follow these processes of text (re)mediation as they take place through perceptual and temporal processes, movement, and memory.

WRIT675 - Community Writing

Course Information

Course Title
Community Writing

Subject code	Course Number	Academic Level
WRIT	675	Graduate

Course Description
Focuses on the theory and practice of community literacy and citizen engagement in the community. Emphasizes research on community literacy and action-oriented projects meeting community literacy needs.

WRIT682 - Genres in Nonfiction Writing

Course Information

Course Title
Genres in Nonfiction Writing

Subject code	Course Number	Academic Level
WRIT	682	Graduate

Course Description
Exploration of theories and practices of creative non-fiction, including but not limited to memoirs, profiles, histories, biographies, travel literature, blogging, and nature writing in diverse modes (print, digital,& visual) for diverse audiences and purposes.

Entrepreneurship Department

Millersville University's interdisciplinary minor in entrepreneurship is the only truly interdisciplinary minor of its kind throughout the entire Pennsylvania State System of Higher Education. This minor allows students in any major to bring an entrepreneurial perspective to their specific area of study.

FACULTY LIST
Dr. Jennifer Jester, Coordinator, Entrepreneurship Minor

Programs

Creative Industries and Entrepreneurship Minor

Overview

The *Creative Industries and Entrepreneurship Minor* is an interdisciplinary program designed to equip students with the entrepreneurial mindset, problem-solving skills, and industry knowledge needed to thrive in creative fields. This minor complements a student's major by providing the tools to launch independent ventures, innovate within established organizations, and navigate the evolving landscape of the creative economy. Students will explore opportunity recognition, business strategy, branding, marketing, and financial management within artistic and cultural industries. Whether aspiring to build a freelance career, start a creative business, or contribute to entrepreneurial initiatives within arts organizations, students will develop the skills to create, sustain, and grow meaningful careers in the creative sector.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Creative Industries and Entrepreneurship (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- ENTR201 - The Art of Entrepreneurship
- ENTR315 - Entrepreneurship Practicum
- ENTR488 - Capstone in Entrepreneurship

BUAD 303 Accounting & Finance for Entrepreneurs (New in Fall 2026)

AND

Complete at least 1 of the following courses:

- COMM390 - Social Media Campaigns
- DESN243 - Creativity, Innovation & Human-Centered Design Thinking
- PHIL281 - Bus. & Prof. Ethics
- COMM305 - Business and Professional Communication

AND

Electives (3 credits)

Earn at least 3 credits from the following:

- ART486 - Sp Topics:
- BUSN101A - Introduction to Business
- BUSN101B - Introduction to Business
- COMM206 - Communication and Media Law
- COMM220 - Survey of Media
- COMM251 - Public Relations I: Intro to Principles & Theory
- DESN343 - Experience Design
- DESN348 - Packaging in Design
- DESN480 - Sp Topics in Design
- ENTR300 - Co-Op Ed Exp in Entrepreneur
- ENTR400 - Co-Op Ed Exp in Entrepreneur
- ENTR498 - Ind Stdy:
- ENTR500 - Co-Op Ed Exp in Entrepreneur
- JOUR313 - Fundamentals of Journalism
- MUSI190 - Music Industry 1
- THEA350 - Theatre Management
- THEA412 - Topics in Theatre
- THEA412 - Topics in Theatre
- WRIT316 - Business Writing

- WRIT318 - Web Writing

Choose 3.0 to 6.0 credit hours of Entrepreneurship electives in consultation with your advisor.

Courses

ENTR201 - The Art of Entrepreneurship

Course Information

Course Title
The Art of Entrepreneurship

Subject code	Course Number	Academic Level
ENTR	201	Undergraduate

Course Description
Introduces students to the fundamental concepts and skills of entrepreneurship within the creative industries. Emphasizing critical thinking and problem-solving, students will explore how to identify opportunities, analyze market trends, and develop sustainable business models in sectors such as music, film, and design. Through case studies, feasibility studies, and applied projects, students will research, evaluate, and implement entrepreneurial strategies to address real-world challenges.

Gateway Stage Labels
Problem Solving (PS)

ENTR279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ENTR	279	Undergraduate

ENTR300 - Co-Op Ed Exp in Entrepreneur

Course Information

Course Title
Co-Op Ed Exp in Entrepreneur

Subject code	Course Number	Academic Level
ENTR	300	Undergraduate

Course Description
Co-Op Ed Experience in Entrepreneurship

ENTR315 - Entrepreneurship Practicum

Course Information

Course Title
Entrepreneurship Practicum

Subject code	Course Number	Academic Level
ENTR	315	Undergraduate

Course Description
Serves as training for entrepreneurial leadership and emphasizes experiential learning in the practice and the development of skills that are needed by entrepreneurs, including effective leadership, collaboration, planning, and communication.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENTR201 and BUSN161

Complete ALL of the following Courses:
- ENTR201 - The Art of Entrepreneurship
- BUSN161 - Intro to Financial Accounting

ENTR370 - Media Entrepreneurship

Course Information

Course Title
Media Entrepreneurship

Subject code	Course Number	Academic Level
ENTR	370	Undergraduate

Course Description
The course focuses on the major steps needed to create a for-profit or nonprofit communication-based enterprise. Emphasis on media writers creating an entrepreneurial endeavor to serve as a model for further development or continued operation.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing
- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech

ENTR379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ENTR	379	Undergraduate

ENTR400 - Co-Op Ed Exp in Entrepreneur

Course Information

Course Title
Co-Op Ed Exp in Entrepreneur

Subject code	Course Number	Academic Level
ENTR	400	Undergraduate

Course Description
Co-Op Ed Experience in Entrepreneurship

ENTR479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ENTR	479	Undergraduate

Course Description
Experimental Course in Entrepreneurship

ENTR488 - Capstone in Entrepreneurship

Course Information

Course Title
Capstone in Entrepreneurship

Subject code	Course Number	Academic Level
ENTR	488	Undergraduate

Course Description
This course serves as a capstone for the Entrepreneurship Minor and provides students with the opportunity to work on either a simulated or real startup company, as well as examining case studies from leading entrepreneurs. Multidisciplinary teams of students work on mentor-defined or mentor-approved projects, from product or process conception towards commercialization. The course is intended to show what it takes to assemble teams with core competencies in different areas into a successfully functioning business organization. Teams work on a variety of issues including intellectual property, marketing, definition of a product requirements document, human factors, safety and environmental concerns, and legal matters.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENTR201 and ENTR315

Complete ALL of the following Courses:

- ENTR201 - The Art of Entrepreneurship
- ENTR315 - Entrepreneurship Practicum

ENTR498 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
ENTR	498	Undergraduate

ENTR500 - Co-Op Ed Exp in Entrepreneur

Course Information

Course Title
Co-Op Ed Exp in Entrepreneur

Subject code	Course Number	Academic Level
ENTR	500	Graduate

Course Description
Co-Op Ed Experience in Entrepreneurship

ENTR501 - Intro to Entrepreneurship

Course Information

Course Title
Intro to Entrepreneurship

Subject code	Course Number	Academic Level
ENTR	501	Graduate

Course Description
This course offers a broad overview of the art, science, and process entrepreneurship. Course concepts addressed include Corporate, Social, and Educational Entrepreneurism. Students will investigate opportunities for developing a business while learning how to evaluate opportunities, assess overall resources, and manage growth.

ENTR510 - ENTR Promotions & Branding

Course Information

Course Title
ENTR Promotions & Branding

Subject code	Course Number	Academic Level
ENTR	510	Graduate

Course Description
The focus of this course is on helping entrepreneurs understand the fundamentals of sales promotions as well as create a brand for their business and themselves. Students will learn how to analyze direct competition, establish an online presence for the purposes of branding and gain experience with other low cost promotional techniques. Pre-Req: ENTR 501 or permission of Faculty

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENTR501

Complete ALL of the following Courses:
- ENTR501 - Intro to Entrepreneurship

Or must have permission of faculty.

ENTR511 - Entre: Networking & Sales

Course Information

Course Title
Entre: Networking & Sales

Subject code	Course Number	Academic Level
ENTR	511	Graduate

Course Description
This course introduces the Entrepreneurial tools necessary for networking and sales in ways that help create networks, through important ties including; economic, financial, consumer, social and political attitudes that can improve entrepreneurial endeavors. This course explores real-world principles that permeate the functioning of these diverse networks. Pre-requisites: ENTR 501 or permission of faculty

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENTR501

Complete ALL of the following Courses:
- ENTR501 - Intro to Entrepreneurship

Or must have permission of faculty.

ENTR512 - ENTR Conflict & Negotiation

Course Information

Course Title
ENTR Conflict & Negotiation

Subject code	Course Number	Academic Level
ENTR	512	Graduate

Course Description
The course is designed to provide participants with the theory and skills to manage interpersonal communication conflict and negotiation in an entrepreneurial environment. Various negotiation styles will be discussed and applied to case studies and the participants' current professional relationships. The role of ethical conflict resolution, negotiation and decisionmaking will be emphasized. Existing and emerging entrepreneurs will apply conflict management and negotiation principles to interactions with current or likely future internal and external stakeholders. Prerequisite: Introduction to Entrepreneurship (ENTR 501)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENTR501

Complete ALL of the following Courses:
- ENTR501 - Intro to Entrepreneurship

ENTR540 - Entrepreneurship Capstone

Course Information

Course Title
Entrepreneurship Capstone

Subject code	Course Number	Academic Level
ENTR	540	Graduate

Course Description
As a culmination to the graduate-level certificate program in Entrepreneurship, this capstone course focuses on tying together the functional aspects of an entrepreneurial initiative to position it for growth and longevity. The course immerses the student in entrepreneurship through experiential learning and covers entrepreneurial thinking among students to develop the necessary real-world skills for founding and growing an entrepreneurial venture. Pre-Req: ENTR 501,510, 511 or permission of Faculty

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENTR501 and ENTR510

Complete ALL of the following Courses:
- ENTR501 - Intro to Entrepreneurship
- ENTR510 - ENTR Promotions & Branding

ENTR511

Complete ALL of the following Courses:
- ENTR511 - Entre: Networking & Sales

Or must have permission of faculty.

ENTR541 - Topics in Entrepreneurship:

Course Information

Course Title
Topics in Entrepreneurship:

Subject code	Course Number	Academic Level
ENTR	541	Graduate

Course Description
The development and exchange of scholarly information and the scope of the work shall include the exploration of current topics in entrepreneurship, which will require course registrants to engage in research and scholarly exchanges through class discussion, projects, reports, and/or papers.

Environment, Geosciences, and Emergency Management Department

Departmental Student Learning Outcomes

Earth Science graduates exhibit knowledge and understanding of the component of the Earth system specific to their discipline so that they are prepared to embark on their careers and work effectively to address complex issues.

Earth Science graduates can employ evidenced-based scientific reasoning to critically think about problems in the Earth sciences. Students will engage in observation, inquiry, analysis, and synthesis to expand their knowledge and understanding of the Earth system in the courses and/or in student research.

Earth Science graduates demonstrate skill in the use of tools and the application of technologies appropriate to their discipline. Students will be able to evaluate the scientific problem to determine the appropriate tool and/or technology necessary to solve the problem and then employ that tool and/or technology effectively.

Earth Science graduates can effectively communicate their knowledge and understanding in both oral and written formats to diverse audiences.

Program Overviews & Workforce Projections

The Earth Sciences span the disciplines of climate, energy, environmental hazards, mineral and water resources, tectonics, and weather. The need for energy, environmental protection, and responsible land and water resource management is projected to spur demand for geoscientists in the future (Bureau of Labor Statistics 2020). Earth Sciences courses are rigorous and comprehensive utilizing the most current technology so that students not only develop but also apply knowledge of their discipline to solve complex problems. Our students engage in research of critical importance such as identifying key processes in the forecasting of snowfall or determining how fluids flow through fractured and porous rock units. Graduates from the Earth Sciences curriculum find satisfying careers in the atmospheric sciences, emergency management, and the environmental geo- and ocean sciences.

Our bachelor's degrees are designed to prepare students for the professional workforce or graduate education with qualifications and skills that will ensure success. The meteorology curriculum conforms to the American Meteorological Society's (AMS) guidelines for a B.S. in atmospheric science/meteorology, and the GS-1340 civil service requirements for government employment (e.g., National Weather Service, NOAA). The BS EEOS environmental geology option exceeds the academic requirements for professional licensure and prepares every student for success through extensive opportunities to apply their skills in the field. The BS EEOS program has ocean/bay access at the Chincoteague Bay Field Station (CBFS), where students have opportunities for hands-on, feet-wet experiences, on shore and onboard research vessels. Academic

minors in areas where the workforce is strong or emerging, such as data science, emergency management, environmental policy, geospatial sciences, mathematics, broadcast communication, government and political affairs, and heliophysics and space weather, are encouraged but not required.

Millersville University is a senior partner of the CBFS, institutional member of the American Geophysical Union (AGU), American Geosciences Institute (AGI), American Meteorological Society (AMS), International Association of Emergency Managers (IAEM), National Weather Association (NWA), University Corporation for Atmospheric Research (UCAR), and an educational partner of the Weather Risk Management Association (WRMA). The University is a participant in the National Weather Service (NWS) StormReady® program and the Mid-Atlantic Regional Association Coastal Observing System, and the AMS Student Chapter is a member of the Weather-Ready Nation (WRN). For more information, see www.millersville.edu/esci

Five multidisciplinary minors are available that have been designed for students with an environmental interest. A full major in a discipline is an important foundation on which to build expertise in a specific environmental area, and the minors are designed to complement majors in the sciences, technology and social sciences. Increasingly, environmental problems are addressed by multidisciplinary teams, so the minors prepare students to operate in this multidisciplinary setting.

Geography is the study of how people relate to their natural and human surroundings. Geography is a bridge discipline, an environmental science which brings together principles of physical sciences and other social sciences; a social science which examines the spatial characteristics of culture, history, politics, economies and business decisions; and a liberal arts discipline which provides background for study in art, languages, literature, music, education and many other subjects. Geographers can bring to analyses of current issues an understanding of global interrelationships and specialized geospatial technology skills. Many geographers develop professional skills in map interpretation, cartography, geographic information systems (GIS), and remote sensing. Geographic understanding and skills create the potential for employment in such diverse areas as planning and other government agencies, environmental and cartographic service companies, and the business community. Contact the department chairperson for more detailed information on career opportunities.

The Bachelor of Arts program in Geography offers major concentrations in environmental studies, geospatial applications, global studies, and sustainability studies. The major program requires 42 credit hours of study and a minor program of study outside the department.

The Bachelor of Science program in Environmental and Spatial Sciences provides advanced training in geospatial technologies, including: geographic information science (GIS), global positioning system (GPS) technology, remote sensing, data management, and cartography. Graduates of the program are well-positioned for careers in environmental analysis and mitigation of environmental problems. The program prepares students to assess environmental and human-environment systems, identify and evaluate environmental problems, and design innovative and sustainable solutions.

The Bachelor of Science in Education (B.S.Ed.) program in secondary education, providing certification for social studies teaching with a geography emphasis, serves students who are interested in a robust and well-rounded social studies preparation for their future teaching careers.

Minor programs of study in environmental geography, geospatial applications, global geography, sustainability studies, and general geography each require 18 credits and may be studied by those students in major programs other than the B.A. Geography.

FACULTY LIST
Blumberg, William; Assistant Professor College of Science and Technology B.S., University of Oklahoma, 2011; M.S, Ibid., 2013; Ph.D., Ibid., 2018
Casas, Eleanor; Assistant Professor College of Science and Technology B.S., Valparaiso University, 2015; M.S., Colorado State University, 2018; Ph.D., Ibid., 2022
Cuthbert, Angela; Professor College of Science and Technology B.E.S., University of Waterloo (Canada), 1995; M.E.S., Ibid., 1996; Ph.D., McMaster University (Canada), 2001
Earman, Samuel; Associate Professor College of Science and Technology B.A., Macalester College, 1989; M.S., University of Nevada, 1996; Ph.D., New Mexico Institute of Mining and Technology, 2004
Elliott, Kyle; Weather Center Director College of Science and Technology B.S., Millersville University, 2014; M.S., Penn State University, 2016
Fitzgerald, David; Systems Administrator College of Science and Technology B.S., Millersville University, 1987; M.S., University of Wyoming, 1994
Frost, Ethan; Assistant Professor College of Science and Technology B.A., Clark University, 2002; M.S., University of Delaware, 2006; Ph.D., Ibid., 2011
Hagelgans, Duane; Professor College of Science and Technology B.S., Millersville University, 1998; J.D., Widener University School of Law, 2003
Kelly, Jessica; Geography Program Coordinator, Associate Professor College of Science and Technology B.A., Boston University, 2003; M.A., Ibid., 2003; Ph.D., Rutgers University, 2009
Kumar, Ajoy; Professor (Sabbatical 2025-26) College of Science and Technology B.S., University of Madras (India), 1985; M.S., Ibid., 1987; Ph.D., Old Dominion University, 1996
Marquez, Lynn; Department Chairperson, Professor College of Science and Technology B.A., DePauw University, 1991; M.S., Northwestern University, 1994, Ph.D., Ibid., 1998
Schreiber, Kathleen; Professor College of Science and Technology B.A., University of Delaware, 1983; M.S., Ibid., 1990; Ph.D., Ibid., 1996
Sikora, Todd; Professor College of Science and Technology B.S., The Pennsylvania State University; M.S., Ibid., 1992; Ph.D., Ibid., 1996
Vaillancourt, Robert; Professor College of Science and Technology Ph.D., University of Rhode Island, 1999
Walsh, Talor; Associate Professor College of Science and Technology B.A., Oberlin College, 2007; M.S., University of Rochester, 2012; Ph.D., Ibid., 2015

FACULTY LIST

Yalda, Sepideh; Professor
College of Science and Technology
B.S., Saint Louis University, 1991; M.S., Ibid., 1993; Ph.D., Ibid., 1997

Programs

Earth Science Post-Baccalaureate Certification

Overview

For post-baccalaureate information please see the "Post-Bacc Teacher Certification" section of the Graduate Course Catalog.

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Foundations Courses (6 credits)

Complete at least 1 of the following:

Option 1. Foundations Graduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

Major in Earth Science, Post-Bacc Certification

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

Credits Required for Major

AND

Minimum GPA

Earn a minimum GPA of 2.0

AND

Required Courses

Earn a minimum grade of C- in the following:

- ESCI221 - Physical Geology
- ESSC241 - Meteorology
- ESSC261 - Introduction to Oceanography

AND

Required Courses

Complete ALL of the following Courses:

- ESSC222 - Historical Geology
  OR ESSC222H - H:Historical Geology
- ESSC245 - Environmental Meteorology

AND

Additional Oceanography Course

Complete at least 1 of the following courses:

- ESSC267 - Field Methods in Oceanography
- ESSC363 - Chemical Oceanography
- ESSC366 - Marine Resources and Policy
  OR ESSC366H - Hon: Marine Resources and Policy
- ESSC369 - Physical Oceanography and Climate
- ESSC464 - Ocean Ecosystems
- ESSC465 - Biological Oceanography
- ESSC266 - Environmental Oceanography
- ESSC468 - Ocean Data Analysis and Presentation

AND

300 or 400 level ESSC Elective

Complete at least 1 course in the following course sets:

- Any 3-level ESSC course(s)
- Any 4-level ESSC course(s)

Req Related for Earth Science, Post-Bacc Cert

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (8 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1

AND

Physics

Fulfill ALL of the following requirements:

Physics 1 (4 credits)

Earn a minimum grade of C- in the following:

- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra

AND

Physics 2 (4 credits)

Complete ALL of the following Courses:

- PHYS132 - Physics 2 with Algebra

AND

General Astronomy or Intro to Astronomy & Astrophysics (3 credits)

Complete at least 1 of the following courses:

- PHYS117 - General Astronomy
- PHYS317 - Introduction to Astronomy

AND

Chemistry

Fulfill ALL of the following requirements:

Introductory Chemistry 1 (4 credits)

Earn a minimum grade of C- in the following:

- CHEM111 - Introductory Chemistry 1

AND

Introductory Chemistry 2 (4 credits)

Complete ALL of the following Courses:

- CHEM112 - Introductory Chemistry 2

AND

Biology

Fulfill ALL of the following requirements:

Demonstrated Competency in Biology

Competency may be demonstrated by:

1. A course grade of 'A' or 'B' in AP Biology.
2. A score of 3 or better in the national AP exam.
3. A successful score on the CLEP exam.
4. A successful score on a General Biology challenge or placement examination.
5. A passing grade for General Biology (BIOL100 General Biology).

AND

200 level or higher Biology elective

Complete at least 1 course in the following course sets:

- Any 2-level BIOL course(s)
- Any 3-level BIOL course(s)
- Any 4-level BIOL course(s)

Professional Education - Certification (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/EDFN241 Psyc Foundation of Teaching and please register for both courses in the same block.

AND

APS - Professional Bloc

Fulfill ALL of the following requirements:

Instructional Technology, Design & Assessment (3 credits)

Complete at least 1 of the following courses:

- EDFN530 - Instructional Technology, Design and Assessment
- EDFN330 - Instructional Technology, Design & Assessment

AND

Issues in Secondary Education (3 credits)

Complete at least 1 of the following courses:

- SEED521 - Issues in Second Education
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education

AND

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- SEED435 - Teaching of Science in Secondary Schools

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc and but prior to Student Teaching.

AND

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Access the Student teaching Website

AND

Student Teaching Semester (9 credits)

Complete at least 1 of the following courses:

- SCED461 - Student Teaching in Science
- SCED462 - Student Teaching in Science

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

Emergency Management, M.S.

Overview

The Master of Science degree in Emergency Management (MSEM) is a multidisciplinary program and is delivered as a fully online program. Graduate students will benefit through the continued development of both general and specialized courses, exposure to academics and practitioners with interest and experience in the area of disaster research and emergency management, the opportunity to undertake graduate research independently as part of ongoing faculty research, the opportunity to complete internships/co-ops, the link to other graduate programs and the availability of high-demand employment opportunities following graduation.

Admission Requirements

Before an application will be considered for admission, the following documents must be submitted to the College of Graduate Studies and Adult Learning: a completed graduate application and application fee, an official transcript from all institutions of higher education attended, verification of completion of a baccalaureate degree from a regionally accredited institution, three professional letters of recommendation, a goal statement and a résumé. If an applicant does not meet the minimum undergraduate GPA requirement of 2.8, an official score from either the GRE or MAT test taken within five years of the date of application is required. Applicants whose first language is not English must submit their score from the Test of English as a Foreign Language (TOEFL). Students with non-U.S. degrees must submit official academic credentials evaluated by an evaluation service along with the MSEM application. The TOEFL must have been completed within the previous two years.

Degree Requirements

The curriculum consists of 24 credit hours of required courses and an additional six credit hours of elective courses. The degree program, therefore, requires students to complete a total of 30 credit hours. Each course will incorporate knowledge and skills from or relevant to academic research, best practices, human behavior and key organizations, as well as legal issues, policies, rules and regulations.

The program can be completed on a part-time schedule. Students can elect to enroll in one or two courses during the fall and spring semesters as well as during the summer. It is possible for students to complete the program within two years; it must be completed, however, within five years.

Transfer Credits

All transfer credits must come from a regionally accredited institution and must have been completed within five years of enrolling in the MSEM program. A total of nine credits can be transferred.

Curriculum

Simple Requirements

Major in Emergency Management - MS (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (24 credits)

Complete ALL of the following Courses:

- EMGT601 - Principles & Practices of Emergency Management
- EMGT603 - Technical & Professional Writing for Emergency Management
- EMGT605 - Social Dimensions of Disaster
- EMGT607 - Emergency Mental Health and Trauma
- EMGT614 - Natural Hazards Primer
- EMGT615 - Emergency Preparedness for Industry
- EMGT619 - Emergency Management Planning
- EMGT693 - Field Experience Practicum

AND

Elective Courses (6 credits)

Complete at least 2 of the following courses:

- EMGT609 - Disaster Resp & Recov
- EMGT616 - Terrorism,WMD,HomeInd Security
- EMGT617 - Crisis, Emergency and Risk Communication
- EMGT618 - Humanitrn Rspnse/Intl Disastrs
- EMGT629 - Topics:
- EMGT630 - Topics:
- EMGT631 - Topics:
- EMGT632 - Topics:
- EMGT633 - GIS Applications for Emer Mgmt
- EMGT653 - Theoretical Prspctvs/Methods
- EMGT691 - Ind Stdy:
- TEIN605 - Applying Critical Thinking and Decision Making

Emergency Management, M.S. - Communication Concentration

Overview

Millersville University's Master of Science in Emergency Management (MSEM) degree requires 30 credit hours of study. The curriculum for the Communication Track within the MSEM Program consists of 15 credit hours of communication courses and 15 credit hours of MSEM courses. The Communication Track requires students to take five graduate courses from the Department of Communication and Theatre, including three required courses and two electives. Since the MSEM is an online program, all communication courses will be offered completely online, with synchronous component in each course for faculty and student interaction, discussions, group work and individual projects.

Curriculum

Simple Requirements

Major in Emergency Management, Communication - MS (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Emergency Management Courses (15 credits)

Complete ALL of the following Courses:

- EMGT601 - Principles & Practices of Emergency Management
- EMGT603 - Technical & Professional Writing for Emergency Management
- EMGT605 - Social Dimensions of Disaster
- EMGT614 - Natural Hazards Primer
- EMGT693 - Field Experience Practicum

AND

Required Communication Courses (9 credits)

Complete ALL of the following Courses:

- EMGT617 - Crisis, Emergency and Risk Communication

- COMM605 - Comm Research Proseminar
- COMM625 - Intercultural Comm in Contexts

AND

Additional Communication Electives (6 credits)

Complete at least 2 of the following courses:

- COMM610 - Seminar in Organizational Comm
- COMM627 - Digital Advocacy
- COMM653 - Applied Comm Theory
- COMM661 - Health Communication

Emergency and Disaster Management Graduate Certificate

Overview

The Emergency and Disaster Management (EDM) graduate certificate is a fully online certificate program and consists of five courses. This certificate is a 15-credit graduate certificate program. Certificate students who successfully complete their certificate courses will be able to apply the earned credits towards the full MSEM degree (or the MSEM-MSW dual-degree program) should they elect to do so.

Curriculum

Simple Requirements

Emergency & Disaster Managmnt Graduate Certificate (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Requirements (9 credits)

Complete ALL of the following Courses:

- EMGT601 - Principles & Practices of Emergency Management
- EMGT614 - Natural Hazards Primer
- EMGT619 - Emergency Management Planning

AND

Electives (6 credits)

Earn at least 6 credits from the following:

- EMGT605 - Social Dimensions of Disaster
- EMGT607 - Emergency Mental Health and Trauma
- EMGT616 - Terrorism,WMD,Homelnd Security
- EMGT617 - Crisis, Emergency and Risk Communication
- EMGT618 - Humanitrn Rspnse/Intl Disastrs
- EMGT634 - Comparative EMGT Systems

Space Weather and Environment Certificate

Overview

Space Weather and Environment: Science, Policy and Communication

Space Weather and Environment: Science, Policy and Communication (SWEN) is a fully online five course, 15-credit-hour graduate certificate program for clientele that includes broadcast meteorologists and other weather-casters, emergency responders, military personnel, federal and state policy advisors, legislative assistants, science journalists, and any professional whose career may be enhanced with a greater understanding of this subject area. Guided by the National Space Policy of the United States of America, this program will be an avenue for professional development and advancement for those seeking to deepen and broaden their knowledge-base and understanding of the Earth-Sun-Space environment as well as the impact space weather can have on infrastructure, communication and commerce.

Why Study This Program?

If you are responsible for communication and power grids, transportation systems, navigation systems including space-based assets, commerce, and other infrastructure, this program is for you. Additionally, this program will assist individuals to be better prepared to communicate these issues to policy-makers, stakeholders and the public. The international scope of the SWEN will help prepare individuals for positions in the government, private, commercial and academic sectors. The program should be especially interesting for broadcast meteorologists who are seeking to gain knowledge and proficiency in space weather to better communicate to their market audience.

What You Will Learn?

Those who have completed the SWEN program will possess the ability to:

- Demonstrate base knowledge of natural or environmental hazards, including space weather hazards and associated risks;
- Describe solar and space weather phenomena, including but not limited to: aurora, coronal holes, coronal mass ejections (CME), solar flares, sunspots, solar cycle, geomagnetic storms, characteristics of the magnetosphere, and behavior of the interaction between different elements;
- Relate impacts of space weather phenomena to existing and emerging fields, including the variety of customers and operations most vulnerable;

- Organize existing protocols and design new protocols for preparing and responding to space weather events;
- Describe and apply the products, data and graphics to communicate for specific space weather events; and
- Develop new video products that will communicate space weather to specific audiences – a capstone experience.

Curriculum

Simple Requirements

Certificate in Space Weather & Environment (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- EMGT614 - Natural Hazards Primer
- SWEN571 - The Origins of Space Weather
- SWEN572 - Impacts of Space Weather on the Technological World
- SWEN673 - Effective Decision-Support for Space Weather Risks
- SWEN674 - Space Weather Broadcast and Communications

Earth Sciences Minor

Overview

The Earth Sciences minor provides foundational knowledge in geology, meteorology, and ocean sciences. Students interested in environmental or energy policy, sustainability studies, or geographic information systems may want to consider a minor in Earth Sciences.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Earth Sciences

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ESSC241 - Meteorology
- ESSC261 - Introduction to Oceanography

AND

Geology Course

Complete at least 1 course in the following course sets:

- Any 32-level ESSC course(s)
- Any 42-level ESSC course(s)

AND

Meteorology Course

Complete at least 1 course in the following course sets:

- Any 34-level ESSC course(s)
- Any 44-level ESSC course(s)

AND

Ocean Sciences and Costal Studies Course

Complete at least 1 course in the following course sets:

- Any 36-level ESSC course(s)
- Any 46-level ESSC course(s)

Environmental Geography Minor

Overview

A minor in environmental geography emphasizes a study of physical and human geography and traditional resource-based issues of air, water, energy and land resources. The minor complements most majors in the social and natural sciences. 18 credits required.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Environmental Geography (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- GEOG101 - The Global Environment
- GEOG202 - Environmental Sustainability

AND

Physical Geography or Geomorphology (3 credits)

Complete at least 1 of the following courses:

- GEOG230 - Physical Geography
- ESSC225 - Geomorphology

AND

Physical Geography or Geomorphology (3 credits)

Complete at least 1 of the following courses:

- GEOG281 - Maps and GIS

AND

Geography Electives at the 300-400 Level (6 credits)

Complete at least 2 courses in the following course sets:

- Any 3-level GEOG course(s)
- Any 4-level GEOG course(s)

Environmental Hazards and Emergency Management Minor

Overview

This minor educates those interested in protecting and building disaster-resilient communities. Emergency-management professionals are employed at each level of government, at nonprofit disaster-relief organizations, in domestic and international nongovernmental organizations, in private-sector emergency-management consulting, and in information technology, among others.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Envir Hazards & Emergency Mgmt (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- ESSC101 - Earth Systems & Natural Hazards

OR ESSC101H - Hon: Earth Systems & Natural Hazards (Inactive)
- EHEM201 - Introduction to Emergency Management
- EHEM305 - Disaster Management & Community Risk Reduction
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

AND

Electives (6 credits)

Earn at least 6 credits from the following:
- CHEM101 - Chemistry in Society
- CHEM103 - Gen Organic and Biochemistry 1
- CHEM111 - Introductory Chemistry 1
- EHEM205 - Natural Hazards Risk Assessment and Mitigation
- EHEM300 - Co-Op Ed Experience in EHEM
- EHEM309 - Disaster Response & Recovery
- EHEM316 - Intro to Terrorism, WMD and Homeland Security
- EHEM319 - Emergency Management Planning
- EHEM400 - Co-Op Ed Experience in EHEM
- EHEM498 - Ind Stdy:
- ESSC281 - GIS Applications for Earth Sci
- GEOG295 - GIS I: Vector Data Analysis
- GEOG372 - Urban and Regional Planning
- OSEH221 - Industrial Fire Prevention, Protection and Control
- SOCI313 - Sociology of Disaster
  OR SOCI313H - H: Sociology of Disaster
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology

Note that under electives GEOG295 GIS I: Vector Data Analysis and ESSC281 GIS Applications for Earth Sci are equivalent and only one may be taken for credit.

Note for SOCI329: This course may be included if taken with any of the following topics:
- Topics:Bio-Terrorism
- Topics:Sociology of Terrorism
- Topics:Terrorism

General Geography Minor

Overview

A minor in general geography complements most majors in the social and physical sciences. The general geography minor is customizable to student interests and career goals. The minor complements most majors offered by Millersville University.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Geography (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for minor
- Minimum Residency 50% of minor credits
- 2 Courses Must be Upper-Division

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- GEOG101 - The Global Environment
- GEOG281 - Maps and GIS

AND

Geography Electives at the 300-400 level (6 credits)

Complete at least 2 courses in the following course sets:

- Any 3-level GEOG course(s)
- Any 4-level GEOG course(s)

AND

Geography Electives (6 credits)

Complete at least 2 courses in the following course sets:

- Any 1-level GEOG course(s)
- Any 2-level GEOG course(s)
- Any 3-level GEOG course(s)
- Any 4-level GEOG course(s)

Electives must be determined with approval of the Chairperson of the Geography Department.

Geology Minor

Overview

The geology minor provides foundational knowledge in geology appropriate for students interested in agriculture, archeology, biology, climate, emergency management, or environmental policy. This minor is perfect for those students passionate about how the Earth transforms over time through tectonic processes, how landforms develop, or how Earth resources are formed and used.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Geology

Type
Completion Requirement

Track 2 Geology Minor (Non-BSE ESSC Majors)

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Complete ALL of the following Courses:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology

AND

Geology Electives

Complete at least 2 courses in the following course sets:

- Any 32-level ESSC course(s)
- Any 42-level ESSC course(s)

AND

Geology Electives (9-10 credits)

Complete at least 3 of the following courses:

- ESSC222 - Historical Geology
  OR ESSC222H - H:Historical Geology
- ESSC225 - Geomorphology
- ESSC226 - Geology of Earth and Energy Resources
- GEOG230 - Physical Geography
- ESSC101 - Earth Systems & Natural Hazards
  OR ESSC101H - Hon: Earth Systems & Natural Hazards (Inactive)
- ESSC102 - Origin and Evoltn of the Earth
- ESSC120 - Environmental Geology

Student may take ESSC225 Geomorphology OR GEOG230 Physical Geography, not both and for the minor. Student may take ESSC382 Water Wars: Science and Policy OR ESSC385 Glbal Clmate Chng: Sci & Polcy, not both and for the minor. Student may only take (1) 100-level course for elective in minor.

Global Geography Minor

Overview

A minor in global geography emphasizes international and regional geographic issues, including people, communities and culture. The minor complements most humanities and social sciences majors. 18 credits required.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Global Geography (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- GEOG101 - The Global Environment

AND

Map Interpretation & Analysis (3 credits)

Complete ALL of the following Courses:

- GEOG281 - Maps and GIS

AND

Regional Geography Course (300-400 level) (3 credits)

Complete at least 1 course in the following course sets:

- Any 34-level GEOG course(s)
- Any 44-level GEOG course(s)

AND

Systematic Geography Course (300-400 level) (3 credits)

Complete at least 1 of the following:

Option 1

Complete at least 1 course in the following course sets:

- Any 22-level GEOG course(s)
- Any 32-level GEOG course(s)

OR

Option 2

Complete at least 1 of the following courses:

- GEOG307 - US Environmental Policy
- GEOG407 - Glbl Envrnmtl Policy/ Negotiatn

AND

Geography Electives (6 credits)

Complete at least 2 courses in the following course sets:

- Any GEOG course(s)

Geospatial Applications Minor

Overview

A minor in geospatial applications emphasizes methods in geographic information systems (GIS), map use and interpretation, and cartography. The minor complements most business, social sciences, and natural sciences majors. 18 credits required.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Geospatial Applications (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Intro Level GEOG Course (3 credits)

Complete at least 1 of the following courses:

- GEOG101 - The Global Environment
- GEOG120 - Human Geography
- GEOG130 - Intro to Environmental Science **OR** GEOG130H - Hon: Intro to Environmental Science (Inactive)
- GEOG230 - Physical Geography

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- GEOG281 - Maps and GIS

AND

GIS:Vector Data Analysis (3 credits)

Complete ALL of the following Courses:

- GEOG295 - GIS I: Vector Data Analysis

AND

GIS:Raster Data Analysis or Field and Research Methods (3 credits)

Complete at least 1 of the following courses:

- GEOG296 - GIS II: Raster Data Analysis **OR** GEOG296H - H: GIS II: Raster Data Analysis (Inactive)
- GEOG289 - Field and Research Methods in Geography

AND

GEOG 38@ or 39@ Elective (3 credits)

Complete at least 1 course in the following course sets:

- Any 38-level GEOG course(s)
- Any 39-level GEOG course(s)

AND

Upper Level Geography Elective (3 credits)

Complete at least 1 course in the following course sets:

- Any 3-level GEOG course(s)
- Any 4-level GEOG course(s)

Heliophysics and Space Weather Minor

Overview

Heliophysics and Space Weather challenges students to consider the principles and problems associated with the solar system through the lenses of multiple disciplines. As the study of the sun and its effects on the Earth requires a broad understanding of physics and meteorology, the minor program at Millersville University explores this interdisciplinary field through both physics and earth science.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Heliophysics and Space Weather (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- PHYS233 - Wave-Particle Theory
- PHYS321 - Electromagnetic Fields 1
- PHYS322 - Electromagnetic Fields 2
- PHYS335 - Quantum Systems
- ESSC440 - Space Weather and Environment
  OR ESSC440H - Hon: Space Weather and Environment

AND

Atmospheric Thermodynamics or Macroscopic Physics (3 credits)

Complete at least 1 of the following courses:

- ESSC341 - Atmospheric Thermodynamics
- PHYS334 - Macroscopic Physics

AND

Statistical Mechanics

PHYS435 Statistical Mechanics is a recommended course, but is not required for completion of the minor.

Additional Comments:
A C or better in PHYS231 Physics 1 with Calculus and PHYS232 Physics 2 with Calculus is required to be admitted to this minor. MATH161 Calculus 1, MATH211 Calculus 2, MATH311 Calculus 3 and MATH365 Ordinary Differential Equation are prequisite courses to the PHYS courses in this minor, please be sure you are completing these MATH courses prior to the respective PHYS requirements in the minor.

Meteorology Minor

Overview

Millersville University's meteorology program offers a contemporary, comprehensive curriculum, infused with technology and taught by inspiring and passionate faculty. This program prepares students for a broad range of career opportunities through our ongoing commitment to their growth as scientists and citizens, with knowledge and skills that are and will be in demand in the modern, evolving workplace.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Meteorology (19 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (10 credits)

Complete ALL of the following Courses:

- ESSC241 - Meteorology
- ESSC341 - Atmospheric Thermodynamics
- ESSC342 - Atmospheric Dynamics 1

AND

Cloud Physics & Precipitation or Atmospheric Radiative Transfer (3 credits)

Complete at least 1 of the following courses:

- ESSC340 - Cloud Physics & Precip Process
  OR ESSC340H - H:Cloud Physics & Precip Process
- ESSC345 - Atmospheric Radiative Transfer

AND

Earth Science Electives (6 credits)

Complete ALL of the following Course Sets:

- Any 34-level ESSC course(s)
- Any 44-level ESSC course(s)

May also take ESSC385 Glbal Clmate Chng: Sci & Polcy or ESSC385H H: Clmate Chng: Sci & Polcy.

Oceanography Minor

Overview

A minor in Oceanography examines the physical aspects of ocean currents, tides and the intimate relationship between the ocean and atmosphere, with significant emphasis on the ocean's role in climate change. Offering a comprehensive classroom instruction and field training in the physical, chemical, geological and biological aspects of oceanography, students acquire a rigorous education in the fundamental theories, but also experience practical field and laboratory applications currently used by working oceanographers.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Oceanography

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Minor
- Minimum Residency 50% of minor credits
- 2 Courses Must be Upper-Division

AND

Required Courses

Complete ALL of the following Courses:

- ESSC261 - Introduction to Oceanography

AND

Required Core Courses

Complete at least 2 of the following courses:

- ESSC362 - Marine Geology
- ESSC363 - Chemical Oceanography
- ESSC369 - Physical Oceanography and Climate
- ESSC465 - Biological Oceanography

AND

Required Methods Courses (6 credits)

Complete at least 2 of the following courses:

- ESSC267 - Field Methods in Oceanography
- ESSC282 - FORTRAN Programming for Earth Sciences Applications
- ESSC380 - Remote Sensing & Image Interpretation
- ESSC386 - Sci Prg Lang:

AND

Earth Science Elective (3 credits)

Complete at least 1 of the following courses:

- ESSC366 - Marine Resources and Policy
  OR ESSC366H - Hon: Marine Resources and Policy
- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy

- ESSC445 - Num Modeling of Atmos and Ocns
- ESSC464 - Ocean Ecosystems
- ESSC468 - Ocean Data Analysis and Presentation

Sustainability Studies Minor

Overview

A minor in sustainability studies is an interdisciplinary examination of themes in sustainable development, environmental studies, public policy, city and regional planning, economics, and social well-being. A sustainability minor complements most major programs of study in business, social sciences, natural sciences, and human services.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Sustainability Studies

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Human Geography or World Regional Geography (3 credits)

Complete at least 1 of the following courses:

- GEOG120 - Human Geography
- GEOG141 - World Regional Geography

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- GEOG202 - Environmental Sustainability
- GEOG408 - Sustainable Development

AND

Climate and Society or US Environmental Policy (3 credits)

Complete at least 1 of the following courses:

- GEOG336 - Climate And Society
- GEOG307 - US Environmental Policy

AND

Sustainability Elective

Complete at least 1 of the following:

Option 1. Sustainability Elective

Complete at least 1 course in the following course sets:

- Any 30-level GEOG course(s)
- Any 33-level GEOG course(s)
- Any 40-level GEOG course(s)

OR

Option 2. Sustainability Elective

Complete ALL of the following Courses:

- GEOG372 - Urban and Regional Planning

AND

Geography Elective

Complete at least 1 course in the following course sets:

- Any GEOG course(s)

Geography B.A., - Environmental Studies Option

Overview

Millersville University's Environmental Studies concentration offers a comprehensive program of study that encourages students to pursue study in traditional resource-based issues of air, water, energy and land resources. Emphasizing physical geography and environmental topics, this concentration bridges the social and natural sciences in order to study complex environmental problems. Graduates of this program have the foundation for further academic study in disciplines addressing geographic and environmental areas of study, or for immediate employment in the public and private sector, including areas of environmental planning, public policy, and natural resource management.

Environmental Studies is a concentration within the Geography major. 42 credits and a minor program of study required.

Curriculum

Simple Requirements

Major in Geography

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Human Dimensions of Sustainability (3 credits)

Complete ALL of the following Courses:

- GEOG120 - Human Geography

AND

Environmental Foundations (6 credits)

Complete ALL of the following Courses:

- GEOG202 - Environmental Sustainability
- GEOG230 - Physical Geography

AND

Environmental Techniques (6 credits)

Complete ALL of the following Courses:

- GEOG281 - Maps and GIS
- GEOG295 - GIS I: Vector Data Analysis

AND

Concentration in Environmental Studies

See separate block

Concentration in Environmental Studies

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Regional Dimensions

Complete at least 1 course in the following course sets:

- Any 14-level GEOG course(s)
- Any 24-level GEOG course(s)
- Any 34-level GEOG course(s)
- Any 44-level GEOG course(s)

AND

Upper Level Environmental/Physical Geography

Complete at least 4 of the following:

Course Options

Complete ANY of the following Course Sets:

- Any 30-level GEOG course(s)
- Any 33-level GEOG course(s)
- Any 43-level GEOG course(s)

OR

Additional Course Options

Complete ANY of the following Courses:

- GEOG407 - Glbl Envrnmtl Policy/ Negotiatn

Note: This requirement may not be satisfied with GEOG300 Co-Op Ed Experience in Geog.

AND

Additional Environmental Techniques Course

Complete ANY of the following Course Sets:

- Any 29-level GEOG course(s)
- Any 37-level GEOG course(s)
- Any 38-level GEOG course(s)
- Any 39-level GEOG course(s)

AND

Environmental Research/Practicum: Co-Op in Geography or Senior Thesis (1-3 credits)

Complete at least 1 of the following courses:

- GEOG300 - Co-Op Ed Experience in Geog
- GEOG488 - Senior Thesis
- GEOG499 - Departmental Honors

Req Related for Geography, BA (10-11 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

A Minor Is Required

Select a minor OTHER THAN Geography. Recommended minors with an environmental emphasis: Biology, Geology, Meteorology, Oceanography, Earth Science, Env Hazards & Emergency Mgmt, Env Policy & Regulation, Land Use, Water Resources Industrial and Environmental Health, Quantitative Methods in Env Science, Occupational Safety, Other relevant minors: Criminology, Government, International Studies, and Print Media Studies.

AND

Required Related Courses

Fulfill ALL of the following requirements:

Statistics Course (3 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- ECON231 - Applied Statistcs 1
  OR ECON231H - Hon: Applied Statistcs 1
- EVSC330 - Environmental Statistics & Risk Assessment
- MATH235 - Survey of Statistics

AND

Calculus for Management or Precalculus (4 credits)

Complete at least 1 of the following courses:

- MATH151 - Calculus for Management
- MATH160 - Precalculus

AND

Environmental Science Course (3-4 credits)

Complete at least 1 of the following courses:

- BIOL241 - Principles of Ecology (Inactive)
- ESSC101 - Earth Systems & Natural Hazards
  OR ESSC101H - Hon: Earth Systems & Natural Hazards (Inactive)
- ESSC104 - The World Ocean
  OR ESSC104H - Hnrs:The World Ocean (Inactive)
- ESSC107 - The Atmosphere
  OR ESSC107H - Hon: The Atmosphere (Inactive)
- ESCI109 - Atmosphere with Lab
- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ESSC225 - Geomorphology
- ESSC245 - Environmental Meteorology
- ESSC261 - Introduction to Oceanography
- ESSC322 - Environmental Hydrology

Geography, B.A. - Global Studies Option

Overview

Millersville University's Global Studies concentration offers a comprehensive program of study in international and regional geographic issues, including people, communities and culture. Graduates of this program have the foundation for further academic study in disciplines addressing geographic, regional, and international issues, or for immediate employment in the public or private sectors where critical thinking, geographical and cross-cultural understanding, writing, and public speaking are desired.

Global Studies is available as concentration within the Geography major. 42 credits and a minor program of study required.

Curriculum

Simple Requirements

Major in Geography

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Human Dimensions of Sustainability (6 credits)

Complete ALL of the following Courses:

- GEOG120 - Human Geography
- GEOG141 - World Regional Geography

AND

Environmental Foundations (3 credits)

Complete ALL of the following Courses:

- GEOG230 - Physical Geography

AND

Environmental Techniques (9 credits)

Complete ALL of the following Courses:

- GEOG281 - Maps and GIS
- GEOG292 - Quantitative and Spatial Analysis

AND

Concentration in Global Geography

See separate block

Concentration in Global Geography

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Systematic Human Geography Courses

Complete at least 2 courses in the following course sets:

- Any 22-level GEOG course(s)
- Any 32-level GEOG course(s)

AND

Regional Dimensions

Complete at least 4 courses in the following course sets:

- Any 24-level GEOG course(s)
- Any 34-level GEOG course(s)
- Any 44-level GEOG course(s)

Note: This requirement may not be satisfied with GEOG245 Geography of Pennsylvania.

AND

Global Geography Research/Practicum: Co-Op in Geography or Senior Thesis (1-3 credits)

Complete at least 1 of the following courses:

- GEOG300 - Co-Op Ed Experience in Geog
- GEOG400 - Co-Op Ed Experience in Geog
- GEOG488 - Senior Thesis
- GEOG499 - Departmental Honors

AND

Additional Required Geography Elective

Complete at least 3 courses in the following course sets:

- Any GEOG course(s)

Note: This requirement may not be satisfied with GEOG120 Human Geography, GEOG230 Physical Geography, GEOG281 Maps and GIS, GEOG292 Quantitative and Spatl Analys, GEOG295 GIS I: Vector Data Analysis or GEOG372 Urban and Regional Planning.

Any GEOG courses taken in excess of requirements will count toward major GPA.

Req Related for Geography, BA

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

A Minor Is Required

Select a minor OTHER THAN Geography. Recommended minors with an environmental emphasis: Biology, Geology, Meteorology, Oceanography, Earth Science, Env Hazards & Emergency Mgmt, Env Policy & Regulation, Land Use, Water Resources Industrial and Environmental Health, Quantitative Methods in Env Science, Occupational Safety, Other relevant minors: Criminology, Government, International Studies, and Print Media Studies.

Geography, B.A. - Geospatial Applications Option

Overview

Millersville University's Geospatial Applications concentration offers a comprehensive program of study that emphasizes the acquisition of skills in geographic information systems (GIS), remotes sensing, map use and interpretation, cartography, spatial analytical skills, and advanced geospatial applications. Graduates of this program have the foundation for further academic study in disciplines addressing geographic and environmental issues in the social and natural sciences, or for immediate employment in public and private sectors in environmental and urban planning and management where GIS and geospatial analysis skills are highly desirable.

Geospatial Applications is available as concentration within the Geography major. 42 credits and a minor program of study required.

Curriculum

Simple Requirements

Major in Geography (21 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Human Dimensions of Sustainability (3 credits)

Complete ALL of the following Courses:
- GEOG120 - Human Geography

AND

Environmental Foundations (3 credits)

Complete ALL of the following Courses:
- GEOG230 - Physical Geography

AND

Environmental Techniques (12 credits)

Complete ALL of the following Courses:
- GEOG281 - Maps and GIS
- GEOG292 - Quantitative and Spatial Analysis
- GEOG295 - GIS I: Vector Data Analysis
- GEOG296 - GIS II: Raster Data Analysis **OR** GEOG296H - H: GIS II: Raster Data Analysis (Inactive)

AND

Policy and Leadership (3 credits)

Complete ALL of the following Courses:
- GEOG372 - Urban and Regional Planning

AND

Concentration in Geospatial Applications

See separate block

Concentration in Geospatial Applications

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Geography Techniques Courses (6 credits)

Earn at least 6 credits from the following:
- Any 28-level GEOG course(s)
- Any 29-level GEOG course(s)
- Any 38-level GEOG course(s)
- Any 39-level GEOG course(s)

Note: This requirement may not be satisfied with GEOG281 Maps and GIS.

AND

Applied Geography Courses (6 credits)

Earn at least 6 credits from the following:
- GEOG278 - Transportation Geography
- GEOG304 - Water Resources Management
- GEOG305 - Energy Sustainability **OR** GEOG305H - Hon: Energy

Sustainability (Inactive)
- GEOG306 - Environmental Impact Assessmnt
- GEOG307 - US Environmental Policy
- GEOG336 - Climate And Society
- GEOG407 - Glbl Envrnmtl Policy/Negotiatn

AND

Regional Dimensions

Complete at least 1 course in the following course sets:
- Any 14-level GEOG course(s)
- Any 24-level GEOG course(s)
- Any 34-level GEOG course(s)
- Any 44-level GEOG course(s)

AND

Geospatial Applications Research/Practicum: Co-Op in Geography or Senior Thesis (3 credits)

Earn at least 3 credits from the following:
- GEOG300 - Co-Op Ed Experience in Geog
- GEOG400 - Co-Op Ed Experience in Geog
- GEOG500 - Co-Op Ed Experience in Geog
- GEOG488 - Senior Thesis
- GEOG499 - Departmental Honors

AND

Additional Required Geography Elective

Complete at least 1 course in the following course sets:
- Any GEOG course(s)

Note: This requirement may not be satisfied with GEOG120 Human Geography, GEOG230 Physical Geography, GEOG281 Maps and GIS, GEOG292 Quantitative and Spatl Analys, GEOG295 GIS I: Vector Data Analysis or GEOG372 Urban and Regional Planning.

Any GEOG courses taken in excess of requirements will count toward major GPA.

Req Related for Geography, BA (7 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

A Minor Is Required

Select a minor OTHER THAN Geography. Recommended minors with an environmental emphasis: Biology, Geology, Meteorology, Oceanography, Earth Science, Env Hazards & Emergency Mgmt, Env Policy & Regulation, Land Use, Water Resources Industrial and Environmental Health, Quantitative Methods in Env Science, Occupational Safety, Other relevant minors: Criminology, Government, International Studies, and Print Media Studies.

AND

Required Related Courses

Fulfill ALL of the following requirements:

Elements of Stat I or Survey of Statistics (3 credits)

Complete at least 1 of the following courses:
- MATH130 - Elements of Statistics 1
- MATH235 - Survey of Statistics

AND

Calculus for Management or Precalculus (4 credits)

Complete at least 1 of the following courses:
- MATH151 - Calculus for Management
- MATH160 - Precalculus

Geography, B.A. - Sustainability Studies Option

Overview

Millersville University's Sustainability Studies provides students with knowledge, skills, and ways of thinking needed to promote economic and social well-being while protecting the integrity of earth's living systems. Sustainability Studies is an interdisciplinary field, engaging sustainable development, environmental studies, public and environmental policy, city and regional planning, economics, social well-being, and global and local understanding. Spatial tools and skills enhance advanced issue analysis. The program is well-balanced between the integral social, policy, environmental, global, economic, and communication components of sustainability. Graduates of this program have the foundation for further academic study in disciplines addressing geographic and sustainability issues, or for immediate employment in the public or private sectors in sustainability and environmental management.

Sustainability Studies is a concentration in the B.A. program in Geography. 42 credits and a minor program of study required.

Curriculum

Simple Requirements

Major in Geography (27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Human Dimensions of Sustainability (6 credits)

Complete ALL of the following Courses:

- GEOG120 - Human Geography
- GEOG141 - World Regional Geography

AND

Environmental Foundations (6 credits)

Complete ALL of the following Courses:

- GEOG202 - Environmental Sustainability
- GEOG230 - Physical Geography

AND

Environmental Techniques (9 credits)

Complete ALL of the following Courses:

- GEOG281 - Maps and GIS
- GEOG292 - Quantitative and Spatial Analysis
- GEOG289 - Field and Research Methods in Geography

AND

Policy and Leadership: US Env Policy, Climate & Society, or Urban & Reg. Plan (6 credits)

Complete at least 2 of the following courses:

- GEOG307 - US Environmental Policy
- GEOG336 - Climate And Society
- GEOG372 - Urban and Regional Planning

AND

Concentration in Sustainability Studies

See separate block

Concentration in Sustainability Studies (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Sustainability Electives (6 credits)

Complete at least 2 of the following courses:

- GEOG227 - Cities
- GEOG304 - Water Resources Management
- GEOG305 - Energy Sustainability
  OR GEOG305H - Hon: Energy Sustainability (Inactive)
- GEOG306 - Environmental Impact Assessmnt
- GEOG333 - Biogeography
- GEOG307 - US Environmental Policy
- GEOG336 - Climate And Society
- GEOG372 - Urban and Regional Planning

AND

Capstone in Sustainability Studies (3 credits)

Complete ALL of the following Courses:

- GEOG408 - Sustainable Development

AND

Additional Required Geography Elective (6 credits)

Earn at least 6 credits from the following:

- Any GEOG course(s)

Req Related for Geography, BA (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

A Minor Is Required

Select a minor OTHER THAN Geography. Recommended minors with an environmental emphasis: Biology, Geology, Meteorology, Oceanography, Earth Science, Env Hazards & Emergency Mgmt, Env Policy & Regulation, Land Use, Water Resources Industrial and Environmental Health, Quantitative Methods in Env Science, Occupational Safety, Other relevant minors: Criminology, Government, International Studies, and Print Media Studies.

AND

Required Related Courses

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ECON307 - Environmental Economics

AND

Comm & Conflict Mgmt or Global Well-Being (3 credits)

Complete at least 1 of the following courses:

- COMM450 - Communication and Conflict **OR** COMM450H - Hnrs: Communication and Conflict
- SOWK314 - Global Citizenship **OR** SOWK314H - HON:Global Citizenship

Earth Science, B.S.E.

Overview

Interested in pursuing a career as a high school teacher? The Department of Earth Sciences offers a 4-year program leading to the Bachelor of Science in Secondary Education in the Earth Sciences.

This program is for students interested in pursuing careers as a high school educator in the field of earth sciences including environmental earth science, geology, meteorology, and oceanography. Students obtain certification in earth science upon completion of the program and successful completion of state examinations. Education courses and student teaching experiences are offered in conjunction with the department of Educational Foundations in the College of Education and Human Services (Educational Foundations | Millersville University).

Curriculum

Simple Requirements

Major in Earth Science, BSE

Type
Completion Requirement

Minimum GPA

Earn a minimum GPA of 2.0

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

Required Courses (19 credits)

Earn a minimum grade of C- in the following:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ESSC241 - Meteorology
- ESSC261 - Introduction to Oceanography
- ESSC222 - Historical Geology
  OR ESSC222H - H:Historical Geology
- ESSC245 - Environmental Meteorology

Ocean Resources (3 credits)

Complete ALL of the following Courses:

- ESSC366 - Marine Resources and Policy
  OR ESSC366H - Hon: Marine Resources and Policy

Planetary Geology or The Earth in Space (3 credits)

Complete ALL of the following Courses:

- ESSC428 - Planetary Geology
- ESCI202 - The Earth in Space

Advisor Approved ESSC Course

Choose one ESSC course

Professional Education (33 credits)

Type
Completion Requirement

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

Required Education Courses (9 credits)

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- EDFN330 - Instructional Technology, Design & Assessment
- SEED435 - Teaching of Science in Secondary Schools

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- SCED461 - Student Teaching in Science

Req Related for Earth Science, BSE (30 credits)

Type
Completion Requirement

Mathematics (8 credits)

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Complete ALL of the following Courses:
- MATH160 - Precalculus

AND

Required Courses (4 credits)

Earn an average grade of C- in the following:
- MATH161 - Calculus 1
  OR MATH161H - Hon: Calculus 1

Physics (11 credits)

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Earn a minimum grade of undefined in the following:
- PHYS131 - Physics 1 with Algebra

AND

Required Courses (4 credits)

Complete ALL of the following Courses:
- PHYS132 - Physics 2 with Algebra

General Astronomy or Intro to Astronomy & Astrophysics (3 credits)

Complete ALL of the following Courses:
- PHYS117 - General Astronomy
- PHYS317 - Introduction to Astronomy

Chemistry (8 credits)

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Earn a minimum grade of C- in the following:
- CHEM111 - Introductory Chemistry 1

AND

Required Courses (4 credits)

Complete ALL of the following Courses:
- CHEM112 - Introductory Chemistry 2
  OR CHEM112H - Hnrs:Introductory Chemistry 2

Biology

Fulfill ALL of the following requirements:

Demonstrated Competency in Biology

Competency may be demonstrated by:

1. A course grade of 'A' or 'B' in AP Biology
2. A score of 3 or better in the national AP exam
3. A successful score on the CLEP exam
4. A successful score on a General Biology challenge or placement examination
5. A passing grade for General Biology (BIOL100 General Biology).

AND

Principles of Ecology (3 credits)

Complete ANY of the following Courses:
- BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness

Advanced Professional Studies, BSE

Type
Completion Requirement

English Composition (3 credits)

Complete at least 1 of the following courses:
- ENGL110 - Introduction to College Writing

- ENGL110H - Hnrs:Introduction to College Writing

English Literature (3 credits)

Complete ALL of the following Courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Emergency Management, B.S.

Overview

A degree in Emergency Management prepares you for a broad range of career fields in both the public and private sectors ranging from, but not limited, to jobs in areas of local, state and federal emergency management, public health, transportation, public works, non-profit disaster relief organizations, domestic and international non-governmental organizations, energy sector, private sector emergency management consulting and Information technology among others. This program also includes an internship or applied experience that focuses on the application of the theoretical information covered in courses and other training and hands-on elements of the curriculum.

Curriculum

Simple Requirements

Major in Emergency Management, BS (31 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Earth Science Major Core (7 credits)

Fulfill ALL of the following requirements:

The Atmosphere (3-4 credits)

Complete at least 1 of the following courses:

- ESSC107 - The Atmosphere
  OR ESSC107H - Hon: The Atmosphere (Inactive)
- ESCI109 - Atmosphere with Lab

AND

Required Courses (3 credits)

Complete at least 1 of the following courses:

- ESSC120 - Environmental Geology

AND

Emergency Management Core (21 credits)

Complete at least 1 of the following courses:

- EHEM201 - Introduction to Emergency Management
- EHEM205 - Natural Hazards Risk Assessment and Mitigation
- EHEM305 - Disaster Management & Community Risk Reduction
- EHEM309 - Disaster Response & Recovery
- EHEM315 - Business Continuity and Continuity of Operations
- EHEM316 - Intro to Terrorism, WMD and Homeland Security
- EHEM319 - Emergency Management Planning

AND

Required Capstone: Thesis or Capstone Experience (3 credits)

Earn at least 3 credits from the following:

- EHEM393 - Field Experience Practicum
- EHEM300 - Co-Op Ed Experience in EHEM
- EHEM499 - Hnrs Thesis:

Req Related for Emergency Management, BS (25 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (16 credits)

Complete ALL of the following Courses:

- ESSC101 - Earth Systems & Natural Hazards
  OR ESSC101H - Hon: Earth Systems & Natural Hazards (Inactive)
- ESSC104 - The World Ocean
  OR ESSC104H - Hnrs:The World Ocean (Inactive)
- ESSC245 - Environmental Meteorology
- MATH160 - Precalculus
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues

AND

GIS Applications for Earth Sciences (3 credits)

Complete at least 1 of the following courses:

- ESSC281 - GIS Applications for Earth Sci
- GEOG295 - GIS I: Vector Data Analysis

AND

Required Related Electives (6 credits)

Complete at least 2 of the following courses:

- COMM371 - Crisis Emergency & Risk Comm
  OR COMM371H - Hon: Crisis Emergency & Risk Comm
- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy
- OSEH221 - Industrial Fire Prevention, Protection and Control
- GEOG372 - Urban and Regional Planning
- GOVT356 - Disasters and Our World
- EHEM329 - Special Topics in Emergency Management

Environmental Earth & Ocean Science, B.S. - Environmental Earth Sciences Option

Overview

The EEOS curriculum is based on the broad recognition that interdisciplinary competency is critical to educate the next generation of Earth and Environmental scientists. Through our environmental sciences core, students will study the foundational role of the Earth sciences as it relates to emerging environmental issues such as water resources and climate variability. Courses within the three tracks such as Earth Materials, Groundwater Resource and Contamination, Structural Geology and Environmental Oceanography emphasize application of geoscience techniques to environmental problems and develop skills that are broadly applicable to a variety of environmental careers. In addition, in this degree students develop necessary technical expertise through required courses in investigative methods and field techniques. The B.S. EEOS degree provides the fundamental coursework in the geo- and ocean sciences and emphasizes the context of emerging climate and environmental issues.

Curriculum

Simple Requirements

Major in Environmental Earth and Ocean Science, B.S. (29 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Earth and Ocean Sciences Core (20 credits)

Fulfill ALL of the following requirements:

One ESSC Course (3 credits)

Earn at least 3 credits from the following:

- Any 1-level ESSC course(s)
- Any 2-level ESSC course(s)

AND

Required Courses (17 credits)

Complete ALL of the following Courses:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ESSC245 - Environmental Meteorology
- ESSC261 - Introduction to Oceanography
- ESSC322 - Environmental Hydrology
- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy

AND

Methods Courses (6 credits)

Complete at least 2 of the following courses:

- ESSC281 - GIS Applications for Earth Sci
- ESSC380 - Remote Sensing & Image Interpretation
- ESSC423 - Applied Geophysics

AND

Field Course (3 credits)

Complete at least 1 of the following courses:

- ESSC267 - Field Methods in Oceanography
- ESSC422 - Geological Field Mapping
- ESSC465 - Biological Oceanography

AND

Concentration in Environmental Earth Sciences

See separate block

Concentration in Environmental Earth Sciences (18-20 credits)

Type
Completion Requirement

Required Environmental Earth Sciences Courses

Fulfill ALL of the following requirements:

Environmental Geology Courses (6-8 credits)

Complete at least 2 of the following courses:

- ESSC222 - Historical Geology
  OR ESSC222H - H:Historical Geology
- ESSC225 - Geomorphology
- ESSC321 - Structural Geology
- ESSC326 - Sedimentation and Stratigraphy
- ESSC327 - Earth Materials
- ESSC426 - Groundwater Resources and Contamination

AND

Environmental Ocean Science Courses (6 credits)

Complete at least 2 of the following courses:

- ESSC363 - Chemical Oceanography
- ESSC369 - Physical Oceanography and Climate
- ESSC464 - Ocean Ecosystems
- ESSC266 - Environmental Oceanography
- ESSC468 - Ocean Data Analysis and Presentation

AND

Geological Earth and Energy Resources (3 credits)

Complete ALL of the following Courses:

- ESSC226 - Geology of Earth and Energy Resources

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- ESSC366 - Marine Resources and Policy
  OR ESSC366H - Hon: Marine Resources and Policy

AND

300/400 level ESSC Course (3 credits)

Complete at least 1 course in the following course sets:

- Any 3-level ESSC course(s)
- Any 4-level ESSC course(s)

Req Related for Environmental Earth & Ocean Sci (15-18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1

AND

Precalculus or Other Related Electives (Depending on Math Placement) (3-4 credits)

Complete at least 1 of the following courses:

- MATH160 - Precalculus
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- AENG120 - Energy Systems
- AENG281 - Processing Metallic Materials
- AENG304 - Energy, Sustainability **OR** AENG304H - Hon: Energy, Sustainability
- GEOG130 - Intro to Environmental Science **OR** GEOG130H - Hon: Intro to Environmental Science (Inactive)
- GEOG202 - Environmental Sustainability
- GEOG230 - Physical Geography
- GEOG281 - Maps and GIS
- GEOG295 - GIS I: Vector Data Analysis
- GEOG296 - GIS II: Raster Data Analysis **OR** GEOG296H - H: GIS II: Raster Data Analysis (Inactive)
- MATH211 - Calculus 2
- MATH235 - Survey of Statistics
- PHYS132 - Physics 2 with Algebra
- PHYS232 - Physics 2 with Calculus
- CHEM112 - Introductory Chemistry 2
- CHEM235 - Organic Chemistry
- CHEM251 - Inorganic Chemistry 1
- CHEM375 - Environmental Chemistry
- BIOL100 - General Biology
- BIOL101 - Foundations of Biology
- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- CMSC161 - Introduction to Programming 1
- CMSC162 - Introduction to Programming 2

AND

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Physics I with Algebra or Calculus (4-5 credits)

Complete at least 1 of the following courses:

- PHYS131 - Physics 1 with Algebra
- PHYS231 - Physics 1 with Calculus

Environmental Earth & Ocean Science, B.S. - Environmental Geology Option

Overview

The EEOS curriculum is based on the broad recognition that interdisciplinary competency is critical to educate the next generation of Earth and Environmental scientists. Through our environmental sciences core, students will study the foundational role of the Earth sciences as it relates to emerging environmental issues such as water resources and climate variability. Courses within the three tracks such as Earth Materials, Groundwater Resource and Contamination, Structural Geology and Environmental Oceanography emphasize application of geoscience techniques to environmental problems and develop skills that are broadly applicable to a variety of environmental careers. In addition, in this degree students develop necessary technical expertise through required courses in investigative methods and field techniques. The B.S. EEOS degree provides the fundamental coursework in the geo- and ocean sciences and emphasizes the context of emerging climate and environmental issues.

Curriculum

Simple Requirements

Major in Environmental Earth and Ocean Science, B.S. (29 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Earth and Ocean Sciences Core (20 credits)

Fulfill ALL of the following requirements:

One ESSC Course (3 credits)

Earn at least 3 credits from the following:

- Any 1-level ESSC course(s)
- Any 2-level ESSC course(s)

AND

Required Courses (17 credits)

Complete ALL of the following Courses:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ESSC245 - Environmental Meteorology
- ESSC261 - Introduction to Oceanography
- ESSC322 - Environmental Hydrology
- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy

AND

Methods Courses (6 credits)

Complete at least 2 of the following courses:

- ESSC281 - GIS Applications for Earth Sci
- ESSC380 - Remote Sensing & Image Interpretation
- ESSC423 - Applied Geophysics

AND

Field Course (3 credits)

Complete at least 1 of the following courses:

- ESSC267 - Field Methods in Oceanography
- ESSC422 - Geological Field Mapping
- ESSC465 - Biological Oceanography

AND

Concentration in Environmental Geology

See separate block

Concentration in Environmental Geology (22 credits)

Type
Completion Requirement

Required Environmental Geology Courses

Fulfill ALL of the following requirements:

Required Courses (22 credits)

Complete ALL of the following Courses:

- ESSC222 - Historical Geology
  OR ESSC222H - H:Historical Geology
- ESSC225 - Geomorphology
- ESSC321 - Structural Geology
- ESSC326 - Sedimentation and Stratigraphy
- ESSC327 - Earth Materials
- ESSC426 - Groundwater Resources and Contamination

Req Related for Environmental Earth & Ocean Sci (13-19 credits)

Type
Completion Requirement

Required Related for Environmental Geology Concentration

Fulfill ALL of the following requirements:

Precalculus or Higher Level Calculus (4 credits)

Complete ALL of the following Courses:

- MATH160 - Precalculus

AND

Environmental Geology Req Related Electives (9-15 credits)

Complete at least 3 of the following courses:

- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- AENG120 - Energy Systems
- AENG281 - Processing Metallic Materials
- AENG304 - Energy, Sustainability
  OR AENG304H - Hon: Energy, Sustainability
- GEOG130 - Intro to Environmental Science
  OR GEOG130H - Hon: Intro to Environmental Science (Inactive)
- GEOG202 - Environmental Sustainability
- GEOG230 - Physical Geography
- GEOG281 - Maps and GIS
- GEOG295 - GIS I: Vector Data Analysis
- GEOG296 - GIS II: Raster Data Analysis
  OR GEOG296H - H: GIS II: Raster Data Analysis (Inactive)
- MATH151 - Calculus for Management
- MATH161 - Calculus 1
- MATH211 - Calculus 2
- MATH235 - Survey of Statistics
- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra
- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus
- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- CHEM235 - Organic Chemistry
- CHEM251 - Inorganic Chemistry 1
- CHEM375 - Environmental Chemistry
- BIOL100 - General Biology
- BIOL101 - Foundations of Biology
- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- CMSC161 - Introduction to Programming 1
- CMSC162 - Introduction to Programming 2

Environmental Earth & Ocean Science, B.S. - Environmental Ocean Sciences Option

Overview

The EEOS curriculum is based on the broad recognition that interdisciplinary competency is critical to educate the next generation of Earth and Environmental scientists. Through our environmental sciences core, students will study the foundational role of the Earth sciences as it relates to emerging environmental issues such as water resources and climate variabil ity. Courses within the three tracks such as Earth Materials, Groundwater Resource and Contamination, Structural Geology and Environmental Oceanography emphasize application of geoscience techniques to environmental problems and develop skills that are broadly applicable to a variety of environmental careers. In addition, in this degree students develop necessary technical expertise through required courses in investigative methods and field techniques. The B.S. EEOS degree provides the fundamental coursework in the geo- and ocean sciences and emphasizes the context of emerging climate and environmental issues.

Curriculum

Simple Requirements

Major in Environmental Earth and Ocean Science, B.S. (29 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Earth and Ocean Sciences Core (20 credits)

Fulfill ALL of the following requirements:

One ESSC Course (3 credits)

Earn at least 3 credits from the following:

- Any 1-level ESSC course(s)
- Any 2-level ESSC course(s)

AND

Required Courses (17 credits)

Complete ALL of the following Courses:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ESSC245 - Environmental Meteorology
- ESSC261 - Introduction to Oceanography
- ESSC322 - Environmental Hydrology
- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy

AND

Methods Courses (6 credits)

Complete at least 2 of the following courses:

- ESSC281 - GIS Applications for Earth Sci
- ESSC380 - Remote Sensing & Image Interpretation
- ESSC423 - Applied Geophysics

AND

Field Course (3 credits)

Complete at least 1 of the following courses:

- ESSC267 - Field Methods in Oceanography
- ESSC422 - Geological Field Mapping
- ESSC465 - Biological Oceanography

AND

Concentration in Environmental Ocean Sciences

See separate block

Concentration in Environmental Ocean Sciences (18 credits)

Type
Completion Requirement

Required Environmental Ocean Sciences Courses

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- ESSC363 - Chemical Oceanography
- ESSC366 - Marine Resources and Policy **OR** ESSC366H - Hon: Marine Resources and Policy
- ESSC369 - Physical Oceanography and Climate
- ESSC464 - Ocean Ecosystems
- ESSC468 - Ocean Data Analysis and Presentation

AND

Environmental Oceanography (3 credits)

Complete ALL of the following Courses:

- ESSC266 - Environmental Oceanography

Req Related for Environmental Earth & Ocean Sci (15-18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1

AND

Precalculus or Other Related Electives (Depending on Math Placement) (3-4 credits)

Complete at least 1 of the following courses:

- MATH160 - Precalculus
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- AENG120 - Energy Systems
- AENG281 - Processing Metallic Materials
- AENG304 - Energy, Sustainability **OR** AENG304H - Hon: Energy, Sustainability
- GEOG130 - Intro to Environmental Science **OR** GEOG130H - Hon: Intro to Environmental Science (Inactive)
- GEOG202 - Environmental Sustainability
- GEOG230 - Physical Geography
- GEOG281 - Maps and GIS
- GEOG295 - GIS I: Vector Data Analysis
- GEOG296 - GIS II: Raster Data Analysis **OR** GEOG296H - H: GIS II: Raster Data Analysis (Inactive)
- MATH211 - Calculus 2
- MATH235 - Survey of Statistics
- PHYS132 - Physics 2 with Algebra
- PHYS232 - Physics 2 with Calculus
- CHEM112 - Introductory Chemistry 2
- CHEM235 - Organic Chemistry
- CHEM251 - Inorganic Chemistry 1
- CHEM375 - Environmental Chemistry
- BIOL100 - General Biology
- BIOL101 - Foundations of Biology
- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- CMSC161 - Introduction to Programming 1
- CMSC162 - Introduction to Programming 2

AND

Calculus I or Honors Calculus (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Physics I with Algebra or Calculus (4-5 credits)

Complete at least 1 of the following courses:

- PHYS131 - Physics 1 with Algebra
- PHYS231 - Physics 1 with Calculus

Environmental & Spatial Sciences, B.S.

Overview

Millersville University's Bachelor of Science program in Environmental and Spatial Sciences prepares students as environmental scientists with advanced training in geospatial technologies, including: geographic information science (GIS), global positioning system (GPS) technology, remote sensing, data management, and cartography. Graduates of the program are well-positioned for careers in environmental analysis and mitigation of environmental problems. Through coursework in the program, students assess environmental and human-environment systems, identify and evaluate environmental problems, and design innovative and sustainable solutions.

The program is housed in the Department of Geography. 60 credits required in addition to required related courses applied to the general education program.

Curriculum

Simple Requirements

Major in Environmental & Spatial Sciences (43-45 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Core Geography (18 credits)

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- GEOG130 - Intro to Environmental Science
  OR GEOG130H - Hon: Intro to Environmental Science (Inactive)
- GEOG120 - Human Geography
- GEOG289 - Field and Research Methods in Geography
- GEOG408 - Sustainable Development

AND

Physical Geography or Geomorphology (3 credits)

Complete at least 1 of the following courses:

- GEOG230 - Physical Geography
- ESSC225 - Geomorphology

AND

Required Spatial Science (12 credits)

Complete at least 1 of the following courses:

- GEOG281 - Maps and GIS
- GEOG292 - Quantitative and Spatial Analysis
- GEOG295 - GIS I: Vector Data Analysis
- GEOG296 - GIS II: Raster Data Analysis
  OR GEOG296H - H: GIS II: Raster Data Analysis (Inactive)

AND

Spatial Science Electives (6 credits)

Complete at least 2 of the following courses:

- GEOG395 - GIS for Web Development
- GEOG384 - Cartography
- GEOG396 - GIS Modeling
- GEOG397 - GIS Data Management

AND

Environmental Studies Electives (9 credits)

Complete at least 3 of the following courses:

- GEOG304 - Water Resources Management
- GEOG305 - Energy Sustainability
  OR GEOG305H - Hon: Energy Sustainability (Inactive)
- GEOG306 - Environmental Impact Assessmnt
- GEOG307 - US Environmental Policy
- GEOG333 - Biogeography
- GEOG336 - Climate And Society
- GEOG407 - Glbl Envrnmtl Policy/Negotiatn

AND

Required Capstone (1-3 credits)

Complete at least 1 of the following courses:

- GEOG300 - Co-Op Ed Experience in Geog
- GEOG488 - Senior Thesis
- GEOG489 - Honors Thesis

Req Related for Environmental & Spatial Sciences (33-34 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related Environmental Science (27-28 credits)

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- BIOL100 - General Biology
- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
- MATH161 - Calculus 1

AND

Physical Geology or Intro to Oceanography (8 credits)

Complete at least 1 of the following courses:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ESSC261 - Introduction to Oceanography

AND

Physics I with Algebra or with Calculus (4-5 credits)

Complete at least 1 of the following courses:

- PHYS131 - Physics 1 with Algebra
- PHYS231 - Physics 1 with Calculus

AND

Environmental Science Req Related Electives (6 credits)

Earn at least 6 credits from the following:

- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany
- BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness
- BIOL343 - Principles of Ecology & Evolution
  OR BIOL343H - Hon: Principles of Ecology & Evolution
- CHEM235 - Organic Chemistry
- CHEM265 - Quantitative Analysis
- CHEM375 - Environmental Chemistry
- CHEM476 - Environmental Chemistry 2
- ESSC226 - Geology of Earth and Energy Resources
- ESSC241 - Meteorology
- ESSC245 - Environmental Meteorology
- ESSC322 - Environmental Hydrology
- ESSC326 - Sedimentation and Stratigraphy
- ESSC329 - Aqueous Geochemistry
- ESSC366 - Marine Resources and Policy
  OR ESSC366H - Hon: Marine Resources and Policy
- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy
- ESSC422 - Geological Field Mapping
- ESSC426 - Groundwater Resources and Contamination
- ESSC266 - Environmental Oceanography
- OSEH435 - Environmental Health
- PHYS132 - Physics 2 with Algebra
- PHYS232 - Physics 2 with Calculus

A minor program of study is highly recommended. Examples include Biology, Chemistry, Computer Science, Earth Sciences, Environmental Chemistry, Environmental Hazards and Emergency Management, Environmental Policy & Regulation, General Economics, Geology, Government and Political Affairs, Hydrology, Industrial and Environmental Health, Land Use, Mathematics, Meteorology, Occupational Safety & Environmental Health, Oceanography, Physics, Quantitative

Methods in Environmental Science, Science Writing, Social Justice, Sustainability Studies, Water Resources.

Meteorology, B.S.

Overview

The BS Meteorology program conforms to the American Meteorological Society's Guidelines for a B.S. Degree in Meteorology/Atmospheric Science. It satisfies the National Weather Service GS-1340 requirements and adequately prepares a student for the pursuit of an advanced degree. Our graduates are diversely employed, some going onto careers in education, administration, and research. Many continue on to pursue advanced degrees at major research institutions, work for government agencies or begin careers in the private sector. More than half our graduates work in operational forecasting--just a few of their employers include The Weather Channel, Accu-Weather, Weather Services Corporation, and numerous branches of the National Weather Service. Several of grads work as on-air meteorologists at TV stations across the U.S. Our graduates enter the workforce as knowledgeable, skilled and competent professionals.

Curriculum

Simple Requirements

Major in Meteorology and BS (50 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Earth Science Courses (35 credits)

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Earn a minimum grade of C- in the following:

- ESSC241 - Meteorology

AND

Required Courses (31 credits)

Complete ALL of the following Courses:

- ESSC282 - FORTRAN Programming for Earth Sciences Applications
- ESSC340 - Cloud Physics & Precip Process

- ESSC341 - Atmospheric Thermodynamics
- ESSC342 - Atmospheric Dynamics 1
- ESSC340 - Cloud Physics & Precip Process
- ESSC345 - Atmospheric Radiative Transfer
- ESSC441 - Synoptic Meteorology Lecture-Laboratory
- ESSC443 - Climate Dynamics
- ESSC444 - Mesoscale Meteorology
- ESSC446 - Stats & Decision Making in Earth Science

AND

Scientfc Prgm Analys & Vis, GIS Apps for Earth Sci or GIS (3 credits)

Complete at least 1 of the following courses:

- ESSC386 - Sci Prg Lang:
- ESSC281 - GIS Applications for Earth Sci
- GEOG295 - GIS I: Vector Data Analysis

AND

Earth Science Electives (12 credits)

Earn at least 12 credits from the following:

- ESSC261 - Introduction to Oceanography
- ESSC322 - Environmental Hydrology
- ESSC344 - Tropical Meteorology
  OR ESSC344H - H:Tropical Meteorology
- ESSC347 - Satellite Meteorology
  OR ESSC347H - H:Satellite Meteorology
- ESSC349 - Chemistry of the Atmosphere
  OR ESSC349H - Hon: Chemistry of the Atmosphere
- ESSC369 - Physical Oceanography and Climate
- ESSC380 - Remote Sensing & Image Interpretation
- ESSC440 - Space Weather and Environment
  OR ESSC440H - Hon: Space Weather and Environment
- ESSC445 - Num Modeling of Atmos and Ocns
- ESSC447 - Meteorological Instrumentation
  OR ESSC447H - H:Meteorological Instrumentation
- ESSC448 - Boundary Layers and Turbulence
- ESSC449 - Radar Meteorology
  OR ESSC449H - Hon: Radar Meteorology

Topics courses must be approved by advisor. Any approved Meteorology electives taken in excess of 49 will be listed here and count toward major GPA. Only one course designated as Perspectives (P) is allowed as an elective in the MET major or required related. If you are taking a (P) course as a major elective, please have your advisor email degree.audit@millersville.edu

Additional Comments:
ESSC348 Broadcast Meteorology Broadcast Meteorology and ESSC442 Adv Wthr Anlys/Forecstng Pract Advanced Weather Analysis/Forcasting Practicum are recommended skill courses. Completing these courses will not impact your major GPA.

Req Related for Meteorology, BS (32-34 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (18-20 credits)

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus (4-5 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (11 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3
- MATH365 - Ordinary Differential

Equations

AND

Statistics course, Linear Algebra or Partial Differential Equations (3-4 credits)

Complete at least 1 of the following courses:

- MATH235 - Survey of Statistics
- MATH322 - Linear Algebra 1
- MATH333 - Probablity and Statistics
- MATH335 - Mathematical Statistics 1
- MATH467 - Partial Differential Equations

AND

Chemistry (4 credits)

Earn a minimum grade of C- in the following:

- CHEM111 - Introductory Chemistry 1

AND

Physics (10 credits)

Fulfill ALL of the following requirements:

Required Courses (5 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus

AND

Required Courses (5 credits)

Complete ALL of the following Courses:

- PHYS232 - Physics 2 with Calculus

Courses

EHEM201H - H:Introduction to Emergency Management

Course Information

Course Title
H:Introduction to Emergency Management

Subject code	Course Number	Academic Level
EHEM	201H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

EHEM205 - Natural Hazards Risk Assessment and Mitigation

Course Information

Course Title
Natural Hazards Risk Assessment and Mitigation

Subject code	Course Number	Academic Level
EHEM	205	Undergraduate

Course Description

An exploration of risk assessment methodologies for natural disasters, review of natural hazard mitigation and its role in disaster management; analysis of past and current government and private sector programs; and an examination of new approaches. Natural hazard mitigation implementation approaches including those in the form of community-wide programs and to relate the hazard mitigation processes to disaster planning.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC101 or ESSC101H

Complete ANY of the following Courses:

- ESSC101 - Earth Systems & Natural Hazards
- ESSC101H - Hon: Earth Systems & Natural Hazards (Inactive)

EHEM205H - Hon: Natural Hazards Risk Assessment and Mitigation

Course Information

Course Title
Hon: Natural Hazards Risk Assessment and Mitigation

Subject code	Course Number	Academic Level
EHEM	205H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC101 or ESSC101H

Complete ANY of the following Courses:

- ESSC101 - Earth Systems & Natural Hazards
- ESSC101H - Hon: Earth Systems & Natural Hazards (Inactive)

EHEM305H - Hon: Disaster Management & Community Risk Reduction

Course Information

Course Title
Hon: Disaster Management & Community Risk Reduction

Subject code	Course Number	Academic Level
EHEM	305H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

EHEM 201

Complete ALL of the following Courses:

- EHEM201 - Introduction to Emergency Management

EHEM300 - Co-Op Ed Experience in EHEM

Course Information

Course Title
Co-Op Ed Experience in EHEM

Subject code	Course Number	Academic Level
EHEM	300	Undergraduate

Course Description
Co-Op Ed Experience in EHEM

EHEM309 - Disaster Response & Recovery

Course Information

Course Title
Disaster Response & Recovery

Subject code	Course Number	Academic Level
EHEM	309	Undergraduate

Course Description
An in-depth treatment of emergency management practices as it applies to local, state, tribal, territorial, and federal disaster response in the context of short-term and long-term community recovery. The disaster response and recovery efforts will be addressed with a foundation of statutory requirements, key concepts, core principles, roles and responsibilities of leadership ranging from the individual to the federal government and across the public, private, and the non-profit sectors.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EHEM201

Complete ALL of the following Courses:

- EHEM201 - Introduction to Emergency Management

EHEM309H - Hon: Disaster Response & Recovery

Course Information

Course Title
Hon: Disaster Response & Recovery

Subject code	Course Number	Academic Level
EHEM	309H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

EHEM201

Complete ALL of the following Courses:

- EHEM201 - Introduction to Emergency Management

EHEM315 - Business Continuity and Continuity of Operations

Course Information

Course Title
Business Continuity and Continuity of Operations

Subject code	Course Number	Academic Level
EHEM	315	Undergraduate

Course Description
Critical dependence of private and public organizations on disaster vulnerable technologies and operations as a result of natural and man-made disasters. Students will have the opportunity to review the contemporary plan development strategies and methodologies and to produce working plans that provide preventive measures to minimize the impact of all disasters and provide an organized response to ensure continuity of operations. Concepts of business continuity management system consisting of risk identification and mitigation, business impact analysis, development of continuity strategies, training and awareness, plan creation, maintenance and testing will be emphasized.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EHEM201

Complete ALL of the following Courses:

- EHEM201 - Introduction to Emergency Management

EHEM319 - Emergency Management Planning

Course Information

Course Title
Emergency Management Planning

Subject code	Course Number	Academic Level
EHEM	319	Undergraduate

Course Description
Provides students with an in-depth analysis of planning methodologies and constructs as well as pitfalls and limiting factors in the development and execution of emergency management plans at the strategic, operational and tactical levels. Pre-requisite EHEM 201

Simple Requirements

Course Prerequisites

Type
Prerequisite

EHEM201

Complete ALL of the following Courses:

- EHEM201 - Introduction to Emergency Management

EHEM329 - Special Topics in Emergency Management

Course Information

Course Title
Special Topics in Emergency Management

Subject code	Course Number	Academic Level
EHEM	329	Undergraduate

Course Description
In-depth investigation and development of one or more topics of current or emerging not addressed as part of the existing curriculum. Prereq: EHEM 201 or EHEM 205

Simple Requirements

Course Prerequisites

Type
Prerequisite

EHEM 201 or EHEM 205

Complete ANY of the following Courses:

- EHEM201 - Introduction to Emergency Management
- EHEM205 - Natural Hazards Risk Assessment and Mitigation

EHEM393 - Field Experience Practicum

Course Information

Course Title
Field Experience Practicum

Subject code	Course Number	Academic Level
EHEM	393	Undergraduate

Course Description
A capstone experience in which emergency-management knowledge and skills are applied and integrated within a field experience. Those already working within an emergency-management-related career can use their current position as the basis for completing a project applicable to enhancing their current skills and applying best practices. For B.S. Emergency Management majors and Environmental Hazards and Emergency management minors only. Senior level and 18 credits in EHEM courses required. Permission of instructor required to enroll.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EHEM Course Credit Hours Completion

Earn at least 18 credits

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

Instructor Permission

Must have permission of the instructor to enroll.

Degree/Major/Field of Study Restrictions

Type
Prerequisite

BS Emergency Management Majors and Environmental Hazards and Emergency management Minors only.

Must be one of the listed majors or minors to enroll.

EHEM400 - Co-Op Ed Experience in EHEM

Course Information

Course Title
Co-Op Ed Experience in EHEM

Subject code	Course Number	Academic Level
EHEM	400	Undergraduate

Course Description
Co-Op Ed Experience in EHEM

EHEM489 - Hnrs:

Course Information

Course Title
Hnrs:

Subject code	Course Number	Academic Level
EHEM	489	Undergraduate

EHEM498 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
EHEM	498	Undergraduate

Course Description
Ind Stdy:

EHEM499 - Hnrs Thesis:

Course Information

Course Title
Hnrs Thesis:

Subject code	Course Number	Academic Level
EHEM	499	Undergraduate

EMGT579 - Experimental Course

Course Information

Course Title
Experimental Course

Subject code	Course Number	Academic Level
EMGT	579	Graduate

Course Description
Experimental Graduate Level course in Emergency Management

EMGT601 - Principles & Practices of Emergency Management

Course Information

Course Title
Principles & Practices of Emergency Management

Subject code	Course Number	Academic Level
EMGT	601	Graduate

Course Description
History and perspectives of the field, hazards concepts and taxonomies, all-hazards approach, phases of emergency management, risk assessment, risk communication, emergency management functions, sustainable development, best practices, the EOC, the disaster plan, CEM, IAEM, forging intra- and intergovernment relationships. Offered in fall and spring.

EMGT603 - Technical & Professional Writing for Emergency Management

Course Information

Course Title
Technical & Professional Writing for Emergency Management

Subject code	Course Number	Academic Level
EMGT	603	Graduate

Course Description
The emergency-management professional is engaged in an ever-increasing workload involving reporting, budget preparation, grant applications and communicating with the public. This course is designed to enhance the necessary skills for the emergency manager to successfully negotiate the increased demands of the profession. Offered in fall.

EMGT605 - Social Dimensions of Disaster

Course Information

Course Title
Social Dimensions of Disaster

Subject code	Course Number	Academic Level
EMGT	605	Graduate

Course Description
An overview of the findings of disaster sociology, including, but not limited to, an examination of the social science definition of disaster, the disaster mythology, the impact of the media, organizational challenges during disaster, creating and maintaining a disaster-resilient community, national and international disaster researchers and the research literature. Offered in fall.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:

- EMGT601 - Principles & Practices of Emergency Management

EMGT607 - Emergency Mental Health and Trauma

Course Information

Course Title
Emergency Mental Health and Trauma

Subject code	Course Number	Academic Level
EMGT	607	Graduate

Course Description
This in-depth course provides the emergency responder with a greater appreciation of the challenges, responses and adjustments encountered by those exposed to disastrous events. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:

- EMGT601 - Principles & Practices of Emergency Management

EMGT609 - Disaster Resp & Recov

Course Information

Course Title
Disaster Resp & Recov

Subject code	Course Number	Academic Level
EMGT	609	Graduate

Course Description
An in depth investigation of emergency management practices as applied to response, and short term and long-term community recovery. The course will explore disaster recovery efforts with a foundation of statutory requirements, key concepts, core principles, roles and responsibilities of leadership, of individuals and households to governmental entities and between government and non-government sectors. Pre-requisite: EMGT 601

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:
- EMGT601 - Principles & Practices of Emergency Management

EMGT614 - Natural Hazards Primer

Course Information

Course Title
Natural Hazards Primer

Subject code	Course Number	Academic Level
EMGT	614	Graduate

Course Description
Natural Science examination of natural or environmental hazards and their associated risks. The overview will include hazards such as hurricanes, tornadoes, earthquakes, tsunamis and floods. Offered in summer and winter.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:
- EMGT601 - Principles & Practices of Emergency Management

EMGT615 - Emergency Preparedness for Industry

Course Information

Course Title
Emergency Preparedness for Industry

Subject code	Course Number	Academic Level
EMGT	615	Graduate

Course Description
An examination of industrial and societal risks associated with the manufacture, handling, storing and transporting of biological, chemical, nuclear and radiological materials. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:

- EMGT601 - Principles & Practices of Emergency Management

EMGT616 - Terrorism,WMD,HomeInd Security

Course Information

Course Title
Terrorism,WMD,HomeInd Security

Subject code	Course Number	Academic Level
EMGT	616	Graduate

Course Description
A sociological exploration of what terrorism is, why it occurs, prudent approaches to reducing the incidence of terrorism, and failed approaches; the origins and functions of homeland security; the necessity of maintaining an all-hazards approach; and issues surrounding the placement of FEMA within the Department of Homeland Security. WMD history; an overview of the basic known biological, chemical, radiological and nuclear materials likely to be used as weapons; approaches to inoculation and treatment before and after exposure. Offered in spring of odd years.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:

- EMGT601 - Principles & Practices of Emergency Management

EMGT617 - Crisis, Emergency and Risk Communication

Course Information

Course Title
Crisis, Emergency and Risk Communication

Subject code	Course Number	Academic Level
EMGT	617	Graduate

Course Description
Draws on communication theory to examine common challenges and best practices encountered in ernergency, crisis and risk communication situations by public information officers, public authorities, first responders, and health professionals. Provides the opportunity to develop strategies and communication solutions in interpersonal, social media, and public contexts. Prerequisites: EM 601 or permission of the instructor and MSEM director

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:
- EMGT601 - Principles & Practices of Emergency Management

EMGT618 - Humanitrn Rspnse/Intl Disastrs

Course Information

Course Title
Humanitrn Rspnse/Intl Disastrs

Subject code	Course Number	Academic Level
EMGT	618	Graduate

Course Description
International organizations and the challenges and experiences they commonly encounter in mitigating and responding to disaster events; considers if a global economy, global village will help or hinder future efforts. Offered in summer of odd years.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:
- EMGT601 - Principles & Practices of Emergency Management

EMGT619 - Emergency Management Planning

Course Information

Course Title
Emergency Management Planning

Subject code	Course Number	Academic Level
EMGT	619	Graduate

Course Description
In-depth analysis of planning methodologies and constructs as well as pitfalls and limiting factors in the development and execution of emergency management plans at the strategic, operational and tactical levels. Origins of emergency management planning, applicable policies and legislation, historical incident review and analysis, contemporary and emerging planning doctrine, and advanced planning concepts.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:
- EMGT601 - Principles & Practices of Emergency Management

EMGT629 - Topics:

Course Information

Course Title
Topics:

Subject code	Course Number	Academic Level
EMGT	629	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not addressed in current curriculum. Topics will vary according to the needs of students and the faculty involved. Offered periodically.

EMGT630 - Topics:

Course Information

Course Title
Topics:

Subject code	Course Number	Academic Level
EMGT	630	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not addressed in current curriculum. Topics will vary according to the needs of students and the faculty involved. Offered periodically

EMGT631 - Topics:

Course Information

Course Title
Topics:

Subject code	Course Number	Academic Level
EMGT	631	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not addressed in current curriculum. Topics will vary according to the needs of students and the faculty involved. Offered periodically.

EMGT632 - Topics:

Course Information

Course Title
Topics:

Subject code	Course Number	Academic Level
EMGT	632	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest not addressed in current curriculum. Topics will vary according to the needs of students and the faculty involved. Offered periodically.

EMGT633 - GIS Applications for Emer Mgmt

Course Information

Course Title
GIS Applications for Emer Mgmt

Subject code	Course Number	Academic Level
EMGT	633	Graduate

Course Description
Introduction to Geographic Information Systems (GIS), with emphasis on their use in emergency management. Covers the different types of GIS data available, sources of data and software tools for querying and spatially analyzing data. Offered in fall of odd years.

EMGT634 - Comparative EMGT Systems

Course Information

Course Title
Comparative EMGT Systems

Subject code	Course Number	Academic Level
EMGT	634	Graduate

Course Description
Provides a comparative perspective to emergency management by examining different governmental frameworks for emergency/disaster management from around the globe. Students will gain insight, through a variety of case studies into the connections between a country's political and legal culture, level of political-economic development and disaster vulnerability to the organization of its domestic emergency/disaster management system.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:
- EMGT601 - Principles & Practices of Emergency Management

EMGT653 - Theoretical Prspctvs/ Methods

Course Information

Course Title
Theoretical Prspctvs/Methods

Subject code	Course Number	Academic Level
EMGT	653	Graduate

Course Description
Theoretical perspectives drawn from sociology are applied to emergency management. The EM professional will develop insight into the common responses to planning, responding, recovery and mitigation. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:
- EMGT601 - Principles & Practices of Emergency Management

EMGT691 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
EMGT	691	Graduate

Course Description
Intensive study of a particular emergency-management area, topic or event. Permission of program coordinator is required.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Program Coordinator Permission Required

Must have permission of the program coordinator .

EMGT693 - Field Experience Practicum

Course Information

Course Title
Field Experience Practicum

Subject code	Course Number	Academic Level
EMGT	693	Graduate

Course Description
A capstone experience in which emergency management knowledge and skills are applied and integrated within a field experience. Those already working within an emergency management related career will use their current position as the basis for completing a project applicable to enhancing their current skills and applying best practices. The course will provide you with the opportunity to participate in supervised emergency management work activities, or focused research, that provide experiential and research-based learning in the application and integration of the theory and skills acquired in earlier coursework. Permission of the program coordinator is required. Prerequisites: Successful completion of 24 credit hours in the MSEM program, submission and approval of the Field Experience Practicum Proposal Form.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EMGT601

Complete ALL of the following Courses:
- EMGT601 - Principles & Practices of Emergency Management

MSEM Program Credit Hours

Earn at least 24 credits

Submission and Approval of Field Experience Practicum Proposal Form

Must submit the Field Experience Practicum Proposal Form and have it approved.

Program Coordinator Permission Required

Must have permission of the program coordinator.

ESCI109 - Atmosphere with Lab

Course Information

Course Title
Atmosphere with Lab

Subject code	Course Number	Academic Level
ESCI	109	Undergraduate

Course Description
Origin and evolution of the atmosphere; solar and terrestrial radiation; horizontal and vertical structure of the atmosphere; temperature, pressure and water in the air; vertical motion; cloud formation and cloud type; circulation systems, severe weather, climate and climate change. Does not count toward Meteorology major. Credit may not be received for ESCI 109 if ESCI 107 is taken, these are equivalent courses and will be treated as repeated course credit.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

ESCI221 - Physical Geology

Course Information

Course Title
Physical Geology

Subject code	Course Number	Academic Level
ESCI	221	Undergraduate

Course Description
The nature and distribution of materials of the solid Earth - the dynamic processes by which they are formed and modified and the character of resulting geologic structures. 3 hrs. lec., 2 hrs. lab. Offered in fall, spring.

Gateway Stage Labels
Problem Solving (PS), Investigations in Scientific Reasoning (SCI)

ESSC101 - Earth Systems & Natural Hazards

Course Information

Course Title
Earth Systems & Natural Hazards

Subject code	Course Number	Academic Level
ESSC	101	Undergraduate

Course Description
The scientific understanding of Earth systems as the causes of natural disasters, such as earthquakes, volcanoes, landslides, hurricanes, tornadoes, floods and tsunamis. 3 hrs. lec. Does not count toward Meteorology major.

ESSC102 - Origin and Evoltn of the Earth

Course Information

Course Title
Origin and Evoltn of the Earth

Subject code	Course Number	Academic Level
ESSC	102	Undergraduate

Course Description
The origin and evolutionary development of the universe, solar system and planet Earth. Geophysical behavior of the solid earth, including volcanism, mountain building and other manifestations of the Earth's dynamic interior. Does not count toward Meteorology major.

ESSC105 - World Ocean Laboratory

Course Information

Course Title
World Ocean Laboratory

Subject code	Course Number	Academic Level
ESSC	105	Undergraduate

Course Description
Methods and techniques used in the marine sciences, including introduction to navigation, plotting and evaluation of data pertaining to salinity, temperature, dissolved oxygen, primary productivity and current velocity. 2 hrs. lab. Mandatory coreq: ESSC 104. ESSC 104/105 together constitute a single laboratory course in earth sciences for purposes of the general education curriculum. Does not count toward Meteorology major.

Simple Requirements

Course Corequisite

Type
Corequisite

ESSC104 or ESSC104H

Enroll in the following Courses:

- ESSC104 - The World Ocean
  OR ESSC104H - Hnrs:The World Ocean (Inactive)

ESSC107 - The Atmosphere

Course Information

Course Title
The Atmosphere

Subject code	Course Number	Academic Level
ESSC	107	Undergraduate

Course Description
Origin and evolution of the atmosphere; solar and terrestrial radiation; horizontal and vertical structure of the atmosphere; temperature, pressure and water in the air; vertical motion; cloud formation and cloud type; circulation systems, severe weather, climate and climate change. Does not count toward Meteorology major. Credit may not be received for ESSC 107 if ESSC 109 is taken, these are equivalent courses and will be treated as repeated course credit.

ESSC121 - Environmental Geology Lab

Course Information

Course Title
Environmental Geology Lab

Subject code	Course Number	Academic Level
ESSC	121	Undergraduate

Course Description
Laboratory exploration of Earth system impacts on society, human influences on Earth. Mandatory coreq. ESSC 120. ESSC 120/121 taken concurrently constitute a single laboratory course in earth science for purpose of the general education curriculum. Does not count toward Meteorology major.

Simple Requirements

Course Corequisite

Type
Corequisite

ESSC 120

Enroll in the following Courses:

- ESSC120 - Environmental Geology

ESSC179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ESSC	179	Undergraduate

Course Description
Experimental

ESSC221H - Hnrs:Physical Geology

Course Information

Course Title
Hnrs:Physical Geology

Subject code	Course Number	Academic Level
ESSC	221H	Undergraduate

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI), Problem Solving (PS)

ESSC222 - Historical Geology

Course Information

Course Title
Historical Geology

Subject code	Course Number	Academic Level
ESSC	222	Undergraduate

Course Description
Methods of interpreting the geologic rock record, chronologic study of earth history and study of fossils as records of ancient life. Emphasis on the history of North America. 3 hrs. lec., 2 hrs. lab, field trips required. Prereq: C- or higher in ESSC 221.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H

Earn a minimum grade of C- in the following:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology

ESSC222H - H:Historical Geology

Course Information

Course Title
H:Historical Geology

Subject code	Course Number	Academic Level
ESSC	222H	Undergraduate

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H

Earn a minimum grade of C- in the following:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology

ESSC225 - Geomorphology

Course Information

Course Title
Geomorphology

Subject code	Course Number	Academic Level
ESSC	225	Undergraduate

Course Description
Processes of landscape development in theory and in the context of the regional geomorphology of North America. 3 hrs. lec. Offered in fall of odd years. Prereq: C- or higher in ESSC 221.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H

Earn a minimum grade of C- in the following:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology

ESSC226 - Geology of Earth and Energy Resources

Course Information

Course Title
Geology of Earth and Energy Resources

Subject code	Course Number	Academic Level
ESSC	226	Undergraduate

Course Description
Investigation of the geologic origin of Earth resources important to society (including energy resources, metals, industrial materials and evaporites); methods of resource evaluation, extraction and processing; and environmental impacts of resource extraction/use. 3 hrs. lec. Offered spring of even years.

ESSC241 - Meteorology

Course Information

Course Title
Meteorology

Subject code	Course Number	Academic Level
ESSC	241	Undergraduate

Course Description
Atmospheric structure and motions; physics of weather processes; weather and motion systems. 3 hrs. lec., 2 hrs. lab. Coreq or Prereq: C- or higher in MATH 161 or 163H.

Simple Requirements

Course Prerequisite or Corequisite

Type
Prerequisite

MATH 161 or MATH 163H

Earn a minimum grade of C- in the following:
- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

ESSC245 - Environmental Meteorology

Course Information

Course Title
Environmental Meteorology

Subject code	Course Number	Academic Level
ESSC	245	Undergraduate

Course Description
Practical meteorological problems in air pollution, atmospheric experimentation and other aspects of the human environment. Instrumentation and data analysis methods in applied meteorology. 2 hrs. lec., 2 hrs. lab. Offered in spring and online in summer. Prereq: C- or higher in MATH 110 or 160 or 161 or 163H.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 110 or MATH 160 or MATH 161 or MATH 163H

Earn a minimum grade of C- in the following:
- MATH110 - Trigonometry
  OR MATH160 - Precalculus
  OR MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

ESSC266 - Environmental Oceanography

Course Information

Course Title
Environmental Oceanography

Subject code	Course Number	Academic Level
ESSC	266	Undergraduate

Course Description
A comprehensive examination of some of the pressing ocean-related environmental issues of the 21st century using critical thinking and quantitative approaches. Emphasis on how human activities are changing ocean ecosystems and environments, and how sound scientific reasoning can reveal true cause-and-effect relationships that then may lead to viable solutions. Includes occasional field work demonstrating modern techniques of water quality analysis, and case studies of real-world marine environmental problems. 2 hrs. lec., 2 hrs lab. Prereq: ESSC 261 or permission of the instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 261

Complete ALL of the following Courses:
- ESSC261 - Introduction to Oceanography

Or must have permission of instructor.

ESSC267 - Field Methods in Oceanography

Course Information

Course Title
Field Methods in Oceanography

Subject code	Course Number	Academic Level
ESSC	267	Undergraduate

Course Description
Work on board small research vessels in the dynamic marine environment; use and application of standard oceanographic instruments and sampling devices; opportunities for independent research. 1 hr. lec., 4 hrs. lab. Offered only in summer at the Chincoteague Bay Field Station. Prereq: C- or higher in ESSC 261.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 261

Earn a minimum grade of C- in the following:
- ESSC261 - Introduction to Oceanography

ESSC279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ESSC	279	Undergraduate

Course Description
Experimental

ESSC281 - GIS Applications for Earth Sci

Course Information

Course Title
GIS Applications for Earth Sci

Subject code	Course Number	Academic Level
ESSC	281	Undergraduate

Course Description
Introduction to the basic concepts of geospatial information systems applications for earth sciences students. Emphasis is on the use of GIS applications for solving problems in the earth sciences. Limited to earth sciences majors or minors who have completed one of the introductory earth sciences courses for majors. ESSC 281 and GEOG 295 may not both be taken for credit. 3 hrs. lec. Prereq: ESSC 221, 241 or 261.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H or ESSC 241 or ESSC 261

Complete ANY of the following Courses:

- ESCI221 - Physical Geology
- ESSC221H - Hnrs:Physical Geology
- ESSC241 - Meteorology
- ESSC261 - Introduction to Oceanography

ESSC282 - FORTRAN Programming for Earth Sciences Applications

Course Information

Course Title
FORTRAN Programming for Earth Sciences Applications

Subject code	Course Number	Academic Level
ESSC	282	Undergraduate

Course Description
Programming in computational methods emphasizing FORTRAN applied to the earth sciences; numerical solution of equations of motion; statistical properties of digital images; analysis of periodical phenomena; use of National Center for Atmospheric Research graphics library. 2 hrs. lec., 2 hrs. lab. Offered in fall. Prereq: MATH 211 and PHYS 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 211 and PHYS 231

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- PHYS231 - Physics 1 with Calculus

ESSC300 - Co-Op Ed Experience in ESCI

Course Information

Course Title
Co-Op Ed Experience in ESCI

Subject code	Course Number	Academic Level
ESSC	300	Undergraduate

Course Description
Co-Op Ed Experience in ESSC

ESSC321 - Structural Geology

Course Information

Course Title
Structural Geology

Subject code	Course Number	Academic Level
ESSC	321	Undergraduate

Course Description
Recognition, interpretation and illustration of geological structures; kinematic and dynamic analysis of rock deformation; stress, strain and deformation mechanisms. 3 hrs. lec., 3 hrs. lab., field trips required. Prereq: C- or higher in ESSC 221 and completion of MATH 160.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H

Earn a minimum grade of C- in the following:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology

MATH 160

Complete ALL of the following Courses:

- MATH160 - Precalculus

ESSC322 - Environmental Hydrology

Course Information

Course Title
Environmental Hydrology

Subject code	Course Number	Academic Level
ESSC	322	Undergraduate

Course Description
Theory and practice of quantifying hydrologic phenonmena; field methods, data manipulation and environmental applications. 2 hrs. lec., 2 hrs. lab. Offered spring. Prereq: minimum of 45 credits, C- or higher in MATH 101 and any 200-level science course that counts towards a science degree, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 101

Earn a minimum grade of C- in the following:

- MATH101 - College Algebra

Credit Hours Completion

Earn at least 45 credits

200-Level Science Course or Instructor Permission

Must complete a 200-level science course that counts towards a science degree or have permission of instructor.

ESSC326 - Sedimentation and Stratigraphy

Course Information

Course Title
Sedimentation and Stratigraphy

Subject code	Course Number	Academic Level
ESSC	326	Undergraduate

Course Description
The origin and composition of sediments and sedimentary rocks, study of the processes involved in the sedimentary cycle, environments of deposition, and the interpretation of ancient environments from sedimentary rocks. 3 hrs. lec., 3 hrs. lab, field trips required. Prereq: ESSC 221 and ENGL 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

ESSC327 - Earth Materials

Course Information

Course Title
Earth Materials

Subject code	Course Number	Academic Level
ESSC	327	Undergraduate

Course Description
Identification, crystal chemistry, crystallography and occurrence of common minerals; optical theory and interaction of light with crystals; mineral and rock identification through use of transmitted polarized light; identification, formation, and occurrence of common rocks. 3 hrs. lec., 3 hrs. lab. Offered fall of odd years. Prereq: C- or higher in 221.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC221 or ESSC221H

Earn a minimum grade of C- in the following:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology

ESSC328 - Petrography/Igneous and Metamorphic Petrology

Course Information

Course Title
Petrography/Igneous and Metamorphic Petrology

Subject code	Course Number	Academic Level
ESSC	328	Undergraduate

Course Description
Optical characteristics and identification of igneous and metamorphic rocks; petrogenesis of igneous and metamorphic rocks; introductory thermodynamics and phase equilibria as applied to igneous and metamorphic systems. A weekend field trip is required.

Simple Requirements

ESSC 327 Earth Materials

Type
Prerequisite

ESSC329 - Aqueous Geochemistry

Course Information

Course Title
Aqueous Geochemistry

Subject code	Course Number	Academic Level
ESSC	329	Undergraduate

Course Description
Inorganic chemistry of surface waters; equilibrium thermodynamics, solubility and stability relationships of silicates and calcium carbonates; kinetics, acid-base reactions, redox equilibria; contaminants transport in natural waters; surficial materials weathering. 3 hrs. lec. Offered spring of odd years. Prereq: ESSC 221, CHEM 112; ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H and CHEM 112 or CHEM 112H and ENGL 110 and ENGL 110H

Complete ANY of the following Courses:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- CHEM112 - Introductory Chemistry 2
  OR CHEM112H - Hnrs:Introductory Chemistry 2
- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

ESSC340 - Cloud Physics & Precip Process

Course Information

Course Title
Cloud Physics & Precip Process

Subject code	Course Number	Academic Level
ESSC	340	Undergraduate

Course Description
Cloud types and physical characteristics; cloud formation processes; precipitation types and formation processes; vertical stability and its relation to types of cloud and precipitation formation; lightning and other forms of atmospheric electricity; atmospheric optical phenomena such as rainbows, halos, mirages, etc. 3 hrs. lec. Prereq: C- or higher in ESSC 241, or PHYS 231. Coreq or Prereq: MATH 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241 or PHYS 231

Earn a minimum grade of C- in the following:
- ESSC241 - Meteorology
  OR PHYS231 - Physics 1 with Calculus

Course Prerequisites or Corequisites

Type
Prerequisite

MATH 211

Complete ALL of the following Courses:
- MATH211 - Calculus 2

ESSC340H - H:Cloud Physics & Precip Process

Course Information

Course Title
H:Cloud Physics & Precip Process

Subject code	Course Number	Academic Level
ESSC	340H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241 or PHYS 231

Earn a minimum grade of C- in the following:
- ESSC241 - Meteorology
  OR PHYS231 - Physics 1 with Calculus

Course Prerequisites or Corequisites

Type
Prerequisite

MATH 211

Complete ALL of the following Courses:
- MATH211 - Calculus 2

ESSC341 - Atmospheric Thermodynamics

Course Information

Course Title
Atmospheric Thermodynamics

Subject code	Course Number	Academic Level
ESSC	341	Undergraduate

Course Description
First and second principles of thermodynamics, water-air systems, equilibrium of small droplets and crystals, thermodynamic processes in the atmosphere, atmospheric statics, vertical stability and aerological diagrams. 3 hrs. lec. Prereq: C- or higher in ESSC 241. Coreq or Prereq: MATH 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241

Earn a minimum grade of C- in the following:
- ESSC241 - Meteorology

Course Prerequisite or Corequisite

Type
Prerequisite

MATH 311

Complete ALL of the following Courses:
- MATH311 - Calculus 3

ESSC342 - Atmospheric Dynamics 1

Course Information

Course Title
Atmospheric Dynamics 1

Subject code	Course Number	Academic Level
ESSC	342	Undergraduate

Course Description
Centered difference approximations, total derivative, and basic kinematics; fundamental and apparent forces; mass and momentum conservation; equations of motion and their applications; circulation, vorticity, and divergence. Prereq: C- or higher in ESSC 241 and PHYS 231. Coreq or Prereq: MATH 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241 and PHYS 231

Earn a minimum grade of C- in the following:
- ESSC241 - Meteorology
- PHYS231 - Physics 1 with Calculus

Course Prerequisites or Corequisites

Type
Prerequisite

MATH 311

Complete ALL of the following Courses:
- MATH311 - Calculus 3

ESSC343 - Atmospheric Dynamics 2

Course Information

Course Title
Atmospheric Dynamics 2

Subject code	Course Number	Academic Level
ESSC	343	Undergraduate

Course Description
Ageostrophic wind; quasi-geostrophic theory; theory and properties of atmospheric waves, including gravity waves, sound waves, internal waves, inertial-gravity waves; geostrophic adjustment; atmospheric instabilities, including inertial/slantwise instability, barotropic and baroclinic instability. 3 hrs. lec. Offered in spring. Prereq: ESSC 342.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 342

Complete ALL of the following Courses:
- ESSC342 - Atmospheric Dynamics 1

ESSC344 - Tropical Meteorology

Course Information

Course Title
Tropical Meteorology

Subject code	Course Number	Academic Level
ESSC	344	Undergraduate

Course Description
General circulation of the tropics; energy balance; boundary layer; cumulus convection; survey of tropical disturbances including tropical cyclones. 3 hrs. lec. Prereq: C- or higher in ESSC 341, 342.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 341 and ESSC 342

Earn a minimum grade of C- in the following:
- ESSC341 - Atmospheric Thermodynamics
- ESSC342 - Atmospheric Dynamics 1

ESSC344H - H:Tropical Meteorology

Course Information

Course Title
H:Tropical Meteorology

Subject code	Course Number	Academic Level
ESSC	344H	Undergraduate

Course Description
H:Tropical Meteorology

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 341 and ESSC 342

Earn a minimum grade of C- in the following:
- ESSC341 - Atmospheric Thermodynamics
- ESSC342 - Atmospheric Dynamics 1

ESSC345 - Atmospheric Radiative Transfer

Course Information

Course Title
Atmospheric Radiative Transfer

Subject code	Course Number	Academic Level
ESSC	345	Undergraduate

Course Description
Quantitative description and analysis of atmospheric radiation and its interaction with atmospheric constituents (gases, aerosol, and clouds) and the land and ocean surfaces. Topics include properties of radiation, the electromagnetic spectrum, reflection and refraction, radiative properties of natural surfaces, thermal emission, atmospheric transmission, atmospheric emission (the Schwarzschild Equation) and absorption, scattering and absorption by molecules and particles, radiative transfer with multiple scattering, numerical modeling of atmospheric radiation, relevance for climate and weather. Prereq: C- or higher in ESSC 241, or PHYS 231. Coreq or Prereq: MATH 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241 or PHYS 231

Earn a minimum grade of C- in the following:
- ESSC241 - Meteorology
  OR PHYS231 - Physics 1 with Calculus

Course Prerequisites or Corequisites

Type
Prerequisite

MATH 311

Complete ALL of the following Courses:
- MATH311 - Calculus 3

ESSC347 - Satellite Meteorology

Course Information

Course Title
Satellite Meteorology

Subject code	Course Number	Academic Level
ESSC	347	Undergraduate

Course Description
Orbital and radiative transfer physics applied to satellite meteorology systems. Contemporary applications of satellite remote sensing of the atmosphere, including the retrieval of cloud microphysics and precipitation, the generation of atmospheric vertical profiles of temperature and moisture, the retrieval of wind, and image interpretation in the context of weather forecasting. 3 hrs. lec. Offered in fall of even years. Prereq: ESSC 241; MATH 161 or MATH 163.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241 and MATH 161 or MATH 161H or MATH 163H

Complete ALL of the following Courses:

- ESSC241 - Meteorology
- MATH161 - Calculus 1
  AND MATH161H - Hon: Calculus 1
  AND MATH163H - Honors Calculus 1

ESSC347H - H:Satellite Meteorology

Course Information

Course Title
H:Satellite Meteorology

Subject code	Course Number	Academic Level
ESSC	347H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241 and MATH 161 or MATH 161H or MATH 163H

Complete ALL of the following Courses:

- ESSC241 - Meteorology
- MATH161 - Calculus 1
  AND MATH161H - Hon: Calculus 1
  AND MATH163H - Honors Calculus 1

ESSC348 - Broadcast Meteorology

Course Information

Course Title
Broadcast Meteorology

Subject code	Course Number	Academic Level
ESSC	348	Undergraduate

Course Description
Preparation and presentation of weather information to the public; graphics preparation, television and radio weathercasting; video production. 1 hr. lec. 2 hrs. studio. Offered in spring. Prereq: C- or higher in ESSC 241 or COMM 320.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241 or COMM 320 or COMM 320H

Earn a minimum grade of C- in the following:

- ESSC241 - Meteorology
  OR COMM320 - Radio Production
  OR COMM320H - H:Radio Production

ESSC349 - Chemistry of the Atmosphere

Course Information

Course Title
Chemistry of the Atmosphere

Subject code	Course Number	Academic Level
ESSC	349	Undergraduate

Course Description
Theory, application, methods of analysis and instrumentation relevant to a study of the chemistry of the atmosphere. 3 hrs. of integrated lecture/lab/ working group activities. May be used as an elective in meteorology and environmental chemistry if not counted as "P" course. Prereq: Minimum of 36 credit hours, COMM 100, ENGL 110; junior status; CHEM 104 or CHEM 111; and PHYS 132 or PHYS 232.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

CHEM 104 or CHEM 111 and PHYS 132 or PHYS 232

Complete ANY of the following Courses:

- CHEM104 - Gen Organic and Biochemistry 2
  OR CHEM111 - Introductory Chemistry 1
- PHYS132 - Physics 2 with Algebra
  OR PHYS232 - Physics 2 with Calculus

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ESSC349H - Hon: Chemistry of the Atmosphere

Course Information

Course Title
Hon: Chemistry of the Atmosphere

Subject code	Course Number	Academic Level
ESSC	349H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

CHEM 104 or CHEM 111 and PHYS 132 or PHYS 232

Complete ANY of the following Courses:
- CHEM104 - Gen Organic and Biochemistry 2
  OR CHEM111 - Introductory Chemistry 1
- PHYS132 - Physics 2 with Algebra
  OR PHYS232 - Physics 2 with Calculus

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ESSC350 - History of Meteorology

Course Information

Course Title
History of Meteorology

Subject code	Course Number	Academic Level
ESSC	350	Undergraduate

Course Description
Overall intellectual and institutional development of meteorology from Aristotle to present, with emphasis on the 20th century. Historical overviews of dynamic meteorology and numerical weather prediction, observational tools (the history of radar and satellites) and computational devices, cloud microphysics and dynamics, hurricanes, convective storms and climatology. Spotlights key scientists and their role in the advancement of atmospheric sciences. 3 hrs. lec. Prereq: ESSC 107, 109, or ESSC 241; and HIST 101 or 102 or 106, or 340; COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 107 or ESSC 107H or ESSC 109 or ESSC 241 and HIST 101 or HIST 102 or HIST 106 or HIST 340

Complete ALL of the following Courses:
- ESSC107 - The Atmosphere
  OR ESSC107H - Hon: The Atmosphere (Inactive)
  OR ESCI109 - Atmosphere with Lab
  OR ESSC241 - Meteorology
- HIST101 - Europe and the World 1350-1789
  OR HIST102 - Europe and the World 1789-Present
  OR HIST106 - Contours of US History
  OR HIST340 - Twentieth Century Europe

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ESSC350H - H:History of Meteorology

Course Information

Course Title
H:History of Meteorology

Subject code	Course Number	Academic Level
ESSC	350H	Undergraduate

Course Description
H:History of Meteorology

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 107 or ESSC 107H or ESSC 109 or ESSC 241 and HIST 101 or HIST 102 or HIST 106 or HIST 340

Complete ALL of the following Courses:

- ESSC107 - The Atmosphere
  OR ESSC107H - Hon: The Atmosphere (Inactive)
  OR ESCI109 - Atmosphere with Lab
  OR ESSC241 - Meteorology
- HIST101 - Europe and the World 1350-1789
  OR HIST102 - Europe and the World 1789-Present
  OR HIST106 - Contours of US History
  OR HIST340 - Twentieth Century Europe

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ESSC362 - Marine Geology

Course Information

Course Title
Marine Geology

Subject code	Course Number	Academic Level
ESSC	362	Undergraduate

Course Description
Sedimentary and tectonic characteristics of the continental margins and deep ocean basins; principles and processes of sediment transport and deposition in the marine environment; applications of geophysical methods at sea; marine mineral resources. 3 hrs. lec. Offered only in summers of even years at the Chincoteague Bay Field Station. Prereq: C- or higher in ESSC 261 or 221.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 261 or ESSC 221 or ESSC 221H

Earn a minimum grade of C- in the following:

- ESSC261 - Introduction to Oceanography
  OR ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology

ESSC363 - Chemical Oceanography

Course Information

Course Title
Chemical Oceanography

Subject code	Course Number	Academic Level
ESSC	363	Undergraduate

Course Description
Oceanic chemical phenomena, including structure of water, salinity, sources and sinks of chemical constituents; chemical interactions at interfaces between hydrosphere and atmosphere, lithosphere and biosphere; biogeochemical cycles of nutrients; the carbon-dioxide-carbonate system; origin and history of seawater; anthropogenic effects. Prereq: C- or higher in ESSC 261 and CHEM 111.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 261 and CHEM 111

Earn a minimum grade of C- in the following:
- ESSC261 - Introduction to Oceanography
- CHEM111 - Introductory Chemistry 1

ESSC366 - Marine Resources and Policy

Course Information

Course Title
Marine Resources and Policy

Subject code	Course Number	Academic Level
ESSC	366	Undergraduate

Course Description
This course will give the student a broad background in Marine Resources including biological, transportation, oil and gas, methane hydrates, minerals and freshwater, recreation, endangered species, energy and waste disposal. The course will also give an overview on National and International Law Applied to the marine environment. Topics on Marine policies including marine environmental policy, International fisheries policy, Marine transportation and safety policy, etc. will be discussed and related to geographical, socio-economic and political issues affecting Marine Resources, Sustainability and Marine Conservation. News clips, articles in journals, case studies of issues relevant to the topics above will be discussed in an open, free and debate like atmosphere that is designed to develop students critical thinking skills in a deliberate and structured way. Prereq: COMM 100 or 100H, ENGL 110 or 110H, junior standing and any 200-level course in ESSC, BIOL or GEOG.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 100 or COMM 100H and ENGL 110 or ENGL 110H and any 200-level course in ESSC, BIOL or GEOG

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100
- Any 2-level ESSC course(s)
  OR Any 2-level BIOL course(s)
  OR Any 2-level GEOG course(s)

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ESSC366H - Hon: Marine Resources and Policy

Course Information

Course Title
Hon: Marine Resources and Policy

Subject code	Course Number	Academic Level
ESSC	366H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM 100 or COMM 100H and ENGL 110 or ENGL 110H and any 200-level course in ESSC, BIOL or GEOG

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100
- Any 2-level ESSC course(s)
  OR Any 2-level BIOL course(s)
  OR Any 2-level GEOG course(s)

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ESSC369 - Physical Oceanography and Climate

Course Information

Course Title
Physical Oceanography and Climate

Subject code	Course Number	Academic Level
ESSC	369	Undergraduate

Course Description
Physical properties of seawater; mass and energy budgets of the ocean; typical distribution of water characteristics, global balances; the conservation equations; equations of motion; fluid motion in rotating systems. Conservation of vorticity; wind and thermohaline circulation; currents and eddies; wind-generated waves; tides and other waves; Exchange of buoyancy and heat fluxes in the atmosphere-ocean boundary layer; Climate Change and the Ocean. A required course for Ocean Sciences and Coastal Studies majors and elective for other earth sciences programs. Combination of lecture and laboratory exercises. 2 hrs. lec., 2 hrs. lab. Offered in fall of odd years. Prereq: ESSC 261 or ESSC 241; MATH 161, PHYS 131 or PHYS 231, or permission of Instructor. 3.000 Credit hours 2.000 Lecture hours 2.000 Lab hours.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 261 or ESSC 241 and MATH 161 or MATH 161H

Complete ALL of the following Courses:

- ESSC261 - Introduction to Oceanography
  OR ESSC241 - Meteorology
- MATH161 - Calculus 1
  OR MATH161H - Hon: Calculus 1

PHYS131 or PHYS231 or PHYS132 or PHYS232

Complete ANY of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS231 - Physics 1 with Calculus
- PHYS132 - Physics 2 with Algebra

Or must have permission of instructor.

ESSC379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ESSC	379	Undergraduate

Course Description
Experimental

ESSC380 - Remote Sensing & Image Interpretation

Course Information

Course Title
Remote Sensing & Image Interpretation

Subject code	Course Number	Academic Level
ESSC	380	Undergraduate

Course Description
Principles of remote sensing; fundamentals of image visualization; radiative transfer equation; use of environmental, meteorological and oceano- graphic satellites; satellite algorithm and parameter estimation; use of Environment for Visualizing Images (EVSC) software for image analysis and interpretation. Basic computer literacy is assumed. 2 hrs. lec., 2 hrs. lab. Research project is required. Prereq: ESSC 221 or 241 or 261.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H or ESSC 241 or ESSC 261

Complete ANY of the following Courses:

- ESCI221 - Physical Geology
- ESSC221H - Hnrs:Physical Geology
- ESSC241 - Meteorology
- ESSC261 - Introduction to Oceanography

ESSC382 - Water Wars: Science and Policy

Course Information

Course Title
Water Wars: Science and Policy

Subject code	Course Number	Academic Level
ESSC	382	Undergraduate

Course Description
Interdisciplinary investigation of the causes and solutions of water crises. Topics such as the sources of fresh water, the use and consumption of water, and regional and international conflict over water rights will be discussed. Current water crises from across the globe will be used to highlight societal differences in water use and preservation. Prereq: Minimum of 60 credits, ENGL 110 and any ESSC course or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Any ESSC Course

Complete ALL of the following Course Sets:

- Any ESSC course(s)

Or must have permission of instructor.

ESSC382H - H: Water Wars: Science and Policy

Course Information

Course Title
H: Water Wars: Science and Policy

Subject code	Course Number	Academic Level
ESSC	382H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Any ESSC Course

Complete ALL of the following Course Sets:
- Any ESSC course(s)

Or must have permission of instructor.

ESSC385 - Global Climate Change: Sci & Policy

Course Information

Course Title
Global Climate Change: Sci & Policy

Subject code	Course Number	Academic Level
ESSC	385	Undergraduate

Course Description
Evolution of the Earth's habitable atmosphere and oceans; mechanisms that control climate processes and change; past global climate change as deciphered through paleoclimatic and paleoceanographic methods; recent rapid climate fluctuations and possible future changes. 3 hrs. lec. Prereq: ENGL 110 and COMM 100; ESSC 221, ESSC 241 or 261 or GEOG 230.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H or ESSC 241 or ESSC 261 or GEOG 230

Complete ANY of the following Courses:
- ESCI221 - Physical Geology
- ESSC221H - Hnrs:Physical Geology
- ESSC241 - Meteorology
- ESSC261 - Introduction to Oceanography
- GEOG230 - Physical Geography

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

ESSC385H - H: Global Climate Change: Sci & Policy

Course Information

Course Title
H: Global Climate Change: Sci & Policy

Subject code	Course Number	Academic Level
ESSC	385H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 221 or ESSC 221H or ESSC 241 or ESSC 261 or GEOG 230

Complete ANY of the following Courses:
- ESCI221 - Physical Geology
- ESSC221H - Hnrs:Physical Geology
- ESSC241 - Meteorology
- ESSC261 - Introduction to Oceanography
- GEOG230 - Physical Geography

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

ESSC386 - Sci Prg Lang:

Course Information

Course Title
Sci Prg Lang:

Subject code	Course Number	Academic Level
ESSC	386	Undergraduate

Course Description
Use of scientific programming languages for analysis and display of data. Topics include: data types; syntax and control statement; use of plotting and graphics libraries; reading and writing data sets in ASCII, binary, NetCDF, and other formats; spectral analysis; statistical operations; matrix operations. 2 hrs. lec., 2 hrs. lab. Offered in spring. Prereq: ESSC 282 or CMSC 161; MATH 211 and PHYS 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 282 or CMSC 161 and MATH 211 and PHYS 231

Complete ALL of the following Courses:
- ESSC282 - FORTRAN Programming for Earth Sciences Applications
  OR CMSC161 - Introduction to Programming 1
- MATH211 - Calculus 2
- PHYS231 - Physics 1 with Calculus

ESSC390 - Topics in the Earth Sciences

Course Information

Course Title
Topics in the Earth Sciences

Subject code	Course Number	Academic Level
ESSC	390	Undergraduate

Course Description
Detailed investigation of a topic of current research interest. Topic to be announced each time course is offered. Credit and meeting hours variable, depending on topic offered. Offered infrequently. Prereq: completion of 60 credits.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ESSC390H - Hon: Topics in the Earth Sciences

Course Information

Course Title
Hon: Topics in the Earth Sciences

Subject code	Course Number	Academic Level
ESSC	390H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

ESSC400 - Co-Op Ed Experience in ESCI

Course Information

Course Title
Co-Op Ed Experience in ESCI

Subject code	Course Number	Academic Level
ESSC	400	Undergraduate

Course Description
Co-Op Ed Experience in ESSC

ESSC422 - Geological Field Mapping

Course Information

Course Title
Geological Field Mapping

Subject code	Course Number	Academic Level
ESSC	422	Undergraduate

Course Description
Examination and interpretation of geologic materials and structures in the field. Students prepare a geologic map, stratigraphic column and structural cross-sections of an assigned field area. Prereq: C- or higher in ESSC 321.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 321

Earn a minimum grade of C- in the following:

- ESSC321 - Structural Geology

ESSC423 - Applied Geophysics

Course Information

Course Title
Applied Geophysics

Subject code	Course Number	Academic Level
ESSC	423	Undergraduate

Course Description
Geophysical methods applied to environmental assessment, resource exploration and civil engineering issues. Topics covered include seismic refraction and reflection, ground-penetrating radar, electrical resistivity, gravity, and geomagnetism. 2 hrs. lec., 2 hrs. lab. Offered fall of even years. Prereq: minimum of 60 credits, C- or higher in MATH 101 and any 200-level science course that counts towards a science degree, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

(PHYS 232 or PHYS 232H) or (PHYS 132 and MATH 161)

Complete ANY of the following Courses:
- PHYS232 - Physics 2 with Calculus **OR** PHYS232H - Hon: Physics 2 with Calculus
- PHYS132 - Physics 2 with Algebra **AND** MATH161 - Calculus 1

ESSC 221 or ESSC 221H

Complete ANY of the following Courses:
- ESCI221 - Physical Geology
- ESSC221H - Hnrs:Physical Geology

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

MATH 101

Earn a minimum grade of C- in the following:
- MATH101 - College Algebra

Course Prerequisites

Type
Prerequisite

200-Level Science Course or Instructor Permission

Completed any 200-level science course that counts towards a science degree or must have permission of instructor.

ESSC426 - Groundwater Resources and Contamination

Course Information

Course Title
Groundwater Resources and Contamination

Subject code	Course Number	Academic Level
ESSC	426	Undergraduate

Course Description
Occurrence and behavior of groundwater; groundwater contamination and remediation; groundwater resource assessment, including aquifer test design and analysis; introduction to groundwater modeling. 2 hrs. lec., 2 hrs. lab. Prereq: minimum of 60 credits, C- or higher in MATH 101 and any 200-level science course that counts towards a science degree, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 101

Earn a minimum grade of C- in the following:
- MATH101 - College Algebra

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Course Prerequisites

Type
Prerequisite

200-Level Science Course or Instructor Permission

Completed any 200-level science course that counts towards a science degree or must have permission of instructor.

ESSC428 - Planetary Geology

Course Information

Course Title
Planetary Geology

Subject code	Course Number	Academic Level
ESSC	428	Undergraduate

Course Description
Terrestrial geology in the context of the solar system; geochemical evolution of the solar nebula; planetary formation and evolution; comparative planetology, meteoritics; asteroid/cometary impact phenomena. 3 hrs. lec. Offered infrequently. Prereq: ENGL 110, ESSC 222 and CHEM 111.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ESSC 222 or ESSC 222H and CHEM 111

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- ESSC222 - Historical Geology **OR** ESSC222H - H:Historical Geology
- CHEM111 - Introductory Chemistry 1

ESSC440 - Space Weather and Environment

Course Information

Course Title
Space Weather and Environment

Subject code	Course Number	Academic Level
ESSC	440	Undergraduate

Course Description
In-depth study of the space environment between the earth and sun; solar-terrestrial interactions; physics of the sun and space weather; observations, modeling and prediction of space weather events; effects on life, property and infrastructure. 3 hrs. lec. Offered in spring of even years. Coreq: MATH 365; Prereq: ESSC 342 and either ESSC 340 or PHYS 233 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 342

Complete ALL of the following Courses:
- ESSC342 - Atmospheric Dynamics 1

ESSC 340 or ESSC 340H or PHYS 233

Complete ANY of the following Courses:
- ESSC340 - Cloud Physics & Precip Process
- ESSC340H - H:Cloud Physics & Precip Process
- PHYS233 - Wave-Particle Theory

Or by permission of instructor.

Course Corequisite

Type
Corequisite

MATH 365

Enroll in the following Courses:
- MATH365 - Ordinary Differential Equations

ESSC440H - Hon: Space Weather and Environment

Course Information

Course Title
Hon: Space Weather and Environment

Subject code	Course Number	Academic Level
ESSC	440H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 342

Complete ALL of the following Courses:
- ESSC342 - Atmospheric Dynamics 1

ESSC 340 or ESSC 340H or PHYS 233

Complete ANY of the following Courses:
- ESSC340 - Cloud Physics & Precip Process
- ESSC340H - H:Cloud Physics & Precip Process
- PHYS233 - Wave-Particle Theory

Or by permission of instructor.

Course Corequisite

Type
Corequisite

MATH 365

Enroll in the following Courses:
- MATH365 - Ordinary Differential Equations

ESSC441 - Synoptic Meteorology Lecture-Laboratory

Course Information

Course Title
Synoptic Meteorology Lecture-Laboratory

Subject code	Course Number	Academic Level
ESSC	441	Undergraduate

Course Description
Application of atmospheric dynamics and atmospheric physics to the theoretical and empirical investigation of mid-latitude synoptic-scale meteorological processes. Topics include the diagnosis of synoptic-scale vertical motions, the circulation at fronts and the life cycle of the extratropical cyclone. 3 hrs. lec., 3 hrs. lab. Offered in fall. Prereq: ESSC 340, 341, 343.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 340 or ESSC 340H and ESSC 341 and ESSC 343

Complete ALL of the following Courses:
- ESSC340 - Cloud Physics & Precip Process **OR** ESSC340H - H:Cloud Physics & Precip Process
- ESSC341 - Atmospheric Thermodynamics
- ESSC343 - Atmospheric Dynamics 2

ESSC442 - Adv Wthr Anlys/Forecstng Pract

Course Information

Course Title
Adv Wthr Anlys/Forecstng Pract

Subject code	Course Number	Academic Level
ESSC	442	Undergraduate

Course Description
Advanced synoptic and mesoscale weather analysis and forecasting skills. Students perform weather analysis exercises designed to complement the forecast process. Students prepare probabilistic meteorological forecasts and lead post-forecast discussions focused on lessons learned. 1 hr. lec., 2 hrs. lab. Offered in spring. Prereq: C- or higher in ESSC 441 and one semester of Campus Weather Service or by permission of instructor. Coreq: ESSC 444.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 441

Earn a minimum grade of C- in the following:
- ESSC441 - Synoptic Meteorology Lecture-Laboratory

One Semester of Campus Weather Service or Instructor Permission

Must have one semester of Campus Weather Service or permission of instructor.

Course Corequisite

Type
Corequisite

MATH 365

Enroll in the following Courses:
- ESSC444 - Mesoscale Meteorology

ESSC443 - Climate Dynamics

Course Information

Course Title
Climate Dynamics

Subject code	Course Number	Academic Level
ESSC	443	Undergraduate

Course Description
A comprehensive treatment of the components of the climate system, feedback mechanisms and interactions; mean state of the climate system; a detailed and in-depth treatment of the earth-atmosphere radiation balance and general circulation; natural and anthropogenic forcings and their effect on the climate system; climate models; and the current state of climate-observing networks and model validation. 2 hrs. lec., 2 hrs. applications and analysis. Offered in spring. Prereq: ESSC 343 or 369, ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 343 or ESSC 369 and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- ESSC343 - Atmospheric Dynamics 2
  OR ESSC369 - Physical Oceanography and Climate
- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

ESSC444 - Mesoscale Meteorology

Course Information

Course Title
Mesoscale Meteorology

Subject code	Course Number	Academic Level
ESSC	444	Undergraduate

Course Description
Application of atmospheric dynamics and atmospheric physics to the theoretical and empirical investigation of mid-latitude mesoscale meteorological processes. Topics include atmospheric sounding analysis, pressure perturbations, mesoscale instabilities, the atmospheric boundary layer, air mass boundaries, convection initiation, organization of convection and tornadoes. 4 hrs. lec. Prereq: ESSC 441.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 441

Complete ALL of the following Courses:

- ESSC441 - Synoptic Meteorology Lecture-Laboratory

ESSC445 - Num Modeling of Atmos and Ocns

Course Information

Course Title
Num Modeling of Atmos and Ocns

Subject code	Course Number	Academic Level
ESSC	445	Undergraduate

Course Description
Methods and mathematical concepts of numerical weather and ocean prediction models. Students must be able to program in one of the following languages: Fortran, C++, or IDL. 3 hrs. lec. Offered in spring of odd-numbered years. Prereq: ESSC 282 or CMSC 161. Coreq or Prereq: ESSC 343 or 365.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 282 or CMSC 161

Complete ANY of the following Courses:
- ESSC282 - FORTRAN Programming for Earth Sciences Applications
- CMSC161 - Introduction to Programming 1

Course Prerequisite or Corequisite

Type
Prerequisite

ESSC 343

Complete ALL of the following Courses:
- ESSC343 - Atmospheric Dynamics 2

ESSC446 - Stats & Decision Making in Earth Science

Course Information

Course Title
Stats & Decision Making in Earth Science

Subject code	Course Number	Academic Level
ESSC	446	Undergraduate

Course Description
Descriptive and inference statistics, uncertainty, review of probability, empirical distributions, exploratory data analysis, parametric probability distributions, frequency and Bayesian inference, statistical forecasting and forecast verification, statistics in decision making, time series, multivariate statistics and normal distribution (MVN), principal component analysis (EOF), canonical correlation analysis (CCA), discriminant analysis, cluster analysis, thriving on the edge of chaos, effective complexity. Pre-req: C- or higher in MATH 211

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 211

Earn a minimum grade of C- in the following:
- MATH211 - Calculus 2

ESSC447 - Meteorological Instrumentation

Course Information

Course Title
Meteorological Instrumentation

Subject code	Course Number	Academic Level
ESSC	447	Undergraduate

Course Description
Devices and platforms used to gather meteorological data; methods of data acquisition, reduction, error analysis and quality assurance; description of instrumentation, measurement techniques, observing systems and their deployment. 2 hrs. lec., 2 hrs. lab. Offered in fall of odd years. Prereq: ENGL 110, PHYS 232 and MATH 235.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PHYS 232 and MATH 235

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- PHYS232 - Physics 2 with Calculus
- MATH235 - Survey of Statistics

ESSC447H - H:Meteorological Instrumentation

Course Information

Course Title
H:Meteorological Instrumentation

Subject code	Course Number	Academic Level
ESSC	447H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PHYS 232 and MATH 235

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- PHYS232 - Physics 2 with Calculus
- MATH235 - Survey of Statistics

ESSC448 - Boundary Layers and Turbulence

Course Information

Course Title
Boundary Layers and Turbulence

Subject code	Course Number	Academic Level
ESSC	448	Undergraduate

Course Description
Mean boundary layer characteristics; turbulence and its spectrum; governing equations to turbulent flow; prognostic equations for turbulent fluxes and variances; TKE; turbulence closure schemes; similarity theory; simulation techniques; convective and stable boundary layers; boundary layer clouds. 3 hrs. lec. Offered in spring of even years. Prereq: C- or higher in ESSC 342 and MATH 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 342 and MATH 211

Earn a minimum grade of C- in the following:
- ESSC342 - Atmospheric Dynamics 1
- MATH211 - Calculus 2

ESSC449 - Radar Meteorology

Course Information

Course Title
Radar Meteorology

Subject code	Course Number	Academic Level
ESSC	449	Undergraduate

Course Description
Algorithms used in the display and interpretation of weather radar data; theory of electromagnetic radiation, principles of radar operation, Doppler radar and interpretation techniques; wind velocity, rainfall rates and detection of individual cells, multiple cells and turbulence. 3 hrs. lec. Offered in spring of even years. Prereq: C- or higher in ESSC 241, MATH 311. Coreq or Prereq: ESSC 342.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241 and MATH 311

Earn a minimum grade of C- in the following:
- ESSC241 - Meteorology
- MATH311 - Calculus 3

Course Prerequisites or Corequisites

Type
Prerequisite

ESSC 342

Complete ALL of the following Courses:
- ESSC342 - Atmospheric Dynamics 1

ESSC449H - Hon: Radar Meteorology

Course Information

Course Title
Hon: Radar Meteorology

Subject code	Course Number	Academic Level
ESSC	449H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 241 and MATH 311

Earn a minimum grade of C- in the following:
- ESSC241 - Meteorology
- MATH311 - Calculus 3

Course Prerequisites or Corequisites

Type
Prerequisite

ESSC 342

Complete ALL of the following Courses:
- ESSC342 - Atmospheric Dynamics 1

ESSC464 - Ocean Ecosystems

Course Information

Course Title
Ocean Ecosystems

Subject code	Course Number	Academic Level
ESSC	464	Undergraduate

Course Description
Advanced ocean sciences course investigating the physical, chemical and biological characteristics of the major pelagic ocean biomes from the polar through equatorial regions of the world ocean. Emphasis will be on the important marine plankton functional groups and how their abundances and rates of production are controlled by the circulation patterns of the ocean, ocean turbulence, food web structure, density stratification, the supply of nutrients and the availability of sunlight, and water transparency. 3 hrs. lec. Prereq: ESSC 363 and ESSC 369 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 363

Complete ALL of the following Courses:
- ESSC363 - Chemical Oceanography

ESSC 369

Complete ALL of the following Courses:
- ESSC369 - Physical Oceanography and Climate

Or must have permission of instructor.

ESSC465 - Biological Oceanography

Course Information

Course Title
Biological Oceanography

Subject code	Course Number	Academic Level
ESSC	465	Undergraduate

Course Description
Intensive summer lecture and field course teaching the physical, chemical and biological factors controlling the structure and dynamics of marine ecosystems. Classroom instruction focuses on theoretical principles concerning the environmental control of phytoplankton communities by sunlight, nutrients and grazing. The dynamics and complexity of marine food webs including the phytoplankton, zooplankton and upper trophic levels. Laboratory and field instruction focuses on ocean monitoring and sampling from research vessels, biomass determination and identification of key plankton species, measurement of the rates of net and gross primary production using oxygen light-dark bottle experiments, and optical and chemical techniques of determining phytoplankton biomass and species composition. Approximately 40-50% of course time is spent in field. Prerequisites: C- or higher in ESSC 261 and completion of BIOL (211 or 221), or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC261

Earn a minimum grade of C- in the following:
- ESSC261 - Introduction to Oceanography

BIOL 211 or BIOL 221

Complete ANY of the following Courses:
- BIOL211 - Concepts of Zoology
- BIOL221 - Concepts of Botany

Or must have permission of instructor.

ESSC468 - Ocean Data Analysis and Presentation

Course Information

Course Title
Ocean Data Analysis and Presentation

Subject code	Course Number	Academic Level
ESSC	468	Undergraduate

Course Description
Advanced ocean sciences course covering the theory behind the most commonly used techniques of ocean sampling and the analysis and presentation of oceanographic data. In this course we will cover the meaning of data and the common types of oceanographic data, methods of ocean data collection, the meaning and importance of metadata, databases in ocean science community, the idea of geospatial data and the importance of frame of reference and time and space scales of interest, the variety of ways to analyze and present oceanographic data, and how to present data to maximize its informational content. 2 hrs. lec., 2 hrs. lab. Prereq: ESSC 261 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ESSC 261

Complete ALL of the following Courses:
- ESSC261 - Introduction to Oceanography

Or must have permission of instructor.

ESSC479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ESSC	479	Undergraduate

Course Description
Experimental

ESSC489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ESSC	489	Undergraduate

Course Description
Honors Course

ESSC498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
ESSC	498	Undergraduate

Course Description
Supervised independent research in the earth sciences. Subject determined jointly by student and the problem supervisor. Permission of department chair and school dean required.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Department Chair and School Dean Permission Required

Must have permission of department chair and school dean.

ESSC499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
ESSC	499	Undergraduate

Course Description
Departmental Honors

ESSC500 - Co-Op Ed Experience in ESCI

Course Information

Course Title
Co-Op Ed Experience in ESCI

Subject code	Course Number	Academic Level
ESSC	500	Graduate

Course Description
Co-Op Ed Experience in ESSC

ESSC522 - Environmental Hydrology

Course Information

Course Title
Environmental Hydrology

Subject code	Course Number	Academic Level
ESSC	522	Graduate

Course Description
Theory and practice of quantifying hydrologic phenomena; field methods, data manipulation and environmental applications. 2 hrs. lec., 2 hrs. lab. Offered spring semesters.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH101

Complete ALL of the following Courses:

- MATH101 - College Algebra

ESSC579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ESSC	579	Graduate

Course Description
Experimental

FYEX100AA - First Year Experience: Exploring Earth Systems

Course Information

Course Title
First Year Experience: Exploring Earth Systems

Subject code	Course Number	Academic Level
FYEX	100AA	Undergraduate

Course Description
Each First Year Seminar (FYEX) section features an academic centerpiece (a question, topic, or theme) that will ground the process of intellectual inquiry through a free exchange of ideas during and outside of class. FYEX instructors mentor and assist students in developing meaningful and purposeful goals. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100I - Discovering Nature

Course Information

Course Title
Discovering Nature

Subject code	Course Number	Academic Level
FYEX	100I	Undergraduate

Course Description
Each First Year Seminar (FYEX) section features an academic centerpiece (a question, topic, or theme) that will ground the process of intellectual inquiry through a free exchange of ideas during and outside of class. FYEX instructors mentor and assist students in developing meaningful and purposeful goals.
Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

GEOG101 - The Global Environment

Course Information

Course Title
The Global Environment

Subject code	Course Number	Academic Level
GEOG	101	Undergraduate

Course Description
Global survey of human environment interactions focusing on peoples use of natural resources and major related issues, including scarcity and environmental impacts. Comparisons between developing and developed countries and across cultures.

GEOG123 - Place and Identity

Course Information

Course Title
Place and Identity

Subject code	Course Number	Academic Level
GEOG	123	Undergraduate

Course Description
Introduction to humanistic geography through an examination of the foundational geographical concepts of place and human identity. Place, and its close corollary identity, are explored chronologically beginning with the philosopher-geographers of ancient Greece and Rome, through to modern social and political philosophies of the 19th and 20th centuries. Cross cultural examples are used to illustrate the nature of place as a fundamental element of everyday human experience of the world.

GEOG130 - Intro to Environmental Science

Course Information

Course Title
Intro to Environmental Science

Subject code	Course Number	Academic Level
GEOG	130	Undergraduate

Course Description
Introduction to the scientific concepts, principles, and methodologies that underlie environmental change and environmental sustainability. Emphasis on the spatial scale and interconnection of multiple environmental processes, the effects of human activities on environmental processes, and the technical and scientific methods for their assessment and analysis.

GEOG141 - World Regional Geography

Course Information

Course Title
World Regional Geography

Subject code	Course Number	Academic Level
GEOG	141	Undergraduate

Course Description
Spatial patterns of environmental, cultural, social, economic and political developments in selected regions of the world. Emphasis on developed and less developed parts of the world.

GEOG202 - Environmental Sustainability

Course Information

Course Title
Environmental Sustainability

Subject code	Course Number	Academic Level
GEOG	202	Undergraduate

Course Description
Investigation of problems that have arisen through human use of earths resources, and the technical, economic, policy, and social options available to us. Offered in fall, spring.

Gateway Stage Labels
Problem Solving (PS)

GEOG222 - Economic Geography

Course Information

Course Title
Economic Geography

Subject code	Course Number	Academic Level
GEOG	222	Undergraduate

Course Description
Location of economic activities in different environmental settings. The growth of global economic interdependence. Economic growth and development strategies in a regional framework. Economic versus environmental trade-offs. Offered in summer.

GEOG223 - Health, Gender, Race & Class

Course Information

Course Title
Health, Gender, Race & Class

Subject code	Course Number	Academic Level
GEOG	223	Undergraduate

Course Description
Introduction to the geographical distribution of select contemporary diseases and their relationships to other health care issues. Distribution of, and access to, scarce health care resources along with impacts of gender, race, and class on human life chances at global (especially developed versus developing countries), regional and local (such as urban versus rural) scales are evaluated.

GEOG226 - Political Geography

Course Information

Course Title
Political Geography

Subject code	Course Number	Academic Level
GEOG	226	Undergraduate

Course Description
Political boundaries of the world map. Covers violent conflicts from which countries were formed. Colonization (1400-1900), decolonization (1800- 1970) and the Cold War are discussed. Offered in fall, spring. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GEOG227 - Cities

Course Information

Course Title
Cities

Subject code	Course Number	Academic Level
GEOG	227	Undergraduate

Course Description
City development is described and explained in a global context. The US city system is explained and compared to European, Asian and African urban systems. Contemporary city problems (gentrification, urban decline, segregation, etc.) are discussed.

GEOG228 - Geography of Sport

Course Information

Course Title
Geography of Sport

Subject code	Course Number	Academic Level
GEOG	228	Undergraduate

Course Description
Using a geographical basis, the course will examine a variety of topics, including landscapes of modern sport; place and space in sport; institutions and spatial organization of sport; and sport, politics and development. Offered periodically.

GEOG229 - Sustainable Tourism

Course Information

Course Title
Sustainable Tourism

Subject code	Course Number	Academic Level
GEOG	229	Undergraduate

Course Description
An investigation of the areal distribution of recreation and tourist activities and their positive and negative impacts; emphasis on environmental and economic aspects of leisure within a locational framework. Planning methodology to alleviate problems and create higher-quality recreational experiences. Offered infrequently.

GEOG230 - Physical Geography

Course Information

Course Title
Physical Geography

Subject code	Course Number	Academic Level
GEOG	230	Undergraduate

Course Description
Study of the Earths physical environment, including atmosphere, hydrosphere, lithosphere and biosphere. Viewing the Earth as an integrated system, global patterns and processes are analyzed. Offered annually.

GEOG242 - London

Course Information

Course Title
London

Subject code	Course Number	Academic Level
GEOG	242	Undergraduate

Course Description
Using London as the core of the class, students will be introduced to basic geographic concepts and methods of analysis. Despite the focus on one city, London, the course will take a thematic approach towards geographical inquiry (map interpretation, urban planning, migration, segregation, industrial development, political geography and empire building) London's twentieth century industrial decline will be used to illustrate broader themes of global economic competition.

GEOG245 - Geography of Pennsylvania

Course Information

Course Title
Geography of Pennsylvania

Subject code	Course Number	Academic Level
GEOG	245	Undergraduate

Course Description
Introduction to the geography of Pennsylvania, using the tools and concepts of regional geography. Physical, cultural and economic landscapes and resulting social and environmental issues are examined.

GEOG248 - Geography of Africa

Course Information

Course Title
Geography of Africa

Subject code	Course Number	Academic Level
GEOG	248	Undergraduate

Course Description
The course uses a thematic approach to examine many of the subfields of geography as they pertain to Africa. Topics include the physical landscape, climate, vegetation, environmental issues, precolonial and colonial history, politics, culture, population, urbanization, agricultural and economic development, and medical gender issues. Offered periodically.

GEOG279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GEOG	279	Undergraduate

Course Description
Experimental Course in Geography

GEOG281 - Maps and GIS

Course Information

Course Title
Maps and GIS

Subject code	Course Number	Academic Level
GEOG	281	Undergraduate

Course Description
Thorough examination of maps as tools for representing Earth dimensions, depicting landscapes and displaying data. Use Geographic Information Systems (GIS) mapping software to make a variety of effective maps.

GEOG289 - Field and Research Methods in Geography

Course Information

Course Title
Field and Research Methods in Geography

Subject code	Course Number	Academic Level
GEOG	289	Undergraduate

Course Description
Introduction to the theory, process, and methodology used to collect and analyze data, and conduct and communicate research within the multidisciplinary context of geographic inquiry.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and GEOG101 or GEOG130 or GEOG130H or GEOG202 or GEOG230 and BIOL375 or BIOL375H or ECON231 or ECON231H or EVSC330 or GEOG292 or MATH130 or MATH235

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- GEOG101 - The Global Environment
  OR GEOG130 - Intro to Environmental Science
  OR GEOG130H - Hon: Intro to Environmental Science (Inactive)
  OR GEOG202 - Environmental Sustainability
  OR GEOG230 - Physical Geography
- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
  OR ECON231 - Applied Statistcs 1
  OR ECON231H - Hon: Applied Statistcs 1
  OR EVSC330 - Environmental Statistics & Risk Assessment
  OR GEOG292 - Quantitative and Spatial Analysis
  OR MATH130 - Elements of Statistics 1
  OR MATH235 - Survey of Statistics

GEOG292 - Quantitative and Spatial Analysis

Course Information

Course Title
Quantitative and Spatial Analysis

Subject code	Course Number	Academic Level
GEOG	292	Undergraduate

Course Description
Analysis of spatial and other geographical data using descriptive statistical measures, probability and sampling, and inferential statistical methods. Emphasis on geographical problem solving. Prereq: GEOG 281, and MATH 130 or higher, or MPT 151 or higher, or MATH 101.

Simple Requirements

Course Prerequisites: Complete 1 of the following

Type
Prerequisite

MATH 130 or Higher

Complete ANY of the following Course Sets:

- Any MATH 130 or Higher

Or MPT 151 or higher

MATH 101

Complete ALL of the following Courses:

- MATH101 - College Algebra

GEOG295 - GIS I: Vector Data Analysis

Course Information

Course Title
GIS I: Vector Data Analysis

Subject code	Course Number	Academic Level
GEOG	295	Undergraduate

Course Description
Introduction to Geographic Information Systems (GIS) computer technology, theory, and methodology focusing on vector data models. Combines understanding of geographic data and research with experience in digital mapping, geographic databases, and spatial analysis. Offered in fall, spring. Prereq: GEOG 281.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG 281

Complete ALL of the following Courses:
- GEOG281 - Maps and GIS

GEOG296 - GIS II: Raster Data Analysis

Course Information

Course Title
GIS II: Raster Data Analysis

Subject code	Course Number	Academic Level
GEOG	296	Undergraduate

Course Description
Introduce students to the fundamental concepts of Raster GIS. Topics will include: the physical basis for remote sensing, the extraction of information contained within energy, remote sensing instrumentation, aerial photography, photogrammetry, digital image processing, data structure, database design, and spatial data analysis. Land-based environmental resources and sustainability applications.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG295 or ESSC281

Complete ANY of the following Courses:
- GEOG295 - GIS I: Vector Data Analysis
- ESSC281 - GIS Applications for Earth Sci

GEOG300 - Co-Op Ed Experience in Geog

Course Information

Course Title
Co-Op Ed Experience in Geog

Subject code	Course Number	Academic Level
GEOG	300	Undergraduate

Course Description
Assignment with a public agency or private organization. Requirements include design of an approved job description relevant to employers functions and students program, and a planned program of contact with the faculty supervisor. Performance evaluation by sponsor used in assigning satisfactory/unsatisfactory grade.

GEOG302 - Food System Sustainability

Course Information

Course Title
Food System Sustainability

Subject code	Course Number	Academic Level
GEOG	302	Undergraduate

Course Description
Examines the attendant economic, social and environmental impacts of our food system. Key areas of policy influence on our food system and sustainable interventions for transforming our food system will also be addressed. Offered periodically. Prereq: ENGL 110; GEOG 101 or GEOG 130 or GEOG 202 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GEOG 101 or GEOG 130 or GEOG 130H or GEOG 202

Complete ANY of the following Courses:
- GEOG101 - The Global Environment
- GEOG130 - Intro to Environmental Science
- GEOG130H - Hon: Intro to Environmental Science (Inactive)
- GEOG202 - Environmental Sustainability

Or must have permission of instructor.

GEOG304 - Water Resources Management

Course Information

Course Title
Water Resources Management

Subject code	Course Number	Academic Level
GEOG	304	Undergraduate

Course Description
An interdisciplinary study of how we plan, manage and use water. Topics range from water law to hydrology. Offered periodically. Prereq: GEOG 101 or 202.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG 101 or GEOG 202

Complete ANY of the following Courses:
- GEOG101 - The Global Environment
- GEOG202 - Environmental Sustainability

GEOG305 - Energy Sustainability

Course Information

Course Title
Energy Sustainability

Subject code	Course Number	Academic Level
GEOG	305	Undergraduate

Course Description
Explores energy production and consumption from geographic and sustainability perspectives. The social, economic and environmental impacts of traditional and alternative energy resources will be examined. Options for a sustainable energy future in different geographic locations will be addressed. Offered periodically. Prereq: ENGL 110; GEOG 101 or GEOG 202 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GEOG 101 or GEOG 202

Complete ANY of the following Courses:
- GEOG101 - The Global Environment
- GEOG202 - Environmental Sustainability

Or must have permission of instructor.

GEOG306 - Environmental Impact Assessmnt

Course Information

Course Title
Environmental Impact Assessmnt

Subject code	Course Number	Academic Level
GEOG	306	Undergraduate

Course Description
The various regulatory requirements and technical methods for developing federal environmental-impact statements for air, water, biological and socioeconomic environments. Offered periodically. Prereq: GEOG 202 and 230 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG 202 and GEOG 230

Complete ALL of the following Courses:
- GEOG202 - Environmental Sustainability
- GEOG230 - Physical Geography

Or must have permission of instructor.

GEOG307 - US Environmental Policy

Course Information

Course Title
US Environmental Policy

Subject code	Course Number	Academic Level
GEOG	307	Undergraduate

Course Description
Federal environmental legislation; the relationship between local, state and federal agencies in policy formation and implementation; industry responsibilities and options under existing law; the role of interest groups and the public in environmental decision making and U.S. engagement in emerging international environmental policy debates. Offered in fall of odd years. Prereq: junior or senior status; GEOG 101 or 202 or GOVT 205 or ECON 102 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG 101 or GEOG 202 or GOVT 205 or ECON 102

Complete ANY of the following Courses:

- GEOG101 - The Global Environment
- GEOG202 - Environmental Sustainability
- GOVT205 - Introduction to Public Policy
- ECON102 - Principles of Microeconomics

Or must have permission of instructor.

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GEOG333 - Biogeography

Course Information

Course Title
Biogeography

Subject code	Course Number	Academic Level
GEOG	333	Undergraduate

Course Description
Interactions between environmental, biological and human factors which have led to current geographical distributions of flora and fauna. Field trip required. Offered periodically. Prereq: GEOG 230 or BIOL 100 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG 230 or BIOL 100

Complete ANY of the following Courses:

- GEOG230 - Physical Geography
- BIOL100 - General Biology

Or must have permission of instructor.

GEOG336 - Climate And Society

Course Information

Course Title
Climate And Society

Subject code	Course Number	Academic Level
GEOG	336	Undergraduate

Course Description
Human interrelationships with the atmospheric environment. Includes microclimatological applications in agriculture, water resources, human health and architecture to analysis of global climate-change issues. Offered periodically. Prereq: GEOG 230 or ESSC 107 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG 230 or ESSC 107 or ESSC 107H

Complete ANY of the following Courses:

- GEOG230 - Physical Geography
- ESSC107 - The Atmosphere
- ESSC107H - Hon: The Atmosphere (Inactive)

Or must have permission of instructor.

GEOG342 - Europe

Course Information

Course Title
Europe

Subject code	Course Number	Academic Level
GEOG	342	Undergraduate

Course Description
Introduction to Western Europe as a region. Emphasis on its delimitation and cultural, economic and political spatial patterns relating to the desire to form a European community. Europe within a global framework also considered. Offered in winter, spring, summer. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GEOG343 - Latin America & the Caribbean

Course Information

Course Title
Latin America & the Caribbean

Subject code	Course Number	Academic Level
GEOG	343	Undergraduate

Course Description
A thematic study of the physiographic and cultural regions of Latin America and the Caribbean. Historical, economic, political, social, and environmental geography approaches to studying regional characteristics. Select topics include population change, land use change, urban development, economic development, environmental sustainability, and human rights. Offered periodically. Prereq: COMM100; ENGL110; and junior or senior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GEOG344 - North America

Course Information

Course Title
North America

Subject code	Course Number	Academic Level
GEOG	344	Undergraduate

Course Description
Geography of the U.S. and Canada using the tools and concepts of regional geography. Physical, population and economic patterns are merged in developing an understanding of regional characteristics and issues.

GEOG350 - Global Issues

Course Information

Course Title
Global Issues

Subject code	Course Number	Academic Level
GEOG	350	Undergraduate

Course Description
Issues related to urban, cultural and resource problems are analyzed globally. Emphasis on spatial nature of these problems and emerging global interdependence. Focus on a single current issue, which will be identified in advertised course title. Offered periodically.

GEOG372 - Urban and Regional Planning

Course Information

Course Title
Urban and Regional Planning

Subject code	Course Number	Academic Level
GEOG	372	Undergraduate

Course Description
Introduction to land use and other types of planning in urban and rural areas. Assessment of development suitability and environmental impact. Techniques for implementing different types of plans. Offered annually.

GEOG379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GEOG	379	Undergraduate

Course Description
Experimental

GEOG384 - Cartography

Course Information

Course Title
Cartography

Subject code	Course Number	Academic Level
GEOG	384	Undergraduate

Course Description
Introduction to concepts and techniques of mapmaking. Skill developed in computer-based compilation, layout and lettering of maps. Offered periodically. Prereq: GEOG 281, 295.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG 281 and GEOG 295

Complete ALL of the following Courses:
- GEOG281 - Maps and GIS
- GEOG295 - GIS I: Vector Data Analysis

GEOG395 - GIS for Web Development

Course Information

Course Title
GIS for Web Development

Subject code	Course Number	Academic Level
GEOG	395	Undergraduate

Course Description
Integrate GIS and Web development technologies. Implement data compilation and map design decisions to support an organization's internal and public information flows. Incorporate interactive maps and information retrieval to enhance Web content. Prerequisites: GEOG 295 or ESSC 281, and DESN 247 or CMSC 121.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG295 or ESSC281 and DESN247 or CMSC121

Complete ANY of the following Courses:
- GEOG295 - GIS I: Vector Data Analysis
  OR ESSC281 - GIS Applications for Earth Sci
- DESN247 - Intro to Web, Experience and Interaction Design
  OR CSCI121 - Introduction to Web Development

GEOG396 - GIS Modeling

Course Information

Course Title
GIS Modeling

Subject code	Course Number	Academic Level
GEOG	396	Undergraduate

Course Description
Analyze and construct GIS-based models of various geographical scenarios. Strategize spatial and temporal problem solving in environmental, transportation, emergency management and other contexts. Adapt some models to computer algorithms used within GIS software. Prerequisites: GEOG 295 or ESSC 281, and GEOG 296, and CMSC 161 or ESSC 282, or permission. Offered fall of even-numbered years.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG295 or ESSC281 or GEOG296 or GEOG296H and CMSC161 or ESSC282

Complete ALL of the following Courses:

- GEOG295 - GIS I: Vector Data Analysis **OR** ESSC281 - GIS Applications for Earth Sci
- GEOG296 - GIS II: Raster Data Analysis **OR** GEOG296H - H: GIS II: Raster Data Analysis (Inactive)
- CMSC161 - Introduction to Programming 1 **OR** ESSC282 - FORTRAN Programming for Earth Sciences Applications

Or by permission.

GEOG397 - GIS Data Management

Course Information

Course Title
GIS Data Management

Subject code	Course Number	Academic Level
GEOG	397	Undergraduate

Course Description
Fully explore the GIS geodatabase model and related data structures, and how they encapsulate all data types, characteristics and capabilities. Assess data quality and long-term data management issues.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GEOG295 or ESSC281 and GEOG296 or GEOG296H

Complete ALL of the following Courses:

- GEOG295 - GIS I: Vector Data Analysis **OR** ESSC281 - GIS Applications for Earth Sci
- GEOG296 - GIS II: Raster Data Analysis **OR** GEOG296H - H: GIS II: Raster Data Analysis (Inactive)

GEOG400 - Co-Op Ed Experience in Geog

Course Information

Course Title
Co-Op Ed Experience in Geog

Subject code	Course Number	Academic Level
GEOG	400	Undergraduate

Course Description
Assignment with a public agency or private organization. Requirements include design of an approved job description relevant to employers functions and students program, and a planned program of contact with the faculty supervisor. Performance evaluation by sponsor used in assigning satisfactory/unsatisfactory grade.

GEOG407 - Glbl Envrnmtl Policy/ Negotiatn

Course Information

Course Title
Glbl Envrnmtl Policy/Negotiatn

Subject code	Course Number	Academic Level
GEOG	407	Undergraduate

Course Description
Global political and economic forces and environmental change. Emphasis on spatial patterns and processes of transboundary environmental problems, the major pieces of international environmental policy, the negotiations process between states and nonstate actors in policy formation and implemention, and the dynamics of North-South relations on the changing physical landscape. Offered in spring of even years. Prereq: junior or senior status; ENGL 110, GEOG 307 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GEOG 307

Complete ALL of the following Courses:
- GEOG307 - US Environmental Policy

Or must have permission of instructor.

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GEOG408 - Sustainable Development

Course Information

Course Title
Sustainable Development

Subject code	Course Number	Academic Level
GEOG	408	Undergraduate

Course Description
Social, economic, and environmental aspects of global sustainable development. Class discussion integrated with research and service learning projects. Prereq: COMM 100, ENGL 110, and junior or senior standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GEOG479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GEOG	479	Undergraduate

Course Description
Experimental

GEOG488 - Senior Thesis

Course Information

Course Title
Senior Thesis

Subject code	Course Number	Academic Level
GEOG	488	Undergraduate

Course Description
Investigation of selected topic with individual research assignment; focus varies but related to geographical analysis. For senior Geography majors only. Prereq: senior standing and completion of basic courses. Offered as needed.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

Basic Courses Completion

Must have completed all basic courses.

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Senior Geography Majors

Must be a senior Geography major.

GEOG489 - Honors Thesis

Course Information

Course Title
Honors Thesis

Subject code	Course Number	Academic Level
GEOG	489	Undergraduate

Course Description
Investigation of selected topic with individual research assignment; focus varies but related to geographical analysis. Prereq: senior standing and completion of basic courses and eligibility for departmental honors. See Special Academic Opportunities, Departmental Honors section of this catalog.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

Basic Courses Completion

Must have completed all basic courses.

Eligible for Departmental Honors

Must be eligible for departmental honors.

GEOG498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
GEOG	498	Undergraduate

Course Description
Investigation of selected topic with individual research assignment; focus varies.

GEOG499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
GEOG	499	Undergraduate

Course Description
Investigation of selected topic with individual research assignment; focus varies but related to geographical analysis. Prereq: senior standing and completion of basic courses and eligibility for departmental honors. See Special Academic Opportunities, Departmental Honors section of this catalog.

GEOG500 - Co-Op Ed Experience in Geog

Course Information

Course Title
Co-Op Ed Experience in Geog

Subject code	Course Number	Academic Level
GEOG	500	Graduate

Course Description
Co-Op Ed Experience in Geog

GEOG579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GEOG	579	Graduate

Course Description
Experimental

ISCA579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ISCA	579	Graduate

Course Description
Experimental course number for Integrated Scientific Applications. Topics vary.

ISCA591 - Introduction to Geospatial Information and Technologies

Course Information

Course Title
Introduction to Geospatial Information and Technologies

Subject code	Course Number	Academic Level
ISCA	591	Graduate

Course Description
Explores the core concepts of geographic information and the tools and technologies employed to access, manipulate, analyze, and display geographic information. Topics include geographic information systems, remote sensing, global positional systems, cartography, spatial science ethics, and crowdsourcing of geographic information.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MS ISA Graduate Students or Instructor Permission

For MS ISA graduate students only or permission of instructor.

ISCA679 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
ISCA	679	Graduate

Course Description
Experimental Course in Integrated Scientific Applications

SWEN571 - The Origins of Space Weather

Course Information

Course Title
The Origins of Space Weather

Subject code	Course Number	Academic Level
SWEN	571	Graduate

Course Description
Phenomenological approach to understanding the origins of space weather and the space environment from the Sun to the Earth's surface including a detailed treatment of coronal holes, coronal mass ejections, sunspots, solar flares, solar energetic particle events, solar radio bursts, solar structure including its magnetic dynamo, solar wind, terrestrial magnetic field, geomagnetic storms. Prerequisite: admission to the program or permission of the program coordinator. 3 hrs. Fully online, distance-learning format. Offered annually.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Program Admission or Program Coordinator Permission

Must be admitted to the program or have permission of the program coordinator.

SWEN572 - Impacts of Space Weather on the Technological World

Course Information

Course Title
Impacts of Space Weather on the Technological World

Subject code	Course Number	Academic Level
SWEN	572	Graduate

Course Description
Systems approach to understanding how space weather impacts the near-earth space environment, our magnetosphere, upper atmosphere, and the myriad of ways it couples into the Earth system. Identification and impact of solar radio bursts, geomagnetic storms, geomagnetically induced currents (GI Cs), aurora, and radiation storms on our technological infrastructure. The course will address the varying severity of impacts from mild inconveniences to the possibility of a Carrington-class event that could cause a massive geomagnetic storm that could destroy national power grids world-wide and cause irreparable damage to the global economy. 3 hrs. Prerequisite: SWEN 571 or permission of program coordinator. Fully online, distance-learning format. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SWEN 571

Complete ALL of the following Courses:

- SWEN571 - The Origins of Space Weather

Or permission of program coordinator.

SWEN673 - Effective Decision-Support for Space Weather Risks

Course Information

Course Title
Effective Decision-Support for Space Weather Risks

Subject code	Course Number	Academic Level
SWEN	673	Graduate

Course Description
Space weather data, products, and information Is a vital component for effective decision-making process for relevant stakeholders. This course uses a case-studies approach to Identify and document the most effective means of producing and delivering space-weather information including alerts, warnings, and notifications to target audiences and the general public, and to ensure that space-weather products are used intelligibly to inform decision making. Prerequisites: SWEN 572 or permission of program coordinator. 3 hrs. Fully online, distance-learning format. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SWEN 572

Complete ALL of the following Courses:

- SWEN572 - Impacts of Space Weather on the Technological World

Or permission of program coordinator.

SWEN674 - Space Weather Broadcast and Communications

Course Information

Course Title
Space Weather Broadcast and Communications

Subject code	Course Number	Academic Level
SWEN	674	Graduate

Course Description
Examines existing space weather data, images and products. These products will be important in learning how to create a space weather broadcast. Video projects pertaining to specific space weather events such as solar flares, geomagnetic storming, radiation storms, etc. will be important to demonstrate knowledge of which products to use for communicating a forecast. How to utilize resources, integrated space weather analysis system, solar dynamics observatory and others, will be stressed. Prerequisite: SWEN 572 or permission of the program coordinator. 3 c.h. Offered annually. Fully onllne, distance-learning format.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SWEN 572

Complete ALL of the following Courses:

- SWEN572 - Impacts of Space Weather on the Technological World

Or permission of program coordinator.

Environmental Sciences Department

Five multidisciplinary minors are available that have been designed for students with an environmental interest. A full major in a discipline is an important foundation on which to build expertise in a specific environmental area, and the minors are designed to complement majors in the sciences, technology and social sciences. Increasingly, environmental problems are addressed by multidisciplinary teams, so the minors prepare students to operate in this multidisciplinary setting.

The environmental minors are coordinated by the Millersville University Center for Environmental Sciences (MUCES), and the director of MUCES is the primary contact for the minors.

For information on environmental studies and for course prerequisites, also see the Biology, Chemistry, Earth Sciences and Geography sections.

For information on environmental options within majors, also see the Biology, Chemistry, Earth Sciences and Geography sections.

FACULTY LIST

Dr. Carolyn Weaver, Coordinator, Environmental Sciences Minors

Programs

Water Resources Minor

Overview

Environmental Studies Minors

Five multidisciplinary minors are available that have been designed for students with an environmental interest. A full major in a discipline is an important foundation on which to build expertise in a specific environmental area, and the minors are designed to complement majors in the sciences, technology and social sciences. Increasingly, environmental problems are addressed by multidisciplinary teams, so the minors prepare students to operate in this multidisciplinary setting. The environmental minors are coordinated by the Center for Environmental Science (CES), and the director of the CES is the primary contact for the minors. For information on environmental studies and for course prerequisites, also see the Biology, Chemistry, Earth Sciences and Geography sections. For information on environmental options within majors, also see the Biology, Chemistry, Earth Sciences and Geography sections.

Water Resources Minor

The Water Resources Minor provides environmental perspective on water resource issues including remediation techniques and solutions, chemical analysis techniques, and the use of aquatic organisms to monitor contamination and recovery of aquatic systems.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Water Resources Minor (18 credits)

Type
Completion Requirement

Core Courses (9 credits)

Complete ALL of the following Courses:

- EVSC495 - Environmental Clinic
- GEOG304 - Water Resources Management
- ESSC322 - Environmental Hydrology

Statistics (3 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- GEOG292 - Quantitative and Spatial Analysis
- MATH235 - Survey of Statistics
- MATH333 - Probablity and Statistics
- ESSC446 - Stats & Decision Making in Earth Science

Electives (6 credits)

Earn at least 6 credits from the following:

- BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness
- BIOL445 - Aquatic Biology
- BIOL447 - Chesapeake Bay System
- BIOL448 - Wetland Ecology and Management
- CHEM375 - Environmental Chemistry
- CHEM476 - Environmental Chemistry 2
- ESSC329 - Aqueous Geochemistry
- ESSC382 - Water Wars: Science and Policy
  OR ESSC382H - H: Water Wars: Science and Policy
- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy
- ESSC426 - Groundwater Resources and Contamination

Environmental Policy and Regulation Minor

Overview

Environmental Studies Program

The five Environmental Studies minors span a wide range of environmental topics with relevance and practical applications for students from diverse disciplines with varied professional aspirations. The central aim of these minors is to provide MU students interested in Environmental Science a multidisciplinary experience that builds on content knowledge with training and experience in practical applications for diverse professions addressing environmental issues.

Environmental Policy and Regulation

This minor is preparation to move successfully toward graduate school in policy or as staffers in the environmental regulation/policy community.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Environmental Policy and Regulation Minor (18 credits)

Type
Completion Requirement

Core Courses (6 credits)

Complete ALL of the following Courses:

- OSEH220 - Legal Aspects Environmental Safety
- EVSC495 - Environmental Clinic

Statistics (3 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- GEOG292 - Quantitative and Spatial Analysis
- MATH235 - Survey of Statistics
- MATH333 - Probablity and Statistics
- EVSC330 - Environmental Statistics & Risk Assessment

Elective Courses (9 credits)

Earn at least 9 credits from the following:

- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy
- ECON307 - Environmental Economics
- GEOG306 - Environmental Impact Assessmnt
- GEOG372 - Urban and Regional Planning
- OSEH435 - Environmental Health
- SOCI313 - Sociology of Disaster
  OR SOCI313H - H: Sociology of Disaster

Hydrology Minor

Overview

The hydrology minor provides foundational knowledge in water resources including courses in both surface water and groundwater. Water resources are a critical issue of the 21st century. Climate change is changing the frequency of high impact storms and the flooding associated with them. As droughts become more problematic the access to clean fresh water becomes even more critical. The minor is appropriate for meteorology majors, climate scientists, and anyone interested in environmental policy.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Hydrology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (10 credits)

Complete ALL of the following Courses:

- ESCI221 - Physical Geology
  OR ESSC221H - Hnrs:Physical Geology
- ESSC322 - Environmental Hydrology
- ESSC426 - Groundwater Resources and Contamination

AND

Elective Courses (8 credits)

Earn at least 8 credits from the following:

- ESSC222 - Historical Geology
  OR ESSC222H - H:Historical Geology
- ESSC326 - Sedimentation and Stratigraphy
- ESSC329 - Aqueous Geochemistry
- ESSC382 - Water Wars: Science and Policy
  OR ESSC382H - H: Water Wars: Science and Policy
- ESSC385 - Global Climate Change: Sci & Policy
  OR ESSC385H - H: Global Climate Change: Sci & Policy
- ESSC281 - GIS Applications for Earth Sci
- GEOG295 - GIS I: Vector Data Analysis
- BIOL445 - Aquatic Biology
- CHEM265 - Quantitative Analysis
- CHEM375 - Environmental Chemistry

Only ONE of the following courses may be counted toward to 8 elective credits: BIOL445 Aquatic Biology, CHEM265 Quantitative Analysis or CHEM375 Environmental Chemistry. Only ONE of the following courses may be taken for credit: ESSC281 GIS Applications for Earth Sci or GEOG295 GIS I: Vector Data Analysis

Industrial and Environmental Health Minor

Overview

Environmental Studies Program:

Five multidisciplinary minors are available that have been designed for students with an environmental interest. A full major in a discipline is an important foundation on which to build expertise in a specific environmental area, and the minors are designed to complement majors in the sciences, technology and social sciences. Increasingly, environmental problems are addressed by multidisciplinary teams, so the minors prepare students to operate in this multidisciplinary setting. The environmental minors are coordinated by the Center for Environmental Science (CES), and the director of the CES is the primary contact for the minors. For information on environmental studies and for course prerequisites, also see the Biology, Chemistry, Earth Sciences and Geography sections. For information on environmental options within majors, also see the Biology, Chemistry, Earth Sciences and Geography sections.

Industrial and Environmental Health Minor

This 18-21 credit minor provides the background needed to understand the impact of environmental issues on public health. Through the courses in this minor, students will gain hands-on experience at the interface of environmental science, environmental policy, and healthcare.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Industrial and Environmental Health (18-21 credits)

Type
Completion Requirement

Core Courses (9 credits)

Complete ALL of the following Courses:

- OSEH321 - Environmental & Industrial Hygiene I - Chemical and Biological Hazards
- OSEH435 - Environmental Health
- EVSC495 - Environmental Clinic

Statistics (3 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- GEOG292 - Quantitative and Spatial Analysis
- MATH235 - Survey of Statistics
- MATH333 - Probablity and Statistics
- ESSC446 - Stats & Decision Making in Earth Science

Elective Courses (6 credits)

Earn at least 6 credits from the following:

- BIOL204 - Human Biology
- BIOL255 - Human Anatomy & Physiology II
  OR BIOL255H - Hon: Human Anatomy & Physiology II
- BIOL435 - Animal Physiology
- BIOL455 - Cardiopulmonary Physiology
- CHEM232 - Organic Chemistry 2
- CHEM235 - Organic Chemistry
- CHEM375 - Environmental Chemistry
- ESSC322 - Environmental Hydrology
- ESSC329 - Aqueous Geochemistry
- ESSC349 - Chemistry of the Atmosphere
  OR ESSC349H - Hon: Chemistry of the Atmosphere
- ESSC426 - Groundwater Resources and Contamination

Land-Use Minor

Overview

Environmental Studies Program

Five multidisciplinary minors are available that have been designed for students with an environmental interest. A full major in a discipline is an important foundation on which to build expertise in a specific environmental area, and the minors are designed to complement majors in the sciences, technology and social sciences. Increasingly, environmental problems are addressed by multidisciplinary teams, so the minors prepare students to operate in this multidisciplinary setting. The environmental minors are coordinated by the Center for Environmental Science (CES), and the director of the CES is the primary contact for the minors. For information on environmental studies and for course prerequisites, also see the Biology, Chemistry, Earth Sciences and Geography sections. For information on environmental options within majors, also see the Biology, Chemistry, Earth Sciences and Geography sections.

Land Use Minor

This minor explores the physical and economic impact of human land-use practices and the ways in which land use can be sustainable both for human life and for the maintenance of essential biological diversity.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Land-Use Minor (21 credits)

Type
Completion Requirement

Core Courses (9 credits)

Complete ALL of the following Courses:

- BIOL340 - Prspctv in Environm Awareness **OR** BIOL340H - HNRS:Prspctv in Environm Awareness
- GEOG372 - Urban and Regional Planning
- EVSC495 - Environmental Clinic

Elective Courses (9 credits)

Earn at least 9 credits from the following:

- BIOL448 - Wetland Ecology and Management
- ESSC225 - Geomorphology
- ESSC322 - Environmental Hydrology
- ESSC329 - Aqueous Geochemistry
- ESSC426 - Groundwater Resources and Contamination
- GEOG227 - Cities
- GEOG305 - Energy Sustainability **OR** GEOG305H - Hon: Energy Sustainability (Inactive)
- GEOG333 - Biogeography
- ECON307 - Environmental Economics

GIS Courses (3 credits)

Complete ALL of the following Courses:

- ESSC281 - GIS Applications for Earth Sci
- GEOG295 - GIS I: Vector Data Analysis
- GEOG296 - GIS II: Raster Data Analysis **OR** GEOG296H - H: GIS II: Raster Data Analysis (Inactive)

Quantitative Methods in Environmental Science Minor

Overview

Environmental Studies Program

Five multidisciplinary minors are available that have been designed for students with an environmental interest. A full major in a discipline is an important foundation on which to build expertise in a specific environmental area, and the minors are designed to complement majors in the sciences, technology and social sciences. Increasingly, environmental problems are addressed by multidisciplinary teams, so the minors prepare students to operate in this multidisciplinary setting. The environmental minors are coordinated by the Center for Environmental Science (CES), and the director of the CES is the primary contact for the minors. For information on environmental studies and for course prerequisites, also see the Biology, Chemistry, Earth Sciences and Geography sections. For information on environmental options within majors, also see the Biology, Chemistry, Earth Sciences and Geography sections.

Quantitative Methods and Environmental Science

This 18 credit minor provides the quantitative and technical skills that are valued by both employers and graduate programs in environmental science. This minor includes a number of options geared towards a wide range of fields; students are able to tailor this minor to reflect their interests and equip them to pursue their professional aspirations in diverse environmental careers.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Quantitative Methods Env Sci (18-21 credits)

Type
Completion Requirement

Required Courses (3 credits)

Complete ALL of the following Courses:

- EVSC495 - Environmental Clinic

Statistics Course (3 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- GEOG292 - Quantitative and Spatial Analysis
- MATH235 - Survey of Statistics
- MATH333 - Probablity and Statistics
- ESSC446 - Stats & Decision Making in Earth Science

GIS Course (3 credits)

Complete at least 1 of the following courses:

- ESSC281 - GIS Applications for Earth Sci
- GEOG295 - GIS I: Vector Data Analysis
- GEOG395 - GIS for Web Development

Elective Courses (9-12 credits)

Earn at least 9 credits from the following:

- BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness
- CHEM265 - Quantitative Analysis
  OR CHEM265H - H:Quantitative Analysis
- CHEM375 - Environmental Chemistry
- CHEM476 - Environmental Chemistry 2
- ESSC267 - Field Methods in Oceanography

- ESSC322 - Environmental Hydrology
- ESSC349 - Chemistry of the Atmosphere **OR** ESSC349H - Hon: Chemistry of the Atmosphere
- ESSC426 - Groundwater Resources and Contamination
- ESSC447 - Meteorological Instrumentation **OR** ESSC447H - H:Meteorological Instrumentation

Exploratory Studies and Student Development Department

Millersville University's academic advisors are committed to helping you assess your interests and academic abilities using the latest technologies available. We will help you find a program that interests you and guide you along the most efficient path to the completion of that degree.

For more information visit: Welcome to Exploratory Studies & Student Development! | Millersville University

FACULTY LIST
Lawson, Kristen L.; Associate Professor University College BBA, University of Georgia, 1991; MEd, Georgia Southern University, 1994; EdD, Valdosta State University, 2003
Mbindyo, Margaret; Associate Professor University College B.Ed., Kenyatta University (Kenya), 1991; M.Ed., Vrije Universiteit (Belgium), 2001; M.Ed., Pennsylvania State University, 2003; Ph.D., Ibid., 2011

Programs

The Exploratory Program

Overview

The Exploratory Program, housed in the Department of Exploratory Studies and Student Development, is intended for students who are unsure which major they want to pursue or may have narrowed down their options to a few possibilities but have not yet decided on a major.

Our mission here at Millersville is to encourage you to graduate on time while giving you the opportunity to explore a variety of interests to match your passion and skills with a major. We have the resources to help you do just that; they keep you on track and keep you motivated while satisfying your curiosity. Even though you may start as a first-year student unsure of what direction you may want to go, you will still be working toward your degree requirements while exploring your options.

The program gives you flexibility to change direction if necessary. Entering college in the Exploratory Program doesn't mean you'll be here longer; it just means your path to graduation may be a little different, but just as fulfilling!

View More Information

Curriculum

Courses

FYEX100A - First-Year Experience: To Infinity and Beyond

Course Information

Course Title
First-Year Experience: To Infinity and Beyond

Subject code	Course Number	Academic Level
FYEX	100A	Undergraduate

Course Description
Each First Year Seminar (FYEX) section features an academic centerpiece (a question, topic, or theme) that will ground the process of intellectual inquiry through a free exchange of ideas during and outside of class. FYEX instructors mentor and assist students in developing meaningful and purposeful goals. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

Simple Requirements

There are no pre-requisite courses for FYEX 100.

Type
Prerequisite

Government, Law, and International Relations Department

The study of government and politics is integral to understanding people's rights and responsibilities as a citizen and acquiring an understanding of domestic and international affairs.

The Department of Government, Law, and International Relations offers three major programs: (1) a Bachelor of Arts (B.A) in Government, Policy, and Law; (2) a Bachelor of Arts (B.A.) in Government, Law and International Relations with a concentration in Pre-Law; and (3) a Bachelor of Science in education (B.S.E.) in secondary education (which provides a teaching certification in the social sciences). The department also offers two minor programs: Government, Law, and International Relations; and Government, Policy, and Law: Pre-Law.

Admission Requirements

New students (first year students and transfers) may be admitted to the government, law and international relations major by the Office of Admissions upon admission to the University. Admission from other majors at the University is dependent upon approval of the Department of Government, Law and International Relations. Such students must have a cumulative GPA of 2.0 or higher to be admitted into the major.

Admission to the Pre-Law concentration is upon approval of the Department of Government, Law, and International Relations. Students wishing to declare the concentration after their first semester at Millersville University must have a cumulative GPA of 2.5 or higher to be admitted.

FACULTY LIST
Bagchi, Nivedita; Professor College of Arts, Humanities and Social Sciences B.A., Converse College, 2001; M.A., University of Virginia, 2003; Ph.D., Ibid., 2009
Bookmiller, Robert; Professor College of Arts, Humanities and Social Sciences B.A., Indiana University of Pennsylvania, 1985; M.A., University of Virginia, 1989; Ph.D., Ibid., 1992
Bookmiller, Kirsten; Professor College of Arts, Humanities and Social Sciences B.A., The Pennsylvania State University, 1986; M.A., University of Virginia, 1988; Ph.D., Ibid., 1992
Glenn, Richard; Department Chairperson, Professor College of Arts, Humanities and Social Sciences B.A., Carson-Newman College, 1990; M.A., University of Tennessee, 1991; Ph.D., Ibid., 1995
Lawrence, Adam; Associate Professor College of Arts, Humanities and Social Sciences B.A., Virginia Polytechnic Institute and State University, 1995; M.A., University of Akron, 1997; Ph.D., University of Pittsburgh, 2004
Owen, David; Associate Professor College of Arts, Humanities and Social Sciences B.S., University of Maryland, 1997; M.S., Troy University, 1998; M.S., Ibid., 2005; Ph.D., Southern Illinois University, 2011

Programs

Government, Law, and International Relations Minor

Overview

A minor in Government, Law, and International Relations is intended to provide students with a basic understanding of politics and how it affects their lives. The curriculum includes subject matter related to American and international governments and politics.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Government, Law, and International Relations (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

American Politics (3 credits)

Complete at least 1 of the following courses:

- GOVT111 - Introduction to American Government
- GOVT112 - Introduction to State and Local Government
- GOVT312 - American Political Parties **OR** GOVT312H - Honors: American Political Parties
- GOVT333 - American Political Thought

AND

International or Comparative Politics (3 credits)

Complete at least 1 of the following courses:

- GOVT221 - Introduction to Comparative Political Systems
- GOVT251 - Introduction to Global Politics
- GOVT351 - International Law **OR** GOVT351H - Honors: International Law
- GOVT352 - International Organizations

AND

Government & Political Affairs Electives (12 credits)

Choose 12 credits of Govt & Political Affairs electives in consultation with your adviser.

International Studies Minor

Overview

International studies offers students a valuable perspective and useful skills for careers in government, international relations, foreign service, law, business, teaching, journalism, communications or for proceeding to higher degrees. For students working toward other degrees, including degrees in the sciences, mathematics or the technical disciplines, a minor or a second major in international studies will provide a global frame of reference and preparation for future work with international colleagues.

International studies prepares students for success in a world made smaller by the steady increase of international contact in society, politics and business. The international studies major and minor emphasize comparative social, cultural, economic, environmental, historical and political systems worldwide. Comparative studies of music, literature, religion and education also are offered. Through these studies, students acquire knowledge and tools that enable them to analyze and understand the complex world in which we live.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in International Studies (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- INTL201 - Intro to International Studies
  OR INTL201H - Hnrs:Intro to International Studies

AND

Senior Seminar (3 credits)

Complete ALL of the following Courses:

- INTL488 - Senior Seminar
  OR INTL488H - H:Senior Seminar

INTL 488 Senior Seminar requires 75 credits and at least 9 credits in International Studies completed.

AND

Area Studies (12 credits)

Complete at least 2 of the following:

Option 1. Comparative Societies (6 credits)

Complete ALL of the following Courses:

- ANTH121 - Cultural Anthropology
- ANTH325 - Medical Anthropology
- ANTH326 - Anthropology of Religion
- ANTH327 - Urban Anthropology
- ANTH336 - Language & Communication
- ANTH344 - Gender, Race, and Class
- COMM230 - International Broadcasting
- COMM317 - Intercultural Communication
  OR COMM317H - Hon: Intercultural Communication
- EDFN511 - Comparative Education
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL431 - Comparative Literature
  OR ENGL431H - Hnrs: Comparative Literature
- GEOG120 - Human Geography

- GEOG141 - World Regional Geography
- GEOG227 - Cities
- AENG301 - Technology and Humans
  OR AENG301H - Hnrs:Technology and Humans
- MATH102 - Math in Non-European Cultures
- MUSI368 - International Music and Arts
- PHIL313 - World Religions
- SOCI310 - Sociology of Religion
- SOCI319 - Social Stratification

To meet the requirement for Option 1. Comparative Societies, classes must include at least 1 of: ANTH 121, ANTH 325, ANTH 326, ANTH 327, ANTH 336, ANTH 344, GEOG 120, GEOG 141, or GEOG 227.

OR

Option 2. Economic Interdependence (6 credits)

Complete ALL of the following Courses:

- INTB321A - Intro to Internationl Business
- INTB321B - Intro to Internationl Business
- FINA344 - International Finance
- MGMT357 - International Management
- MKTG435 - International Marketing
- ECON203 - Introduction to World Economy
- ECON225 - Comparative Economic Systems
- ECON325 - International Economics
  OR ECON325H - Hon: International Economics
- ECON326 - Economic Growth and Develpmnt
- ECON327 - Women and Global Econ Devlop
- GEOG222 - Economic Geography

To meet the requirement for Option 2. Economic Interdependence, classes must include at least 1 of: ECON 203, ECON 225, ECON 325, ECON 326, or ECON 327.

OR

Option 3. Global Environmental Issues (6 credits)

Complete ALL of the following Courses:

- BIOL340 - Prspctv in Environm Awareness
  OR BIOL340H - HNRS:Prspctv in Environm Awareness
- ESSC104 - The World Ocean
  OR ESSC104H - Hnrs:The World Ocean (Inactive)
- ESSC245 - Environmental Meteorology
- ESSC350 - History of Meteorology
  OR ESSC350H - H:History of Meteorology
- GEOG229 - Sustainable Tourism
- GEOG230 - Physical Geography
- GEOG305 - Energy Sustainability
  OR GEOG305H - Hon: Energy Sustainability (Inactive)
- GEOG407 - Glbl Envrnmtl Policy/ Negotiatn
- SOCI216 - Human Population

To meet the requirement for Option 3. Global Environmental Issues, classes must include at least 1 of: BIOL 340, ESSC 104, ESSC 245, or ESSC 350.

OR

Option 4. International Relations (6 credits)

Complete ALL of the following Courses:

- GEOG226 - Political Geography
  OR GEOG226H - Hnrs:Political Geography (Inactive)
- GOVT221 - Introduction to Comparative Political Systems
- GOVT251 - Introduction to Global Politics
- GOVT252 - Global Crime and Justice
- GOVT351 - International Law
  OR GOVT351H - Honors: International Law
- GOVT352 - International Organizations
- GOVT355 - American Foreign Policy
  OR GOVT355H - Honors: American Foreign Policy
- GOVT356 - Disasters and Our World
- GOVT228 - Democracy and Its Challenges

- GOVT456 - Global Humanitarianism
- HIST102 - Europe and the World 1789-Present
- HIST276 - Modern United States Foreign Relations

To meet the requirement for Option 4. International Relations, classes must include at least 1 of: GOVT 221, GOVT 228, GOVT 251, GOVT 252, GOVT 351, GOVT 352, GOVT 355, GOVT 356, or GOVT 456.

Pre-Law Minor

Overview

The pre-law minor in the Department of Government, Policy, and Law (GOVT) is intended for students who are interested in

1. The formal study of law
2. How law intersects with politics
3. Attending law school or a law-related graduate program.
4. Or pursuing a career in law or a law-related field.

The core skills, knowledge and experience acquirable in the pre-law minor will provide a sound foundation for law school, law-related careers and a variety of other professions.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Pre-Law

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (18 credits)

Complete ALL of the following Courses:

- GOVT111 - Introduction to American Government
- GOVT252 - Global Crime and Justice
- GOVT314 - American Judiciary
- GOVT351 - International Law
  OR GOVT351H - Honors: International Law
- GOVT411 - Constitutional Law: Federalism and Separation of Powers
  OR GOVT411H - Honors: Constitutional Law: Federalism and Separation of Powers
- GOVT412 - Constitutional Law: Civil Rights and Civil Liberties
  OR GOVT412H - Honors: Constitutional Law: Civil Rights and Civil Liberties

AND

Introduction to the US Constitution (3 credits)

Complete ALL of the following Courses:

- GOVT211 - Introduction to the U.S. Constitution

Government, Law, and International Relations, B.A.

Overview

Courses consist of American political institutions; comparative politics; political theory; global politics; and American and international law. Students will be introduced to political concepts, political behaviour, policy issues, and structures of government within societies and among nations.

A degree in Government, Law, and International Relations allows students to prepare for active citizenship, careers and advanced training in politics, law and related fields on both a national and international stage. Students should expect to gain a perspective on the many facets of government and politics in the United States and abroad, as well as the relationships among those governments.

Curriculum

Simple Requirements

Major in Government, Policy, and Law, BA (42 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (12 credits)

Earn a minimum grade of C- in the following:

- GOVT111 - Introduction to American Government
- GOVT221 - Introduction to Comparative Political Systems
- GOVT231 - Introduction to Political Theory
  OR GOVT231H - Honors: Introduction to Political Theory
- GOVT251 - Introduction to Global Politics

AND

Advanced Electives (15 credits)

Complete ALL of the following Course Sets:

- Any 3-level GOVT course(s)
- Any 4-level GOVT course(s)

AND

Other Electives (9 credits)

Complete ALL of the following Course Sets:

- Any 1-level GOVT course(s)
- Any 2-level GOVT course(s)
- Any 3-level GOVT course(s)
- Any 4-level GOVT course(s)

Note: This requirement may not be satisfied with GOVT111 Intro to American Government,GOVT221 Intro to Cmprtv Politcl Systms, GOVT231 Intro to Political Theory, or GOVT251 Intro to Global Politics.

AND

Capstone Courses (6 credits)

Majors must complete 6 credits of GOVT capstone experience, earning a C- or better in each of the two courses. A capstone experience is a GOVT course that carries a 400-level designation, except for GOVT 408 or internship. Transfer electives also will not count as capstone credit. Majors must have completed 75 total credits and 27 GOVT credits prior to enrolling in a capstone course. 400-level GOVT courses taken prior to completing 75 total credits and 27 GOVT credits will count as Advanced or Other Electives, not as a capstone.

Government, Law, and International Relations: Pre-Law

Overview

This program is intended for students who are interested in the formal study of law and how it intersects with politics; attending law school or a law-related graduate program; or pursuing a career in law or a law related field. Within the forty-two credits required for a B.A. in Government, Law, and International Relations students seeking a pre-law concentration must take courses on the U.S. Constitution; global crime and justice; the American judiciary; international law; and (two-semesters of) constitutional law.

Curriculum

Simple Requirements

Major in Government, Law, and International Relations, BA (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Courses (12 credits)

Complete ALL of the following Courses:

- GOVT111 - Introduction to American Government
- GOVT221 - Introduction to Comparative Political Systems
- GOVT231 - Introduction to Political Theory **OR** GOVT231H - Honors: Introduction to Political Theory
- GOVT251 - Introduction to Global Politics

AND

Advanced Electives (9 credits)

Complete ALL of the following Course Sets:

- Any 3-level GOVT course(s)
- Any 4-level GOVT course(s)

AND

Other Electives (3 credits)

Complete ALL of the following Course Sets:

- Any 1-level GOVT course(s)
- Any 2-level GOVT course(s)
- Any 3-level GOVT course(s)
- Any 4-level GOVT course(s)

AND

Concentration in Pre-Law

See separate block

Concentration in Pre-Law (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Introduction to the US Constitution (3 credits)

Complete ALL of the following Courses:

- GOVT211 - Introduction to the U.S. Constitution

AND

Required Courses (9 credits)

Complete ALL of the following Courses:

- GOVT252 - Global Crime and Justice
- GOVT314 - American Judiciary
- GOVT351 - International Law
  OR GOVT351H - Honors: International Law

AND

Constitutional Law: Federalism and Separation of Powers (3 hours)

Complete ALL of the following Courses:

- GOVT411 - Constitutional Law: Federalism and Separation of Powers
  OR GOVT411H - Honors: Constitutional Law: Federalism and Separation of Powers

Note: This requirement may not be satisfied with GOVT411 Constnl Law:Sep of Pwrs/Fdrlsm with DWGRADETYPE = T.

AND

Constitutional Law: Civil Rights and Civil Liberties (3 credits)

Complete ALL of the following Courses:

- GOVT412 - Constitutional Law: Civil Rights and Civil Liberties
  OR GOVT412H - Honors: Constitutional Law: Civil Rights and Civil Liberties

Note: This requirement may not be satisfied with GOVT412 Constnl Law:Rights/Liberties with DWGRADETYPE = T.

GOVT411 Constnl Law:Sep of Pwrs/Fdrlsm and GOVT412 Constnl Law:Rights/Liberties are the Capstone courses for Pre-Law students. They may not be transferred and must be taken after 27 GOVT credits and 75 total credits have been taken.

Courses

FYEX100AB - First-Year Experience: The Politics of Food

Course Information

Course Title
First-Year Experience: The Politics of Food

Subject code	Course Number	Academic Level
FYEX	100AB	Undergraduate

Course Description
Each First Year Seminar (FYEX) section features an academic centerpiece (a question, topic, or theme) that will ground the process of intellectual inquiry through a free exchange of ideas during and outside of class. FYEX instructors mentor and assist students in developing meaningful and purposeful goals. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

The “Politics of Food” explores the intricate relationship between food production, consumption, and political systems. It covers the role of governments in regulating food, the impact of food policies on societies, and how food can be both a source of power and a site of resistance. Students will examine how issues like food security, agricultural policy, trade, and sustainability are impacted by politics and, in turn, impacts politics.

Cornerstone Stage Labels
First-Year Experience (FYEX)

GOVT100 - Politics and Popular Culture

Course Information

Course Title
Politics and Popular Culture

Subject code	Course Number	Academic Level
GOVT	100	Undergraduate

Course Description
Demonstrates and analyzes the reciprocal relationship between politics and popular culture, both within the United States and globally.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

GOVT111 - Introduction to American Government

Course Information

Course Title
Introduction to American Government

Subject code	Course Number	Academic Level
GOVT	111	Undergraduate

Course Description
Introduction to the major tenets of the American political system.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

GOVT112 - Introduction to State and Local Government

Course Information

Course Title
Introduction to State and Local Government

Subject code	Course Number	Academic Level
GOVT	112	Undergraduate

Course Description
The federal system and state and local governmental problems. Emphasis on Pennsylvania when possible.

GOVT179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GOVT	179	Undergraduate

Course Description
Experimental

GOVT205 - Introduction to Public Policy

Course Information

Course Title
Introduction to Public Policy

Subject code	Course Number	Academic Level
GOVT	205	Undergraduate

Course Description
Decision making by governments in response to public problems. The policy process. Current policy issues, selected from such possible examples as education, abortion, energy and environment. Some problems of policy evaluation.

GOVT211 - Introduction to the U.S. Constitution

Course Information

Course Title
Introduction to the U.S. Constitution

Subject code	Course Number	Academic Level
GOVT	211	Undergraduate

Course Description
An introduction to the U.S. Constitution, with specific attention on its purpose, principles, parts, and theories of interpretation. GOVT 111 highly recommended prior to this course.

GOVT212 - Women & American Politics

Course Information

Course Title
Women & American Politics

Subject code	Course Number	Academic Level
GOVT	212	Undergraduate

Course Description
Examines the role of women in American political institutions including the legislature, executive, and judiciary, the factors which impact womens participation in politics, and the consequences for issues which concern women such as abortion, pay equity, and paid family leave.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GOVT221 - Introduction to Comparative Political Systems

Course Information

Course Title
Introduction to Comparative Political Systems

Subject code	Course Number	Academic Level
GOVT	221	Undergraduate

Course Description
Introduction to the comparative analysis of government and politics through an examination of different political systems including advanced democracies and developing nations.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

GOVT225 - Modern China

Course Information

Course Title
Modern China

Subject code	Course Number	Academic Level
GOVT	225	Undergraduate

Course Description
Study of political development in China, with an emphasis on political behavior, culture, institutions, processes and structure.

GOVT228 - Democracy and Its Challenges

Course Information

Course Title
Democracy and Its Challenges

Subject code	Course Number	Academic Level
GOVT	228	Undergraduate

Course Description
An exploration into the entire process of democratization, from the conditions that allow democracy to emerge through the stages of democratization towards the post-democratic challenges faced around the globe.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT251

Complete ALL of the following Courses:

- GOVT251 - Introduction to Global Politics

GOVT231 - Introduction to Political Theory

Course Information

Course Title
Introduction to Political Theory

Subject code	Course Number	Academic Level
GOVT	231	Undergraduate

Course Description
Representative philosophers and concepts in the history of Western political theory from antiquity through the 19th century.

Gateway Stage Labels
Information Literacies (IL)

GOVT231H - Honors: Introduction to Political Theory

Course Information

Course Title
Honors: Introduction to Political Theory

Subject code	Course Number	Academic Level
GOVT	231H	Undergraduate

Course Description
Hnrs:Intro Political Theory

GOVT232 - Political Theory, Literature, and Film

Course Information

Course Title
Political Theory, Literature, and Film

Subject code	Course Number	Academic Level
GOVT	232	Undergraduate

Course Description
Uses literature and film to explore central topics in political theory such as capitalism, socialism, democracy and its problems, technology and its problems, etc. Prereq: ENGL 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GOVT241 - Public Administration and Public Service

Course Information

Course Title
Public Administration and Public Service

Subject code	Course Number	Academic Level
GOVT	241	Undergraduate

Course Description
A study of intergovernmental relations, organizational theory, decision making, personnel, management, budgeting, program evaluation and policy analysis. Prereq: ENGL 110. Recommended: GOVT 111.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Recommended: GOVT 111.

GOVT251 - Introduction to Global Politics

Course Information

Course Title
Introduction to Global Politics

Subject code	Course Number	Academic Level
GOVT	251	Undergraduate

Course Description
The nation-state system. Military, political, economic, organizational and legal relations among states. Power and the pursuit of national goals.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

GOVT252 - Global Crime and Justice

Course Information

Course Title
Global Crime and Justice

Subject code	Course Number	Academic Level
GOVT	252	Undergraduate

Course Description
Explores the increasingly transnational nature of crime (including global crimes such as human, arms and drug trafficking), the consequent impact upon human security and sustainable development, and international legal responses. Also addresses the legal distinctions and connections between global and international crimes, the latter including terrorism and crimes against humanity. Open to all majors.

GOVT279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GOVT	279	Undergraduate

Course Description
Experimental

GOVT300 - Co-Op Ed Experience in GOVT

Course Information

Course Title
Co-Op Ed Experience in GOVT

Subject code	Course Number	Academic Level
GOVT	300	Undergraduate

Course Description
Co-Op Ed Experience in GOVT

GOVT312 - American Political Parties

Course Information

Course Title
American Political Parties

Subject code	Course Number	Academic Level
GOVT	312	Undergraduate

Course Description
The origins of American political parties. The American two party system. Political parties in American campaigns and elections. The role of political parties in American governance. The role of third parties in America. Prereq: ENGL 110. Recommended: GOVT 111.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Recommended: GOVT 111.

GOVT312H - Honors: American Political Parties

Course Information

Course Title
Honors: American Political Parties

Subject code	Course Number	Academic Level
GOVT	312H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Recommended: GOVT 111.

GOVT313 - American Presidency

Course Information

Course Title
American Presidency

Subject code	Course Number	Academic Level
GOVT	313	Undergraduate

Course Description
Examination of the presidency and the executive branch of national government. Emphasis on the growth and development of presidential power. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GOVT314 - American Judiciary

Course Information

Course Title
American Judiciary

Subject code	Course Number	Academic Level
GOVT	314	Undergraduate

Course Description
Examination of state and federal courts. Primary emphasis on federal courts and especially the U.S. Supreme Court. Recommended: GOVT 111.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

GOVT315 - Congress and Lawmaking

Course Information

Course Title
Congress and Lawmaking

Subject code	Course Number	Academic Level
GOVT	315	Undergraduate

Course Description
A study of the organization, rules and procedures of the Senate and House of Representatives and extensive analysis of the internal and external environment for policy making by Congress. State legislatures are also examined in the same manner. Prereq: ENGL 110. Strongly recommended: GOVT 111.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Strongly recommended: GOVT 111.

GOVT323 - Government and Politics of the Middle East

Course Information

Course Title
Government and Politics of the Middle East

Subject code	Course Number	Academic Level
GOVT	323	Undergraduate

Course Description
Examination of Middle Eastern politics, including the political systems of Israel, the Palestinian national movement, Iraq, Jordan, Saudi Arabia, Turkey, Syria, and Iran. It assumes a comparative approach toward several regional issues, such as terrorism, the Palestinian-Israeli conflict, Islamic fundamentalism and the peace process. The impact of national, economic, gender and religious perspectives upon the regions politics will also be addressed. GOVT 221 recommended.

GOVT325 - Modern Asia

Course Information

Course Title
Modern Asia

Subject code	Course Number	Academic Level
GOVT	325	Undergraduate

Course Description
Study of political development across East Asia, with an emphasis on political behavior, culture, institutions, processes and structure.

GOVT327 - Canadian Government and Politics

Course Information

Course Title
Canadian Government and Politics

Subject code	Course Number	Academic Level
GOVT	327	Undergraduate

Course Description
Government and politics of Canada and an examination of how its geography, history, economics and culture have affected its governance. Consideration of major policy issues and their impact on Canadas future. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GOVT327H - Honors: Canadian Government and Politics

Course Information

Course Title
Honors: Canadian Government and Politics

Subject code	Course Number	Academic Level
GOVT	327H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GOVT331 - Modern Political Thought

Course Information

Course Title
Modern Political Thought

Subject code	Course Number	Academic Level
GOVT	331	Undergraduate

Course Description
This course will examine political thinkers from Machiavelli to Nietzsche. Among others, it will explore the thought of Hobbes, Locke, Rousseau, Marx, Hume, etc. The course will explore questions regarding human nature, the ideal state, the tensions between principles of freedom and equality, critique of existing systems, etc. Prereq: GOVT 111, Prereq/ Coreq: GOVT 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT 111

Complete ALL of the following Courses:
- GOVT111 - Introduction to American Government

Course Prerequisite or Corequisite

Type
Prerequisite

GOVT 231

Complete ALL of the following Courses:
- GOVT231 - Introduction to Political Theory

GOVT332 - Contemporary Politics

Course Information

Course Title
Contemporary Politics

Subject code	Course Number	Academic Level
GOVT	332	Undergraduate

Course Description
Examines the principles and ideologies found in current politics. Includes an examination of progressivism, communism, conservatism, multiculturalism, etc.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT231 or GOVT231H and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:
- GOVT231 - Introduction to Political Theory **OR** GOVT231H - Honors: Introduction to Political Theory
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

GOVT333 - American Political Thought

Course Information

Course Title
American Political Thought

Subject code	Course Number	Academic Level
GOVT	333	Undergraduate

Course Description
Study of the history and development of democracy in an American setting. Emphasis on different and often conflicting versions of democratic theory and practice. Prereq: ENGL 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GOVT341 - Introduction to City Planning

Course Information

Course Title
Introduction to City Planning

Subject code	Course Number	Academic Level
GOVT	341	Undergraduate

Course Description
Study of the dynamics of human settlement patterns in the country and abroad. Examines public policy alternatives regarding land use and development patterns. Introduces methods and techniques used in designing settlement systems and studies values reflected in human settlement patterns. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GOVT351 - International Law

Course Information

Course Title
International Law

Subject code	Course Number	Academic Level
GOVT	351	Undergraduate

Course Description
Classical sources and recent developments in international law. Evaluation of law in the context of world politics. Recommended: GOVT 251.

GOVT351H - Honors: International Law

Course Information

Course Title
Honors: International Law

Subject code	Course Number	Academic Level
GOVT	351H	Undergraduate

Course Description
H:International Law

GOVT352 - International Organizations

Course Information

Course Title
International Organizations

Subject code	Course Number	Academic Level
GOVT	352	Undergraduate

Course Description
Study of various intergovernmental and nongovernmental associations representing a number of multinational groupings serving humanitarian, economic and security functions. Emphasis on organizations such as the United Nations and the European Union. Recommended: GOVT 251.

GOVT355 - American Foreign Policy

Course Information

Course Title
American Foreign Policy

Subject code	Course Number	Academic Level
GOVT	355	Undergraduate

Course Description
Institutional and historical overview of American foreign policy. Formal, informal and institutional sources of foreign policy. Emphasis on post-WWII presidential administrations. Recommended: GOVT 111 or GOVT 251.

GOVT355H - Honors: American Foreign Policy

Course Information

Course Title
Honors: American Foreign Policy

Subject code	Course Number	Academic Level
GOVT	355H	Undergraduate

Course Description
Hnrs:American Foreign Policy

GOVT356 - Disasters and Our World

Course Information

Course Title
Disasters and Our World

Subject code	Course Number	Academic Level
GOVT	356	Undergraduate

Course Description
Provides a multi-perspective and global exploration into why there is no such thing as a natural disaster. The political, economic, social and environmental sources of vulnerability to such events will be explored along with the role disasters play in some of the 21st centurys most pressing global policy challenges. Open to all majors. Prereq: ENGL 110, COMM 100 and Junior Class Standing. Students who completed GOVT 408.02: Disasters and Global Politics in Fall 2019 are not eligible to earn credit for this course.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GOVT361 - Politics of Race and Ethnicity

Course Information

Course Title
Politics of Race and Ethnicity

Subject code	Course Number	Academic Level
GOVT	361	Undergraduate

Course Description
Examination of the role of racial and ethnic minority groups in American politics and government. Focus on political resources and political status of ethnic minority groups in America, ethnic minority group representation and participation in American politics, the racial divide in American public opinion, racial politics in Americas cities and strategies of ethnic minority political empowerment. Prereq: GOVT 111.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT 111

Complete ALL of the following Courses:

- GOVT111 - Introduction to American Government

GOVT379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GOVT	379	Undergraduate

Course Description
Experimental

GOVT379H - Honors: Experimental

Course Information

Course Title
Honors: Experimental

Subject code	Course Number	Academic Level
GOVT	379H	Undergraduate

GOVT400 - Co-Op Ed Expereince in GOVT

Course Information

Course Title
Co-Op Ed Expereince in GOVT

Subject code	Course Number	Academic Level
GOVT	400	Undergraduate

Course Description
Co-Op Ed Expereince in GOVT

GOVT401 - Political Research Skills and Methods

Course Information

Course Title
Political Research Skills and Methods

Subject code	Course Number	Academic Level
GOVT	401	Undergraduate

Course Description
Knowledge and application of the Scientific Method in political research. Focus on empirical research, explanation and causation, measurement, hypothesis testing, and the challenges of conducting politcal research.

GOVT408 - Seminar in Government, Policy and Law

Course Information

Course Title
Seminar in Government, Policy and Law

Subject code	Course Number	Academic Level
GOVT	408	Undergraduate

Course Description
Analysis of critical problems in the discipline. Research and preparation of a written report. Seminar may be taken for credit more than once, provided content is different each time.

GOVT408H - Honors: Seminar in Government, Policy and Law

Course Information

Course Title
Honors: Seminar in Government, Policy and Law

Subject code	Course Number	Academic Level
GOVT	408H	Undergraduate

GOVT411 - Constitutional Law: Federalism and Separation of Powers

Course Information

Course Title
Constitutional Law: Federalism and Separation of Powers

Subject code	Course Number	Academic Level
GOVT	411	Undergraduate

Course Description
Focus on the allocation of power between branches and among levels of government, as interpreted through significant cases of the U.S. Supreme Court. Prereq: GOVT 111. Recommended: GOVT 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT 111

Complete ALL of the following Courses:

- GOVT111 - Introduction to American Government

Recommended: GOVT 314.

GOVT411H - Honors: Constitutional Law: Federalism and Separation of Powers

Course Information

Course Title
Honors: Constitutional Law: Federalism and Separation of Powers

Subject code	Course Number	Academic Level
GOVT	411H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT 111

Complete ALL of the following Courses:
- GOVT111 - Introduction to American Government

Recommended: GOVT 314.

GOVT412 - Constitutional Law: Civil Rights and Civil Liberties

Course Information

Course Title
Constitutional Law: Civil Rights and Civil Liberties

Subject code	Course Number	Academic Level
GOVT	412	Undergraduate

Course Description
Focus on individual rights and liberties protected by the U.S. Constitution and Bill of Rights, as interpreted through significant cases of the U.S. Supreme Court. Prereq: GOVT 111. Recommended: GOVT 314.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT 111

Complete ALL of the following Courses:
- GOVT111 - Introduction to American Government

Recommended: GOVT 314.

GOVT412H - Honors: Constitutional Law: Civil Rights and Civil Liberties

Course Information

Course Title
Honors: Constitutional Law: Civil Rights and Civil Liberties

Subject code	Course Number	Academic Level
GOVT	412H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT 111

Complete ALL of the following Courses:

- GOVT111 - Introduction to American Government

Recommended: GOVT 314.

GOVT431 - Literature and Politics

Course Information

Course Title
Literature and Politics

Subject code	Course Number	Academic Level
GOVT	431	Undergraduate

Course Description
This course will take one work of fiction, a particular author/writer, or a number of different works of fiction which are thematically connected, and examine the political, social, and cultural questions and issues embedded in these works. Political philosophy asks central questions about human life-what makes us human; what, if anything, makes the best state; how can humans live together while being individuals in their own right, etc. Well crafted works of political fiction are often the best gateway to politics since they use a fictional reality to develop abstract concepts. In fact, some of the best works of political philosophy is fiction. Instructors will choose works of fiction which, juxtaposed with political writings, speeches, articles, and texts, enable students to identify and answer the great political questions of generations. Prereq: C- or higher GOVT 111 and GOVT 231

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT 111 and GOVT 231 or GOVT 231H

Earn a minimum grade of C- in the following:

- GOVT111 - Introduction to American Government
- GOVT231 - Introduction to Political Theory **OR** GOVT231H - Honors: Introduction to Political Theory

GOVT455 - US-Middle East Foreign Relations

Course Information

Course Title
US-Middle East Foreign Relations

Subject code	Course Number	Academic Level
GOVT	455	Undergraduate

Course Description
An institutional, historical and contemporary overview of American foreign policy in the Middle East. While key events and political processes equated with the post-World War II period will be examined, the focus of GOVT 455 will be on current US interests and polices within the region. Past events will be utilized to underscore their contemporary political relevance to US policymakers. Specifically, American policy vis-a-vis Israel, the Palestinian national movement, Egypt, Iran, Iraq, Saudi Arabia, Turkey, and Syria will be explored in detail.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GOVT355 or GOVT355H

Complete ANY of the following Courses:
- GOVT355 - American Foreign Policy
- GOVT355H - Honors: American Foreign Policy

GOVT456 - Global Humanitarianism

Course Information

Course Title
Global Humanitarianism

Subject code	Course Number	Academic Level
GOVT	456	Undergraduate

Course Description
Explores the complex landscape of international humanitarian assistance, including its political, economic, governance and ethical challenges, as well as its historical evolution. It will prepare students for direct entry into a related field, post-graduate study or becoming an international aid or development volunteer. Prereq: ENGL 110, GOVT 251 OR INTL 201 and Junior class standing or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and GOVT 251 or INTL 201 or INTL 201H

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- GOVT251 - Introduction to Global Politics **OR** INTL201 - Intro to International Studies **OR** INTL201H - Hnrs:Intro to International Studies

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

GOVT479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GOVT	479	Undergraduate

Course Description
Experimental

GOVT489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
GOVT	489	Undergraduate

Course Description
Honors Course

GOVT498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
GOVT	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section.

GOVT499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
GOVT	499	Undergraduate

Course Description
Departmental Honors

GOVT500 - Co-Op Ed Experience in GOVT

Course Information

Course Title
Co-Op Ed Experience in GOVT

Subject code	Course Number	Academic Level
GOVT	500	Graduate

Course Description
Co-Op Ed Experience in Government, Policy and Law

GOVT586 - Goethe Institute

Course Information

Course Title
Goethe Institute

Subject code	Course Number	Academic Level
GOVT	586	Graduate

Course Description
Goethe Institute

INTL201 - Intro to International Studies

Course Information

Course Title
Intro to International Studies

Subject code	Course Number	Academic Level
INTL	201	Undergraduate

Course Description
Study of global cultural diversity, economic interdependence, environmental issues and international relations. Offered in fall, spring.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

INTL201H - Hnrs:Intro to International Studies

Course Information

Course Title
Hnrs:Intro to International Studies

Subject code	Course Number	Academic Level
INTL	201H	Undergraduate

Course Description
Hnrs:Intr to Intrnatnl Studies

INTL300 - Co-Op Ed Experience in INTL

Course Information

Course Title
Co-Op Ed Experience in INTL

Subject code	Course Number	Academic Level
INTL	300	Undergraduate

Course Description
Co-Op Ed Experience in INTL

INTL379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
INTL	379	Undergraduate

Course Description
Experimental Course

INTL400 - Co-Op Ed Experience in INTL

Course Information

Course Title
Co-Op Ed Experience in INTL

Subject code	Course Number	Academic Level
INTL	400	Undergraduate

Course Description
Co-Op Ed Experience in INTL

INTL488 - Senior Seminar

Course Information

Course Title
Senior Seminar

Subject code	Course Number	Academic Level
INTL	488	Undergraduate

Course Description
Research, discussion and analysis of current global issues. Prereq: C- or better in INTL 201, 75 total credits earned and 9 credits in International Studies.

Simple Requirements

Course Prerequisites

Type
Prerequisite

INTL 201 or INTL 201H

Earn a minimum grade of C- in the following:

- INTL201 - Intro to International Studies **OR** INTL201H - Hnrs:Intro to International Studies

Minimum International Studies Credits

Earn at least 9 credits

Credit Hours Completion

Earn at least 75 credits

INTL488H - H:Senior Seminar

Course Information

Course Title
H:Senior Seminar

Subject code	Course Number	Academic Level
INTL	488H	Undergraduate

Course Description
H:Senior Seminar

Simple Requirements

Course Prerequisites

Type
Prerequisite

INTL 201 or INTL 201H

Earn a minimum grade of C- in the following:

- INTL201 - Intro to International Studies **OR** INTL201H - Hnrs:Intro to International Studies

Minimum International Studies Credits

Earn at least 9 credits

Credit Hours Completion

Earn at least 75 credits

INTL489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
INTL	489	Undergraduate

Course Description
Honors Course

INTL491 - Topics in Internationl Studies

Course Information

Course Title
Topics in Internationl Studies

Subject code	Course Number	Academic Level
INTL	491	Undergraduate

Course Description
Investigation of topics on economic, environmental or political global systems or in-depth comparative study of international issues, cultures or the arts. Offered annually.

INTL491H - Hnrs:Topics in Internationl Studies

Course Information

Course Title
Hnrs:Topics in Internationl Studies

Subject code	Course Number	Academic Level
INTL	491H	Undergraduate

Course Description
Hnrs:Tpcs in Intrnatnl Studies

INTL498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
INTL	498	Undergraduate

Course Description
For further information, see the Special Academic Opportunities section.

INTL499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
INTL	499	Undergraduate

Course Description
Departmental Honors

INTL500 - Co-Op Ed Experience in Intl

Course Information

Course Title
Co-Op Ed Experience in Intl

Subject code	Course Number	Academic Level
INTL	500	Graduate

Course Description
Co-Op Ed Experience in Intl

History and Philosophy Department

The Department of History and Philosophy offers degrees in liberal arts in History, Philosophy, and Military Science as well as a certificate in Ethics. The department's B.S.Ed. in Social Studies trains students who want to become secondary school educators; upon successful completion of the program, students are certified to teach 7th through 12th grades in Pennsylvania.

Through the Post-Baccalaureate Certification Program, students who already hold a bachelor's degree can be certified to teach Social Studies in the State of Pennsylvania without have to complete a second degree.

History:

Most students who earn a degree in History do not become professional historians. Instead, they use their historian's skills to become leaders in today's society, pursuing entry into a wide variety of careers. Our recent graduates have gone on to work in education, history, law, archaeology, museum studies, archives, libraries, and business, among other fields. Our majors learn

· How to ask good questions and investigate effectively to find real answers

· How to analyze and interpret complex subjects

· How to write and communicate clearly

· How to interact in a global world that requires creative and critical thinking

Our graduates understand the past but also think critically and imaginatively about the worlds of today and tomorrow.

Philosophy:

Philosophical study presents an occasion to develop critical life skills that prepare students for a wide horizon of career choices and professional opportunities as they learn to address and think through a complex world of both longstanding and emergent issues. Our two programs provide students with experiences, skills, and resources that become pathways to competitive law school admissions, graduate schools, and other areas of study and practice after college.

Philosophy Minor: Students get a grounding in the history of philosophy as well as training in philosophical analysis and writing and develop critical thinking and communicative skills useful in many professional fields. This is excellent preparation for varied career paths, including law, theology, business, cognitive science, literary professions, politics and public advocacy.

Ethics & Society Certificate: This program supports students' professional development, advancing their moral reasoning skills to better understand principles and applications of ethics as well as critically analyzing the implications of accelerated and dynamic developments through fostering effective communication and collaboration on controversial matters with people of diverse backgrounds and perspectives.

FACULTY L IST
Davis, Robyn; Associate Professor College of Arts, Humanities and Social Sciences B.A., Columbia University, 1993; M.A., University of Oklahoma, 2001; Ph.D., Ibid., 2009
Frankum, Ronald; Department Chairperson, Professor College of Arts, Humanities and Social Sciences B.A., Syracuse University, 1988, M.A., University of Kentucky, 1991; Ph.D., Syracuse University, 1997
Kevorkian, Tanya; Professor College of Arts, Humanities and Social Sciences B.A., Mount Holyoke College, 1987; M.A., Johns Hopkins University, 1993; Ph.D., Ibid., 1997
Khiterer, Victoria; Professor College of Arts, Humanities and Social Sciences B.A., Kiev State Pedagogical University (Ukraine), 1992; M.A. and Ph.D., Russian State University for the Humanities, 1996; Ph.D., Brandeis University, 2008
Maxwell, Clarence; Assistant Professor College of Arts, Humanities and Social Sciences B.A., St. Leo University (United Kingdom), 1985; B. A., University of Keelee (United Kingdom), 1990; M.A., University of Hull (United Kingdom), 1995; Ph.D., University of Warwick (United Kingdom), 1999
Miller, Jennifer; Assistant Professor, Philosophy College of Arts, Humanities and Social Sciences B.S., Portland State University, 1986; Ph.D., University of Oregon, 1994
Onek, Curthberth; Associate Professor College of Arts, Humanities and Social Sciences B.A., Makerere University (Uganda), 1985/ M.A., University of Toronto (Canada), 1991; M.S., York University (Toronto), 1997; M.A., The Royal Military College of Canada, 2005; Ph.D., University of Connecticut, 2009
Shelor, Erin; Associate Professor College of Arts, Humanities and Social Sciences B.A., Furman University, 1992; M.A., East Tennessee State University, 1996; Ph.D., University of Kentucky, 2003
Ward, Charles; Professor, Philosophy College of Arts, Humanities and Social Sciences B.S., California State University at Long Beach, 1985; M.A., Ibid., 1989; M.A., Johns Hopkins University, 1992; Ph.D., Ibid., 2001

Programs

Social Studies Post-Baccalaureate Certification

Overview

For post-baccalaureate information please see the "Post-Bacc Teacher Certification" section of the Graduate Course Catalog.

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Course Requirements for APS: Foundations Courses (6 credits)

Complete at least 1 of the following:

Option 1. Foundations Graduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Major in Social Studies, Certification (45 credits)

Type
Completion Requirement

Major Required Core Foundation

Fulfill ALL of the following requirements:

Required Courses (33 credits)

Complete ALL of the following Courses:

- ECON100 - Introductory Economics
- ECON203 - Introduction to World Economy
- GEOG120 - Human Geography
- GEOG281 - Maps and GIS
- GOVT111 - Introduction to American Government
- GOVT221 - Introduction to Comparative Political Systems
- GOVT251 - Introduction to Global Politics
- HIST105 - History Matters
- HIST106 - Contours of US History
- PSYC100 - General Psychology
  AND PSYC100H - Hnrs:General Psychology
- SOCI210 - Sociology of the Family

AND

Geography Course (3 credits)

Complete at least 1 of the following courses:

- GEOG141 - World Regional Geography
- GEOG226 - Political Geography
  OR GEOG226H - Hnrs:Political Geography (Inactive)
- GEOG248 - Geography of Africa
  OR GEOG248H - Hon: Geography of Africa (Inactive)
- GEOG342 - Europe
- GEOG343 - Latin America & the Caribbean
- GEOG344 - North America

AND

History Electives (6 credits)

Complete at least 2 of the following courses:

- HIST101 - Europe and the World 1350-1789
- HIST102 - Europe and the World 1789-Present
- HIST206 - World Culture & Religion to 1500
- HIST280 - Pre-Colonial Africa

AND

The Art & Craft of History or Historiography & Hist Research (3 credits)

Complete at least 1 of the following courses:

- HIST205 - The Art & Craft of History
- HIST520 - Historiography and Historical Research

Professional Education - Certification (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/EDFN241 Psyc Foundation of Teaching and please register for both courses in the same block.

AND

APS - Professional Bloc

Fulfill ALL of the following requirements:

Instructional Technology, Design & Assessment (3 credits)

Complete at least 1 of the following courses:

- EDFN530 - Instructional Technology, Design and Assessment
- EDFN330 - Instructional Technology, Design & Assessment

AND

Issues in Secondary Education (3 credits)

Complete at least 1 of the following courses:

- SEED521 - Issues in Second Education
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education

AND

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Teaching of Secondary Social Studies (3 credits)

Complete ALL of the following Courses:

- FORL480 - Tchg For Lang in Sec School

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc and but prior to Student Teaching.

AND

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Access the Student teaching Website

AND

Student Teaching Semester (9 credits)

Complete ALL of the following Courses:

- EDSS461 - Student Teaching in Soc Sci
- EDSS462 - Student Teaching in Soc Sci

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

History, M.A.

Overview

The Master of Arts degree in History at Millersville University offers advanced training in American, European and world history. Helping you achieve your goals is central to all of Millersville's graduate programs. The M.A. in history is no exception – flexibility is key, and you have the option to tailor the program to encompass all of your interests. Courses are offered in the evening during the regular school year, and during the day in the summer. The program is designed to appeal to both teaching professionals who want advanced study in the teaching of history and students who wish to prepare for continuing graduate study in history.

Admission Requirements

The Master of Arts in history is available to all qualified candidates. Applicants should have a 3.0 GPA in history and an overall GPA of 2.8. Applicants must submit a writing sample of between five and 10 pages, preferably showing use of primary and secondary sources and a grasp of historical thinking. Applicants without academic training in history may be admitted probationally and may be asked to complete the sequence of introductory surveys in U.S. and European history. The Graduate Record Exam is required for applicants whose undergraduate CGPA is below 2.8. For additional admission information, refer to the *Admission Requirements* section.

Degree Requirements

The Department of History requires that all students enrolled in the M.A. program maintain the level of academic progress described in the *Academic Policies* section. In addition to University requirements, any student entering the history graduate program who receives a second C in his/her degree program is automatically suspended from the program. A student suspended on this basis must petition the department's chairperson and graduate faculty for reinstatement.

Curriculum

Simple Requirements

Major in History, MA (30 credits)

Type
Completion Requirement

History Required Courses

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- HIST520 - Historiography and Historical Research

AND

500-level seminars (18 credits)

Complete at least 6 of the following courses:

- HIST501 - U.S. History, Beginnings-1815
- HIST502 - U.S. History 1815-1919
- HIST503 - U.S. History, 1919 to present
- HIST505 - Early Modern Europe, 1500-1789
- HIST506 - Age of Revolution, 1789-1914
- HIST507 - Modern Europe, 1914-Present
- HIST510 - Topics in U.S. History
- HIST511 - Topics in European History
- HIST512 - Topics in Regional History

AND

600-level seminars (6 credits)

Complete at least 2 of the following courses:

- HIST610 - Seminar in U.S. History
- HIST611 - Seminar in European History
- HIST612 - Seminar in Regional History
- HIST691 - Independent Study

Thesis or Non-Thesis Option, 600-Level History Seminar (3 credits)

Complete at least 1 of the following courses:

- HIST610 - Seminar in U.S. History
- HIST611 - Seminar in European History
- HIST612 - Seminar in Regional History
- HIST691 - Independent Study
- HIST699 - Thesis:

Ethics and Society Minor

Overview

The Minor in Ethics and Society focuses on a range of topics and problems, including Biomedical Ethics, Business and Professional Ethics, Environmental Ethics, Food Ethics, Global Justice, Human Rights, and others. Today's rapidly changing social and technological circumstances generate increased need for citizens and professionals to better understand the principles and applications of ethics, and to be able to critically analyze the implications of these rapid developments. The purpose of the program is to provide students and community professionals with the opportunity to supplement their disciplinary and technical training by advancing their moral reasoning skills.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Ethics and Society (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- PHIL120 - Introduction to Ethics

AND

Ethics Electives (9 credits)

Complete at least 3 of the following courses:

- PHIL260 - Food, Ethics & Society
- PHIL281 - Bus. & Prof. Ethics
- PHIL285 - Biomedical Ethics
- PHIL345 - Humanity and Environment
- PHIL381 - Global Ethics & Social Justice

AND

Electives (6 credits)

Complete at least 2 of the following courses:

- PHIL202 - Love and Sexuality
- PHIL300 - Co-Op Ed Experience in Phil
- PHIL313 - World Religions
- PHIL321 - Ancient Philosophy
- PHIL322 - Modern Philosophy
- PHIL328 - Philosophy Classics
- PHIL407 - Political and Social Philosphy
- PHIL460 - Philosophy of Law & Humn Right
- PHIL471 - Advanced Seminar in Philosophy
- SOCI335 - Ethics in Criminal Justice **OR** SOCI335H - Hon: Ethics in Criminal Justice

History Minor

Overview

Students who choose a minor in history are required to take a minimum of 18 semester hours of history courses distributed according to departmental guidelines. All history courses except applied history will count toward a minor.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in History (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

United States History (6 credits)

Complete at least 2 of the following:

Course Options

Complete ANY of the following Courses:

- HIST106 - Contours of US History
- HIST501 - U.S. History, Beginnings-1815
- HIST502 - U.S. History 1815-1919
- HIST503 - U.S. History, 1919 to present
- HIST510 - Topics in U.S. History

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 25-level HIST course(s)
- Any 27-level HIST course(s)
- Any 35-level HIST course(s)
- Any 36-level HIST course(s)
- Any 37-level HIST course(s)
- Any 45-level HIST course(s)
- Any 47-level HIST course(s)

Choose any 2 courses from the listed options.

AND

World History (6 credits)

Complete at least 2 of the following:

Course Options

Complete ANY of the following Courses:

- HIST101 - Europe and the World 1350-1789
- HIST102 - Europe and the World 1789-Present
- HIST206 - World Culture & Religion to 1500
- HIST281 - African History
- HIST282 - Transatlantic Slave Trade
- HIST283 - Colonial Latin America
- HIST284 - Modern Latin America
- HIST505 - Early Modern Europe, 1500-1789
- HIST506 - Age of Revolution, 1789-1914
- HIST507 - Modern Europe, 1914-Present
- HIST511 - Topics in European History

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 22-level HIST course(s)
- Any 23-level HIST course(s)
- Any 24-level HIST course(s)
- Any 31-level HIST course(s)
- Any 32-level HIST course(s)
- Any 33-level HIST course(s)
- Any 34-level HIST course(s)

Choose any 2 courses from the listed options.

AND

History Electives (6 credits)

Choose 2 history electives in consultation with your adviser.

Military Science Minor

Overview

Minor in Military Sciences offers coursework from a number of departments including the Departments of Military Science, History, Government and Geography. This path allows the student to pursue a diverse program that incorporates military history, ethics, public administration and the use of the military as an instrument of educational enhancement. While the Military Science classes are taught through a military lens, the components of adaptability, teamwork, comprehensive fitness, leadership and critical thinking are interdisciplinary and applicable regardless of a student's chosen future career paths.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Military Science (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Military Science Core Required Courses (6 credits)

Complete ALL of the following Courses:

- MLSC101 - Intro to Military Science 1
- MLSC102 - Intro to Military Science 2
- MLSC210 - Self and Team Development
- MLSC211 - Military Leadership

AND

Military Science Core Electives (12 credits)

Earn at least 12 credits from the following:

- GEOG226 - Political Geography
  OR GEOG226H - Hnrs:Political Geography (Inactive)
- GEOG281 - Maps and GIS
- GEOG295 - GIS I: Vector Data Analysis
- GOVT251 - Introduction to Global Politics
- GOVT355 - American Foreign Policy
  OR GOVT355H - Honors: American Foreign Policy
- GOVT455 - US-Middle East Foreign Relations
- HIST285 - Decolonization EU Emp in Africa
- HIST286 - War, Revolution and Terrorism
- HIST314 - The Crusades
- HIST355 - Civil War and Reconstruction
- HIST359 - First World War
- HIST360 - The Second World War
- HIST470 - The Vietnam War
- MLSC301 - Management and Leadership
- MLSC302 - Military Tactics
- MLSC401 - Contemporary Military Issues 1
- MLSC402 - Contemporary Military Issues 2

Electives must include one HIST course and two 300- and/or 400- level courses.

Philosophy Minor

Overview

The Philosophy minor at Millersville University provides students with a grounding in the history of philosophy as well as training in philosophical analysis and writing. Such training is one of the best ways to develop critical thinking and communicative skills applicable to many professional fields.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Philosophy

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- PHIL321 - Ancient Philosophy
- PHIL322 - Modern Philosophy

AND

Introduction to Logic or Computer Logic (3 credits)

Complete at least 1 of the following courses:

- PHIL211 - Introduction to Logic
- PHIL312 - Mathematical Logic

AND

Philosophy Classics or Philosophy Workshop (3 credits)

Complete at least 1 of the following courses:

- PHIL328 - Philosophy Classics
- PHIL471 - Advanced Seminar in Philosophy

AND

Electives

Choose 6.0 credit hours of philosophy electives in consultation with your adviser.

Accelerated BA to MA in History

Overview

The Accelerated Bachelor's Master's permits History BA undergraduate students to pursue graduate studies in History beginning in the second semester of their Junior year as undergraduates. This program allows students the opportunity for early acceptance into the MA History degree. Accepted students may complete up to 12 credits or 4 courses of History graduate course work at the 500-level during their undergraduate program; these credits apply to the Master of Arts in History.

Students accepted into the Accelerated History program will be billed for undergraduate tuition for the 12 credits of graduate work that meet both degree requirements. Students in the accelerated program must adhere to Graduate Academic Standing policy available in the Graduate Catalog for all graduate coursework completed.

Curriculum

Simple Requirements

Accelerated History BA to MA (30 credit hours)

Core (15 credit hours)

Type
Completion Requirement

Additional Comments:
Complete TWO of the following courses:

- HIST 101: Europe and the World 1350-1789
- HIST 102: Europe and the World 1789-present
- HIST 106: Contours of US History
- HIST 107: Pre-Modern World Cultures OR
- HIST 206: World Culture and Religion

Complete ALL of the following courses:

- HIST 105: History Matters
- HIST 205: Art and Craft of History
- HIST 405: Senior Seminar/HIST 499: Honors

History Electives

Type
Completion Requirement

History Electives

Choose at least 15.0 credit hours of History courses. At least 6 credit hours of elective courses must be at the 300 level or above. **Up to 12.0 credit hours may be 500-level graduate classes.**

Once 75.0 credits are earned, students may take one 3-credit 500-level class per semester, including summers. Only 500-level courses until 120 credits.

HIST 520 may be taken between 90 and 120 credits after 405/499.

Earn at least 15 credits

Take at least 15 credit hours in History. No more than 12 credit hours may be in 500-level graduate History courses.

1. Once 75 credits are earned, students may take one 3-credit 500-level class per semester, including summers.
2. Only 500-level courses until 120 credits
3. HIST 520 may be taken between 90 and 120 credits after 405/499.

History, B.A.

Overview

The B.A. in History requires 120 credits, of which 30 must be in History.

Required courses include a choice of surveys. in World and US histories, three skills courses, and electives.

At least 2 electives must be 300-level or higher.

Certificates of 12 credits are possible, including Honors in History and Applied History, among others.

Curriculum

Simple Requirements

Major in History, BA (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses

Complete at least 2 of the following courses:

- HIST101 - Europe and the World 1350-1789
  OR HIST102 - Europe and the World 1789-Present
  OR HIST106 - Contours of US History
  OR HIST107 - Pre-Modern World Cultures
  OR HIST206 - World Culture & Religion to 1500

AND

Earn at least 9 credits from the following:

- HIST105 - History Matters
  AND HIST205 - The Art & Craft of History
  AND HIST405 - Senior Seminar

AND

Elective History Courses

Earn at least 15 credits from the following:

- Any HIST course(s)

To meet the requirement for Elective History Courses, classes must include:

- at least 6 hours of 300+ level History courses

Additional Comments:
Earn at least a C- or better in HIST 205

Social Studies Education, B.S.Ed.

Overview

The Social Studies Secondary Education program at Millersville University incorporates core social studies courses with diverse education requirements. Core social studies courses explore the global environment, economics, government, history and more. All MU education programs include a Foundations Block which explores modern teaching and the psychology of teaching, Professional Blocks which focus on instructional technology and positive learning environments, and a semester of student teaching.

Curriculum

Simple Requirements

Major in Social Studies History, BSE (39 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (36 credits)

Complete ALL of the following Courses:

- ECON100 - Introductory Economics
  OR ECON101 - Principles of Macroeconomics
- ECON203 - Introduction to World Economy
- GEOG120 - Human Geography
- GOVT111 - Introduction to American Government
- GOVT221 - Introduction to Comparative Political Systems
- GOVT251 - Introduction to Global Politics
- HIST105 - History Matters
- HIST106 - Contours of US History
- HIST205 - The Art & Craft of History

AND

Geography Course (3 credits)

Complete at least 1 of the following courses:

- GEOG141 - World Regional Geography
- GEOG226 - Political Geography
  OR GEOG226H - Hnrs:Political Geography (Inactive)
- GEOG248 - Geography of Africa
  OR GEOG248H - Hon: Geography of Africa (Inactive)
- GEOG342 - Europe
- GEOG343 - Latin America & the Caribbean

AND

History Electives (6 credits)

Complete at least 2 of the following courses:

- HIST101 - Europe and the World 1350-1789
  OR HIST102 - Europe and the World 1789-Present
- HIST206 - World Culture & Religion to 1500
  OR HIST280 - Pre-Colonial Africa

Complete at least 1 of the following courses:

- HIST200 - Reimagining Holidays & Heroes
  OR HIST275 - Early American Diplomacy
  OR HIST276 - Modern United States Foreign Relations
  OR HIST352 - Provincial and Revolutionary America
  OR HIST356H - H:New Era, 1876-1919
  OR HIST357 - Modern U.S. History
  OR HIST453 - Indians & Colonists in PA

Professional Education (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (12 credits)

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- SEED433 - Teaching of Secondary Social Studies

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- EDSS461 - Student Teaching in Soc Sci

Requirements

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological

Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Certificate in Ethics and Society

Overview

The Ethics and Society Certificate program will provide students with the opportunity to engage in critical study of the philosophical underpinnings of various ethical theories and the application of those principles to a range of contexts. The curriculum for the program includes, along with a general introductory course, classes in Biomedical Ethics, Business and Professional Ethics, Environmental Philosophy/Ethics, Food Ethics, Global Ethics and Social Justice, and others. Through such courses students will develop expertise and skills in critical ethical reasoning in application to diverse contexts. Think about it and you will see the value for yourself: Employers nowadays both want and need to hire college students who have taken courses in philosophy and ethics. The work of professionals today demands it.

Curriculum

Simple Requirements

Major in Ethics and Society (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- PHIL120 - Introduction to Ethics

AND

Ethics Electives (9 credits)

Complete at least 3 of the following courses:

- PHIL260 - Food, Ethics & Society
- PHIL281 - Bus. & Prof. Ethics
- PHIL285 - Biomedical Ethics
- PHIL345 - Humanity and Environment
- PHIL381 - Global Ethics & Social Justice

AND

Elective (3 credits)

Complete at least 1 of the following courses:

- PHIL202 - Love and Sexuality
- PHIL300 - Co-Op Ed Experience in Phil
- PHIL313 - World Religions
- PHIL321 - Ancient Philosophy
- PHIL322 - Modern Philosophy
- PHIL328 - Philosophy Classics
- PHIL407 - Political and Social Philosphy
- PHIL460 - Philosophy of Law & Humn Right
- PHIL471 - Advanced Seminar in Philosophy
- SOCI335 - Ethics in Criminal Justice **OR** SOCI335H - Hon: Ethics in Criminal Justice

Courses

FYEX100AD - First-Year Experience: Introduction to Human Rights

Course Information

Course Title
First-Year Experience: Introduction to Human Rights

Subject code	Course Number	Academic Level
FYEX	100AD	Undergraduate

Course Description
First-Year Seminar (FYEX) courses are designed to support students' successful transition to university life. These courses use at least one high-impact educational practice to develop and foster skills that will lead to success in college, career, and personal life. Each seminar focuses on a different topic/theme of strong interest to faculty and students. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

This multidisciplinary course explores the history and foundation of human rights as standard for governance. It examines the universality of human rights within the contexts of political pluralism, social, and economic realities of our contemporary era.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100B - Inside-Out: Detective Fiction, Philosophy, and Jazz

Course Information

Course Title
Inside-Out: Detective Fiction, Philosophy, and Jazz

Subject code	Course Number	Academic Level
FYEX	100B	Undergraduate

Course Description
Each First Year Seminar (FYEX) section features an academic centerpiece (a question, topic, or theme) that will ground the process of intellectual inquiry through a free exchange of ideas during and outside of class. FYEX instructors mentor and assist students in developing a meaningful and purposeful goals. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

HIST101 - Europe and the World 1350-1789

Course Information

Course Title
Europe and the World 1350-1789

Subject code	Course Number	Academic Level
HIST	101	Undergraduate

Course Description
Europe and its world relationships during the centuries of the Reformation, the scientific revolution, overseas expansion and revolution. Offered in fall, spring.

Gateway Stage Labels
Information Literacies (IL)

HIST102 - Europe and the World 1789-Present

Course Information

Course Title
Europe and the World 1789-Present

Subject code	Course Number	Academic Level
HIST	102	Undergraduate

Course Description
Europe and its world relationships in the age of industrialization and democratization. Offered in fall, spring.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

HIST105 - History Matters

Course Information

Course Title
History Matters

Subject code	Course Number	Academic Level
HIST	105	Undergraduate

Course Description
An introduction to the study of history as an academic discipline (a major) and as a profession (a career) with a focus on research, interpretation, and teaching.

HIST105H - H: History Matters

Course Information

Course Title
H: History Matters

Subject code	Course Number	Academic Level
HIST	105H	Undergraduate

HIST106 - Contours of US History

Course Information

Course Title
Contours of US History

Subject code	Course Number	Academic Level
HIST	106	Undergraduate

Course Description
A survey of United States history from the peopling of the Americas to the present. Identifies and examines the key themes in the creation and transformation of the nation and its peoples. Offered in fall, spring.

HIST107 - Pre-Modern World Cultures

Course Information

Course Title
Pre-Modern World Cultures

Subject code	Course Number	Academic Level
HIST	107	Undergraduate

Course Description
General survey of world history and culture from known beginnings to 1500. Intended for nonmajors. Offered periodically. Equivalent course HIST 206: No credit given if credit earned for HIST 206. Offered annually.

HIST179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
HIST	179	Undergraduate

Course Description
Experimental

HIST200 - Reimagining Holidays & Heroes

Course Information

Course Title
Reimagining Holidays & Heroes

Subject code	Course Number	Academic Level
HIST	200	Undergraduate

Course Description
Content-based inquiry into the celebration of US holidays and heroes. Course covers American Revolution and founding of the United States, Indigenous America since pre-Columbian interactions, and a history of Blacks in America from 1619 to the present.

HIST205 - The Art & Craft of History

Course Information

Course Title
The Art & Craft of History

Subject code	Course Number	Academic Level
HIST	205	Undergraduate

Course Description
An intermediate investigation of the practices of historical investigation: formulation of research queries, location and analysis of evidence, and analytical narration of findings. Prereq: HIST 105 with a grade of C- or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

HIST 105

Earn a minimum grade of C- in the following:

- HIST105 - History Matters

HIST206 - World Culture & Religion to 1500

Course Information

Course Title
World Culture & Religion to 1500

Subject code	Course Number	Academic Level
HIST	206	Undergraduate

Course Description
Survey of world history from known beginnings to 1500. Offered annually. Equivalent course HIST 107: No credit given if credit earned for HIST 107. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST213 - Greeks and Romans

Course Information

Course Title
Greeks and Romans

Subject code	Course Number	Academic Level
HIST	213	Undergraduate

Course Description
This course considers the social, political and economic history of Ancient Greece and Rome. No prior knowledge of history is necessary.

HIST214 - History of Christianity

Course Information

Course Title
History of Christianity

Subject code	Course Number	Academic Level
HIST	214	Undergraduate

Course Description
Examines the formation of early Christianity, the spread of Christianity from the Roman Mediterranean through Asia, Africa, and Europe, and the major issues of European Reformation.

HIST215 - Slaves & Masters Ancient World

Course Information

Course Title
Slaves & Masters Ancient World

Subject code	Course Number	Academic Level
HIST	215	Undergraduate

Course Description
Considers the social, political and economic factors concerning the practice of slavery in ancient world cultures. No prior knowledge of history is necessary.

HIST215H - H: Slaves & Masters Ancient World

Course Information

Course Title
H: Slaves & Masters Ancient World

Subject code	Course Number	Academic Level
HIST	215H	Undergraduate

HIST216 - Vikings

Course Information

Course Title
Vikings

Subject code	Course Number	Academic Level
HIST	216	Undergraduate

Course Description
Considers the social, political and economic history of the Viking explorers and their society. No prior knowledge of history is necessary.

HIST216H - H: Vikings

Course Information

Course Title
H: Vikings

Subject code	Course Number	Academic Level
HIST	216H	Undergraduate

HIST218 - People and the Environment

Course Information

Course Title
People and the Environment

Subject code	Course Number	Academic Level
HIST	218	Undergraduate

Course Description
This course offers an introduction to the methods and insights of environmental history in Europe and the Americas from 1500 to the present. It examines developments in Europe, with background in medieval dynamics and a focus on the period from 1500 onward, through 18th-century projects that cleared land and drained swamps, 19th and 20th century industrialization, World Wars I and II, and the post-World War II era. It also discuss the European colonization of the Americas, with background on Indian use of the land before contact with colonists.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST221 - Introduction to Archives Administration

Course Information

Course Title
Introduction to Archives Administration

Subject code	Course Number	Academic Level
HIST	221	Undergraduate

Course Description
Survey of theories and practices of managing archives , including personal papers, institutional records, electronic records, and other published and unpublished materials. Topics will include the archival profession, records appraisal and acquisition, arrangement and description, reference and outreach, preservation and disaster planning, and repository management and ethics. Offered occasionally.

Gateway Stage Labels
Technological Competency (TC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete ALL of the following Courses:
- FYEX100 - First Year Seminar

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST222 - Modern Britain

Course Information

Course Title
Modern Britain

Subject code	Course Number	Academic Level
HIST	222	Undergraduate

Course Description
Modern England: the political, social, economic and cultural evolution of England from 1688 to the present. Offered annually.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

HIST222H - H: Modern Britain

Course Information

Course Title
H: Modern Britain

Subject code	Course Number	Academic Level
HIST	222H	Undergraduate

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

HIST223 - Traditional Germany

Course Information

Course Title
Traditional Germany

Subject code	Course Number	Academic Level
HIST	223	Undergraduate

Course Description
The evolution of the German people and their political, cultural and socio-economic institutions from Roman times to 1806. Offered annually. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST224 - Modern Germany

Course Information

Course Title
Modern Germany

Subject code	Course Number	Academic Level
HIST	224	Undergraduate

Course Description
German history from 1806 to the present. Offered annually. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST225 - Germany, 1945-Present

Course Information

Course Title
Germany, 1945-Present

Subject code	Course Number	Academic Level
HIST	225	Undergraduate

Course Description
This course examines the transformation of Germany from 1945, when, at the end of World War II, there were four occupational zones and no German state, through the era of two German states, East and West, from 1949 to 1990, to the present post-reunification Germany. The events of the Third Reich, World War II, and the Holocaust will form a backdrop to much of this history, and we will quickly review them. Then, the course focuses on the activities of the four occupying powers (the United States, the Soviet Union, Great Britain, and France) in the post-war years, the emerging Cold War, the formation of East and West Germany, developments from the 1950s to the 1980s, the collapse of East Germany and reunification, and post-reunification developments. Prerequisites: ENGL 110 or ENGL 110H

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST230 - Modern Jewish History

Course Information

Course Title
Modern Jewish History

Subject code	Course Number	Academic Level
HIST	230	Undergraduate

Course Description
Survey of the history of Jews in the mid 18th-20th centuries. Course designed to enrich students historical and cultural knowledge and improve students understanding of Gentile-Jewish relations in the modern world. Offered periodically. Prereq: ENGL 110.

Gateway Stage Labels
Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST241 - Imperial Russia

Course Information

Course Title
Imperial Russia

Subject code	Course Number	Academic Level
HIST	241	Undergraduate

Course Description
Political, cultural, economic and social history from Peter the Great to the Russian Revolution. Offered annually. Prereq: ENGL 110.

Gateway Stage Labels
Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST241H - Hon: Imperial Russia

Course Information

Course Title
Hon: Imperial Russia

Subject code	Course Number	Academic Level
HIST	241H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST242 - Soviet Union

Course Information

Course Title
Soviet Union

Subject code	Course Number	Academic Level
HIST	242	Undergraduate

Course Description
Political, cultural, economic and social history from the Russian Revolution to the present. Offered annually.

Gateway Stage Labels
Information Literacies (IL)

HIST250 - Women in American History

Course Information

Course Title
Women in American History

Subject code	Course Number	Academic Level
HIST	250	Undergraduate

Course Description
History of women in the United States from the early 16th century through the late 20th century, with a particular emphasis on the significance of race, class, religion and region in the shaping of women's experiences. Offered periodically. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST250H - H:Women in American History

Course Information

Course Title
H:Women in American History

Subject code	Course Number	Academic Level
HIST	250H	Undergraduate

Course Description
Honors Course - History of women in the United States from the early 16th century through the late 20th century, with a particular emphasis on the significance of race, class, religion and region in the shaping of women's experiences.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST272 - Afro-American History 1

Course Information

Course Title
Afro-American History 1

Subject code	Course Number	Academic Level
HIST	272	Undergraduate

Course Description
History of African Americans from their first arrival in the Americas through the Civil War, with a particular emphasis on the process of enslavement, the formation of African-American communities and institutions, and the evolution of Black abolitionism. Offered annually. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST273 - Afro-American History 2

Course Information

Course Title
Afro-American History 2

Subject code	Course Number	Academic Level
HIST	273	Undergraduate

Course Description
History of African Americans from the Civil War through the present, with a particular emphasis on the processes of emancipation, urbanization and enfranchisement. Offered annually. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST276 - Modern United States Foreign Relations

Course Information

Course Title
Modern United States Foreign Relations

Subject code	Course Number	Academic Level
HIST	276	Undergraduate

Course Description
With the rise of the United States as an international power in the 1890s through its current foreign policy initiatives, it has acted as a leader in the world community. This course examines the rise, decline and resurrection of the United States as a world power through its foreign relations. Offered annually.

Gateway Stage Labels
Information Literacies (IL)

HIST276H - H: Modern United States Foreign Relations

Course Information

Course Title
H: Modern United States Foreign Relations

Subject code	Course Number	Academic Level
HIST	276H	Undergraduate

Gateway Stage Labels
Information Literacies (IL)

HIST279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
HIST	279	Undergraduate

Course Description
Experimental

HIST280 - Pre-Colonial Africa

Course Information

Course Title
Pre-Colonial Africa

Subject code	Course Number	Academic Level
HIST	280	Undergraduate

Course Description
Examines major social, economic and political developments in pre-colonial African societies. It begins with an overview of historiographical debates of African history, the peopling of Africa, early migration, agricultural innovation, climatic changes to the development of civilizations and cross-cultural contacts. Offered annually.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

HIST281 - African History

Course Information

Course Title
African History

Subject code	Course Number	Academic Level
HIST	281	Undergraduate

Course Description
A survey of African history; special emphasis on the period since 1500. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST282 - Transatlantic Slave Trade

Course Information

Course Title
Transatlantic Slave Trade

Subject code	Course Number	Academic Level
HIST	282	Undergraduate

Course Description
This course examines the Transatlantic slave trade as a transcontinental episode that was responsible for the forced migration of millions of Africans to the Americas and Europe. It critically analyzes the various dimensions of the global forces that created the Atlantic World, experienced by tens of millions of enslaved African people. It illuminates the origins and continuing legacy of inequality based in European expansion, enslavement and economic supremacy. As an exploration of human history in the Atlantic World, this course discusses indepth the historiography of the slave trade and slavery in contemporary political, economic and social interactions of Africa, Americas and Europe.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

HIST283 - Colonial Latin America

Course Information

Course Title
Colonial Latin America

Subject code	Course Number	Academic Level
HIST	283	Undergraduate

Course Description
From pre-Columbian America to the independence of Latin America (1825). Offered periodically. Prereq: ENGL 110.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST284 - Modern Latin America

Course Information

Course Title
Modern Latin America

Subject code	Course Number	Academic Level
HIST	284	Undergraduate

Course Description
Continuation of HIST 283 from 1826 to the present. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST285 - Decolonization EU Emp in Africa

Course Information

Course Title
Decolonization EU Emp in Africa

Subject code	Course Number	Academic Level
HIST	285	Undergraduate

Course Description
This course examines the process of the fall and dissolution of European Empires in the decades following the ending of the Second World War. It discusses the historiographical debate of factors that precipitated decolonization in the international, metropolitan, and national arenas. The course explores colonial insurgency and counterinsurgency programs as well as negotiated, non-violent struggles that culminated in the transfer of power to African nationalists.

HIST286 - War, Revolution and Terrorism

Course Information

Course Title
War, Revolution and Terrorism

Subject code	Course Number	Academic Level
HIST	286	Undergraduate

Course Description
Examines causes, conducts, and consequences of modern wars, revolutions, and terrorism in our contemporary world. Offers students a critical understanding of the concepts and competing theories associated with the study of war. Also explores the social, political, and economic predicaments of modern states confronting the various forms of warfare.

HIST286H - H: War, Revolution and Terrorism

Course Information

Course Title
H: War, Revolution and Terrorism

Subject code	Course Number	Academic Level
HIST	286H	Undergraduate

HIST300 - Co-Op Ed Experience in History

Course Information

Course Title
Co-Op Ed Experience in History

Subject code	Course Number	Academic Level
HIST	300	Undergraduate

Course Description
Co-Op Ed Experience in History

HIST305 - Historical Investigations

Course Information

Course Title
Historical Investigations

Subject code	Course Number	Academic Level
HIST	305	Undergraduate

Course Description
An advanced investigation of a selected topic in history that combines readings colloquium and research seminar. Prereq: HIST 205 C- or better.

Simple Requirements

Course Prerequisites

Type
Prerequisite

HIST 205

Earn a minimum grade of C- in the following:

- HIST205 - The Art & Craft of History

HIST308 - Topics in History

Course Information

Course Title
Topics in History

Subject code	Course Number	Academic Level
HIST	308	Undergraduate

Course Description
A thematic investigation of a significant historical topic with course structure and topic determined by the instructor prior to the preregistration period.

HIST308H - Topics in History

Course Information

Course Title
Topics in History

Subject code	Course Number	Academic Level
HIST	308H	Undergraduate

Course Description
H Topics:

HIST313 - History of Middle Ages

Course Information

Course Title
History of Middle Ages

Subject code	Course Number	Academic Level
HIST	313	Undergraduate

Course Description
Major political, cultural and socioeconomic developments in Europe, c. 500-1300 A.D. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST313H - H: History of Middle Ages

Course Information

Course Title
H: History of Middle Ages

Subject code	Course Number	Academic Level
HIST	313H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST314 - The Crusades

Course Information

Course Title
The Crusades

Subject code	Course Number	Academic Level
HIST	314	Undergraduate

Course Description

The history of the European Crusade movement to the Levant, as it was then called. The course will not concentrate on military history, but rather on the social, cultural and political factors that led to and resulted from these expeditions. The course will consider these issues from the point of view of the several groups of people, European and West Asian, who were involved in these events.

HIST320 - Renaissance and Reformation

Course Information

Course Title
Renaissance and Reformation

Subject code	Course Number	Academic Level
HIST	320	Undergraduate

Course Description

Cultural, social and political history of Europe, 1300-1650, with emphasis on Renaissance arts and literature and 16th century religious upheaval. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST330 - Nineteenth-Century Europe

Course Information

Course Title
Nineteenth-Century Europe

Subject code	Course Number	Academic Level
HIST	330	Undergraduate

Course Description
The history of 19th-century Europe, including social, political, intellectual, cultural, religious and economic history. Offered periodically. Prereq: ENGL 110.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST330H - H: Nineteenth-Century Europe

Course Information

Course Title
H: Nineteenth-Century Europe

Subject code	Course Number	Academic Level
HIST	330H	Undergraduate

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST334 - Victorian England

Course Information

Course Title
Victorian England

Subject code	Course Number	Academic Level
HIST	334	Undergraduate

Course Description
The political, social, economic and intellectual development of England and the British Empire from the end of the Napoleonic wars to the outbreak of World War I. Offered periodically.

HIST334H - H:Victorian England

Course Information

Course Title
H:Victorian England

Subject code	Course Number	Academic Level
HIST	334H	Undergraduate

Course Description
Honors Course - The political, social, economic and intellectual development of England and the British Empire from the end of the Napoleonic wars to the outbreak of World War I.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST340 - Twentieth Century Europe

Course Information

Course Title
Twentieth Century Europe

Subject code	Course Number	Academic Level
HIST	340	Undergraduate

Course Description
The political, socioeconomic, cultural and diplomatic transformation of Europe, 1900 to the present. Offered periodically. Prereq: ENGL 110.

Gateway Stage Labels
Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST342 - Hitler and Nazism

Course Information

Course Title
Hitler and Nazism

Subject code	Course Number	Academic Level
HIST	342	Undergraduate

Course Description
The origins, development and impact upon Germany and the rest of the world of National Socialist theory and practice. Offered annually. Prereq: ENGL 110.

Gateway Stage Labels
Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST342H - H: Hitler and Nazism

Course Information

Course Title
H: Hitler and Nazism

Subject code	Course Number	Academic Level
HIST	342H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST351 - 17th Century British America

Course Information

Course Title
17th Century British America

Subject code	Course Number	Academic Level
HIST	351	Undergraduate

Course Description
The founding and growth of the British Colonies to the Glorious Revolution of 1688, with particular attention devoted to society, beliefs and government. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST352 - Provincial and Revolutionary America

Course Information

Course Title
Provincial and Revolutionary America

Subject code	Course Number	Academic Level
HIST	352	Undergraduate

Course Description
America from the Glorious Revolution to the completion of the American Revolution, with particular attention to social, cultural and political developments such as the Enlightenment, the Great Awakening and the War for Independence. Offered annually. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST352H - H: Provincial and Revolutionary America

Course Information

Course Title
H: Provincial and Revolutionary America

Subject code	Course Number	Academic Level
HIST	352H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST355 - Civil War and Reconstruction

Course Information

Course Title
Civil War and Reconstruction

Subject code	Course Number	Academic Level
HIST	355	Undergraduate

Course Description
The social, political and economic causes of the Civil War, the military and social events of the war, and the postwar developments of Reconstruction, with particular emphasis on the place of African Americans in U.S. society.

HIST356H - H:New Era, 1876-1919

Course Information

Course Title
H:New Era, 1876-1919

Subject code	Course Number	Academic Level
HIST	356H	Undergraduate

Course Description
Honors Course - Responses to industrialization from populism through the progressive era. Changes in thought and culture. World War I and American society. The rise of America as a world power.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110H or ENGL 110

Complete ANY of the following Courses:

- ENGL110H - Hnrs:Introduction to College Writing
- ENGL110 - Introduction to College Writing

HIST357 - Modern U.S. History

Course Information

Course Title
Modern U.S. History

Subject code	Course Number	Academic Level
HIST	357	Undergraduate

Course Description
The United States from 1900 to the present. Focus is on political and social, not military, history.

Gateway Stage Labels
Information Literacies (IL)

HIST359 - First World War

Course Information

Course Title
First World War

Subject code	Course Number	Academic Level
HIST	359	Undergraduate

Course Description
This course focuses on the military strategy and tactics employed by the combatants during the First World War (1914-1918). Offered annually.

Gateway Stage Labels
Information Literacies (IL)

HIST360 - The Second World War

Course Information

Course Title
The Second World War

Subject code	Course Number	Academic Level
HIST	360	Undergraduate

Course Description
The course focuses on the military strategy and tactics employed by the combatants during the Second World War (1939-1945).

Gateway Stage Labels
Information Literacies (IL)

HIST379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
HIST	379	Undergraduate

Course Description
Experimental

HIST383 - Eur Imprlsm in Africa 1870-1914

Course Information

Course Title
Eur Imprlsm in Africa 1870-1914

Subject code	Course Number	Academic Level
HIST	383	Undergraduate

Course Description
Provides an informed understanding of major themes in late 19th- and early 20th-century Africa, with a particular focus on the impact of British, French, Belgian and German imperialism. Special attention will be given to the discussion of the historiography of imperialism related to Africa. Contemporary Africa will be used to provide a background for assessing the effect of imperialism on African society, politics and economies. Prereq: ENGL 110/H.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST388 - Twentieth-Century Africa

Course Information

Course Title
Twentieth-Century Africa

Subject code	Course Number	Academic Level
HIST	388	Undergraduate

Course Description
Course surveys major developments in 20th-century Africa by situating them in their respective historical contexts. It examines the idea of race, cultural representation of others, colonial economic relations, decolonization, national liberation movements, debts, structural adjustment programs, democracy, post-apartheid South Africa, the emergence of U.S. Africa Command (AFRICOM) and Human Rights and Development. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

HIST400 - Co-Op Ed Experience in History

Course Information

Course Title
Co-Op Ed Experience in History

Subject code	Course Number	Academic Level
HIST	400	Undergraduate

Course Description
Co-Op Ed Experience in History

HIST401 - Cultural Interactions across the Atlantic World, 1450-1820

Course Information

Course Title
Cultural Interactions across the Atlantic World, 1450-1820

Subject code	Course Number	Academic Level
HIST	401	Undergraduate

Course Description
This perspectives course will compare the social, economic, political and religious relations of three areas: Africa, Europe and the Native Societies of the Americas in and during the period of the formation of the Atlantic World. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

HIST401H - H:Cultural Interactions across the Atlantic World, 1450-1820

Course Information

Course Title
H:Cultural Interactions across the Atlantic World, 1450-1820

Subject code	Course Number	Academic Level
HIST	401H	Undergraduate

Course Description
Honors Course - This perspectives course will compare the social, economic, political and religious relations of three areas: Africa, Europe and the Native Societies of the Americas in and during the period of the formation of the Atlantic World.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

HIST405 - Senior Seminar

Course Information

Course Title
Senior Seminar

Subject code	Course Number	Academic Level
HIST	405	Undergraduate

Course Description
Students will prepare and defend a seminar paper of approximately 25 pages. Prereq: HIST 205 with a grade of C- or higher; junior or senior standing or permission of instructor. Satisfies advance writing (AW) requirement if a grade of B or higher is attained.

Simple Requirements

Course Prerequisites

Type
Prerequisite

HIST 205

Earn a minimum grade of C- in the following:
- HIST205 - The Art & Craft of History

Satisfies advance writing (AW) requirement if a grade of B or higher is attained.

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

HIST453 - Indians & Colonists in PA

Course Information

Course Title
Indians & Colonists in PA

Subject code	Course Number	Academic Level
HIST	453	Undergraduate

Course Description
Early Pennsylvania became home to a variety of groups in the course of the 18th century. This course takes a transatlantic approach as it explores the diverse backgrounds of European settlers and the Native Americans whom they encountered, and interactions following the establishment of the colony. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

HIST453H - H:Indians & Colonists in PA

Course Information

Course Title
H:Indians & Colonists in PA

Subject code	Course Number	Academic Level
HIST	453H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

HIST470 - The Vietnam War

Course Information

Course Title
The Vietnam War

Subject code	Course Number	Academic Level
HIST	470	Undergraduate

Course Description
The Vietnam War continues to be one of the more controversial moments in the history of the United States. Course examines the war with the objective of achieving a greater understanding of why the United States entered into the conflict and how the war was fought on the military battlefields in Vietnam and political battlefields in Washington, D.C., Saigon, Hanoi and around the world. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

HIST470H - H: The Vietnam War

Course Information

Course Title
H: The Vietnam War

Subject code	Course Number	Academic Level
HIST	470H	Undergraduate

Course Description
Honors Course - The Vietnam War continues to be one of the more controversial moments in the history of the United States. Course examines the war with the objective of achieving a greater understanding of why the United States entered into the conflict and how the war was fought on the military battlefields in Vietnam and political battlefields in Washington, D.C., Saigon, Hanoi and around the world.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

HIST479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
HIST	479	Undergraduate

Course Description
Experimental

HIST480 - History of Medicine

Course Information

Course Title
History of Medicine

Subject code	Course Number	Academic Level
HIST	480	Undergraduate

Course Description
The history of medicine, health and disease, including political, social, cultural, religious and economic factors from the ancient world to the present. The course includes material from European, American and world perspectives. Offered periodically.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

HIST489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
HIST	489	Undergraduate

Course Description
Honors Course

HIST489H - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
HIST	489H	Undergraduate

HIST490 - 17th Century Anglo-America

Course Information

Course Title
17th Century Anglo-America

Subject code	Course Number	Academic Level
HIST	490	Undergraduate

Course Description
This perspectives course introduces students to the use of anthropological methods in studying past societies through examinations of small communities in England and America. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

HIST498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
HIST	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section.

HIST499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
HIST	499	Undergraduate

Course Description
Departmental Honors

HIST500 - Co-Op Ed Experience in History

Course Information

Course Title
Co-Op Ed Experience in History

Subject code	Course Number	Academic Level
HIST	500	Graduate

Course Description
Co-Op Ed Experience in History

HIST501 - U.S. History, Beginnings-1815

Course Information

Course Title
U.S. History, Beginnings-1815

Subject code	Course Number	Academic Level
HIST	501	Graduate

Course Description
An intensive readings and discussion course focusing on the major issues and interpretations of early American history. Offered every third semester.

HIST502 - U.S. History 1815-1919

Course Information

Course Title
U.S. History 1815-1919

Subject code	Course Number	Academic Level
HIST	502	Graduate

Course Description
An intensive readings and discussion course focusing on the major issues and interpretations for the period 1815-1919. Offered every third semester.

HIST503 - U.S. History, 1919 to present

Course Information

Course Title
U.S. History, 1919 to present

Subject code	Course Number	Academic Level
HIST	503	Graduate

Course Description
An intensive readings and discussion course focusing on the major issues and interpretations for the period since World War I. Offered every third semester.

HIST505 - Early Modern Europe, 1500-1789

Course Information

Course Title
Early Modern Europe, 1500-1789

Subject code	Course Number	Academic Level
HIST	505	Graduate

Course Description
An intensive readings and discussion course focusing on the major issues and interpretations of early modern Europe. Offered every third semester.

HIST506 - Age of Revolution, 1789-1914

Course Information

Course Title
Age of Revolution, 1789-1914

Subject code	Course Number	Academic Level
HIST	506	Graduate

Course Description
An intensive readings and discussion course focusing on the major issues and interpretations of European history from the French Revolution to the First World War. Offered every third semester.

HIST507 - Modern Europe, 1914-Present

Course Information

Course Title
Modern Europe, 1914-Present

Subject code	Course Number	Academic Level
HIST	507	Graduate

Course Description
An intensive readings and discussion course focusing on the major issues and interpretations of recent European history. Offered periodically.

HIST510 - Topics in U.S. History

Course Information

Course Title
Topics in U.S. History

Subject code	Course Number	Academic Level
HIST	510	Graduate

Course Description
A topical readings course devoted to selected issues and problems in the history of the United States. Offered annually.

HIST511 - Topics in European History

Course Information

Course Title
Topics in European History

Subject code	Course Number	Academic Level
HIST	511	Graduate

Course Description
A topical readings course devoted to selected issues and problems in European history. Offered annually.

HIST512 - Topics in Regional History

Course Information

Course Title
Topics in Regional History

Subject code	Course Number	Academic Level
HIST	512	Graduate

Course Description
A topical readings course devoted to selected issues and problems in regional and comparative history. Offered periodically.

HIST520 - Historiography and Historical Research

Course Information

Course Title
Historiography and Historical Research

Subject code	Course Number	Academic Level
HIST	520	Graduate

Course Description
Essential to the practice of history are the ability to think historically, familiarity with its basic sources and an understanding of past historiographical traditions. This course seeks to offer instruction in the traditions of history writing that shaped and contextualized the present historiographical tradition, as well as provide training in the execution of various methods of historical research and writing. Offered annually.

HIST610 - Seminar in U.S. History

Course Information

Course Title
Seminar in U.S. History

Subject code	Course Number	Academic Level
HIST	610	Graduate

Course Description
A research seminar devoted to selected issues and problems in United States history. Offered annually.

HIST611 - Seminar in European History

Course Information

Course Title
Seminar in European History

Subject code	Course Number	Academic Level
HIST	611	Graduate

Course Description
A research seminar devoted to selected issues and problems in European history. Offered annually.

HIST612 - Seminar in Regional History

Course Information

Course Title
Seminar in Regional History

Subject code	Course Number	Academic Level
HIST	612	Graduate

Course Description
A research seminar devoted to selected issues and problems in regional and comparative history. Offered periodically.

HIST691 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
HIST	691	Graduate

Course Description
Independent Study

HIST699 - Thesis:

Course Information

Course Title
Thesis:

Subject code	Course Number	Academic Level
HIST	699	Graduate

Course Description
Thesis:

PHIL100 - Introduction to Philosophy

Course Information

Course Title
Introduction to Philosophy

Subject code	Course Number	Academic Level
PHIL	100	Undergraduate

Course Description
A beginning study of some of the major philosophical issues and thinkers.

Gateway Stage Labels
Ethical Action & Citizenship (EAC), Problem Solving (PS)

PHIL120 - Introduction to Ethics

Course Information

Course Title
Introduction to Ethics

Subject code	Course Number	Academic Level
PHIL	120	Undergraduate

Course Description
Examines major philosophical approaches to ethical thinking and moral judgment, offering tools for a clearer understanding of ethical decision-making in our daily lives. Consideration of a range of perennial and contemporary ethical and social problems.

Gateway Stage Labels
Ethical Action & Citizenship (EAC), Problem Solving (PS)

PHIL179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PHIL	179	Undergraduate

Course Description
Experimental

PHIL201 - Philosophical Psychology

Course Information

Course Title
Philosophical Psychology

Subject code	Course Number	Academic Level
PHIL	201	Undergraduate

Course Description
Intensive study of selected problems, figures or movements in psychology with emphasis on the philosophical foundations or implications.

PHIL202 - Love and Sexuality

Course Information

Course Title
Love and Sexuality

Subject code	Course Number	Academic Level
PHIL	202	Undergraduate

Course Description
Various viewpoints regarding both the nature of love and of human sexuality.

PHIL202H - Hon: Love and Sexuality

Course Information

Course Title
Hon: Love and Sexuality

Subject code	Course Number	Academic Level
PHIL	202H	Undergraduate

PHIL211 - Introduction to Logic

Course Information

Course Title
Introduction to Logic

Subject code	Course Number	Academic Level
PHIL	211	Undergraduate

Course Description
Principles of correct thinking; deductive inference; inductive inference; use and misuse of language in reasoning.

Gateway Stage Labels
Problem Solving (PS)

PHIL220 - Existentialism

Course Information

Course Title
Existentialism

Subject code	Course Number	Academic Level
PHIL	220	Undergraduate

Course Description
Study of the works of important existentialist thinkers including Kierkegaard, Dostoyevsky, Nietzsche, Sartre, Camus, Beauvoir and others. Issues addressed include human freedom, the problem of life's meaning, the relation between the individual and society, the grounds of human relations, Existentialism and the problem of race, Existentialism and Feminist thought, and others. Discussion of existentialist themes in literary, cinematic and other artistic endeavors.

PHIL260 - Food, Ethics & Society

Course Information

Course Title
Food, Ethics & Society

Subject code	Course Number	Academic Level
PHIL	260	Undergraduate

Course Description
Examines the ethical problems society faces in regards to food production and consumption practices, offering tools for balancing the nutritional, public health, and normative needs of communities and individuals.

PHIL279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PHIL	279	Undergraduate

Course Description
Experimental

PHIL280 - Thanatopsis:Viewing Death

Course Information

Course Title
Thanatopsis:Viewing Death

Subject code	Course Number	Academic Level
PHIL	280	Undergraduate

Course Description
Various ways people have confronted death and have sought to understand it.

PHIL281 - Bus. & Prof. Ethics

Course Information

Course Title
Bus. & Prof. Ethics

Subject code	Course Number	Academic Level
PHIL	281	Undergraduate

Course Description
Examines basic ethical concepts, principles and theories, as well as applications of them to a range of issues in business and professional contexts. Students will explore case studies in a range of organizational and social settings; standards of professional ethics in various disciplines; and best practices relating to ethical conduct in various contexts. Prerequisite: ENG 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL285 - Biomedical Ethics

Course Information

Course Title
Biomedical Ethics

Subject code	Course Number	Academic Level
PHIL	285	Undergraduate

Course Description
A study of biomedical moral and ethical problems. Offered annually.

PHIL291 - Black, Latin & Native Am Phil.

Course Information

Course Title
Black, Latin & Native Am Phil.

Subject code	Course Number	Academic Level
PHIL	291	Undergraduate

Course Description
Examines patterns of moral origins.

PHIL300 - Co-Op Ed Experience in Phil

Course Information

Course Title
Co-Op Ed Experience in Phil

Subject code	Course Number	Academic Level
PHIL	300	Undergraduate

Course Description
Co-Op Ed Experience in Phil

PHIL312 - Mathematical Logic

Course Information

Course Title
Mathematical Logic

Subject code	Course Number	Academic Level
PHIL	312	Undergraduate

Course Description
First-order predicate calculus with identity and functional symbols. Offered annually. Prereq: PHIL 211 or some background in mathematics.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHIL211 or CMSC140 or MATH151 or MATH160 or MATH161

Complete ANY of the following Courses:

- PHIL211 - Introduction to Logic
- CMSC140 - Discrete Structures
- MATH151 - Calculus for Management
- MATH160 - Precalculus
- MATH161 - Calculus 1

Or some background in mathematics.

PHIL313 - World Religions

Course Information

Course Title
World Religions

Subject code	Course Number	Academic Level
PHIL	313	Undergraduate

Course Description
A study of the contents of certain living world religions. Offered periodically.

PHIL313H - HNRS:World Religions

Course Information

Course Title
HNRS:World Religions

Subject code	Course Number	Academic Level
PHIL	313H	Undergraduate

PHIL314 - Philosophy of Science

Course Information

Course Title
Philosophy of Science

Subject code	Course Number	Academic Level
PHIL	314	Undergraduate

Course Description
The structure of scientific explanation; the logic character of scientific laws and theories; convention and description in science; probability and induction; the scientific method in the behavioral sciences. Offered periodically. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL321 - Ancient Philosophy

Course Information

Course Title
Ancient Philosophy

Subject code	Course Number	Academic Level
PHIL	321	Undergraduate

Course Description
The pre-Socratics, Socrates, Plato and Aristotle. Offered in fall. Prereq: ENGL 110.

Gateway Stage Labels
Information Literacies (IL), Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL321H - Hnrs:Ancient Philosophy

Course Information

Course Title
Hnrs:Ancient Philosophy

Subject code	Course Number	Academic Level
PHIL	321H	Undergraduate

Course Description
Hnrs:Ancient Philosophy

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL322 - Modern Philosophy

Course Information

Course Title
Modern Philosophy

Subject code	Course Number	Academic Level
PHIL	322	Undergraduate

Course Description
Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume and Kant. Offered in spring. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL322H - Hnrs:Modern Philosophy

Course Information

Course Title
Hnrs:Modern Philosophy

Subject code	Course Number	Academic Level
PHIL	322H	Undergraduate

Course Description
Hnrs:Modern Philosophy

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL327 - Philosophy in Film

Course Information

Course Title
Philosophy in Film

Subject code	Course Number	Academic Level
PHIL	327	Undergraduate

Course Description
Investigation of philosophical themes, problems and questions raised in film. The medium of film provides a rich and lively context to explore traditional and current issues pertinent to the discipline of philosophy. Offered annually.

Gateway Stage Labels
Ethical Action & Citizenship (EAC), Creative Exploration (CE)

PHIL327H - HNRS:Philosophy in Film

Course Information

Course Title
HNRS:Philosophy in Film

Subject code	Course Number	Academic Level
PHIL	327H	Undergraduate

PHIL328 - Philosophy Classics

Course Information

Course Title
Philosophy Classics

Subject code	Course Number	Academic Level
PHIL	328	Undergraduate

Course Description
One or more major works or of a major philosopher or philosophers. May be taken any number of times for credit. Offered annually. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL328H - Hnrs:Philosophy Classics

Course Information

Course Title
Hnrs:Philosophy Classics

Subject code	Course Number	Academic Level
PHIL	328H	Undergraduate

Course Description
Hnrs:Philosophical Classics

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL331 - American Philosophy

Course Information

Course Title
American Philosophy

Subject code	Course Number	Academic Level
PHIL	331	Undergraduate

Course Description
A study of philosophy in America. Offered periodically.

PHIL341 - Philosophy of Language

Course Information

Course Title
Philosophy of Language

Subject code	Course Number	Academic Level
PHIL	341	Undergraduate

Course Description
Philosophical analyses of language and meaning across multiple philosophical traditions (e.g. Analytic Philosophy; Continental Philosophy; American Pragmatism; Feminism). Prereq: ENGL 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL345 - Humanity and Environment

Course Information

Course Title
Humanity and Environment

Subject code	Course Number	Academic Level
PHIL	345	Undergraduate

Course Description
Critical examination of the ways in which our understanding of the natural world affects our relationship with it as well as our concepts of human nature and society. Emphasis will be on how knowledge gained through the biological sciences (historically and presently) changes the way we think about ourselves and our place in the natural world. Specific topics include the social impact of evolutionary theory, sociobiology and evolutionary psychology, genetic engineering and aspects of environmental philosophy. Offered periodically. Prereq: COMM 100, ENGL 110 and junior status.

Gateway Stage Labels
Creative Exploration (CE), Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PHIL347 - Phil of City, Tech & Publ Hlth

Course Information

Course Title
Phil of City, Tech & Publ Hlth

Subject code	Course Number	Academic Level
PHIL	347	Undergraduate

Course Description
Examines major philosophical approaches, debates, and intersections between philosophy of the city, philosophy of technology, and public health. Offers tools for a clearer understanding of the competing tensions of city life, technological advancement, and problems of public health that affect the quality of our daily lives. Consideration of a range of perennial and contemporary social, technological, and public health problems.

PHIL351 - Contemporary European Philsphy

Course Information

Course Title
Contemporary European Philsphy

Subject code	Course Number	Academic Level
PHIL	351	Undergraduate

Course Description
A study of the European philosophical traditions of hermeneutics, phenomenology, existentialism and structuralism in their historical context, their relations to contemporary culture, particularly to psychology, literature, theology and political action. Offered periodically.

PHIL361 - Asian Philosophy

Course Information

Course Title
Asian Philosophy

Subject code	Course Number	Academic Level
PHIL	361	Undergraduate

Course Description
A study of significant ideas in the philosophical thought of Asia. Offered periodically.

PHIL373 - Knowledge, Reality & Sci Fict

Course Information

Course Title
Knowledge, Reality & Sci Fict

Subject code	Course Number	Academic Level
PHIL	373	Undergraduate

Course Description
Examines philosophical theories of reality (metaphysics) and knowledge (epistemology). Uses science fiction as a vehicle for exploring these ideas. Offered periodically.

PHIL379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PHIL	379	Undergraduate

Course Description
Experimental

PHIL381 - Global Ethics & Social Justice

Course Information

Course Title
Global Ethics & Social Justice

Subject code	Course Number	Academic Level
PHIL	381	Undergraduate

Course Description
A philosophical examination of ethical issues emergent through globalization. Topics addressed may include wealth and resource distribution in a global economy; environmental crises, disaster, and government responses to them; social justice and social protest movements; philosophies of non-violence; peace studies and global conflict resolution.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL382 - Philosophy of Religion

Course Information

Course Title
Philosophy of Religion

Subject code	Course Number	Academic Level
PHIL	382	Undergraduate

Course Description
An examination of the justifiability of religion and of the nature of the religious experience, especially religious language. Offered infrequently.

PHIL383 - Philosophy of Art

Course Information

Course Title
Philosophy of Art

Subject code	Course Number	Academic Level
PHIL	383	Undergraduate

Course Description
The history of the philosophy of art; an analysis of the aesthetic experience, the aesthetic object and the creative act. Emphasis will be placed on an analysis of the concepts employed in the criticism of literature, painting and music. Offered periodically. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL391 - Gender, Utopia, Human Nature

Course Information

Course Title
Gender, Utopia, Human Nature

Subject code	Course Number	Academic Level
PHIL	391	Undergraduate

Course Description
Utopian thought, from classical philosophy to contemporary science fiction. Shows how different cultures have portrayed gender and gender roles as fixed by human nature or as manifestations of alterable social institutions. Prereq: COMM 100, ENGL 110, junior status and two courses in one area of the social sciences or two courses in philosophy. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PHIL400 - Co-Op Ed Experience in Phil

Course Information

Course Title
Co-Op Ed Experience in Phil

Subject code	Course Number	Academic Level
PHIL	400	Undergraduate

Course Description
Co-Op Ed Experience in Phil

PHIL401 - Philosophy and Neuroscience

Course Information

Course Title
Philosophy and Neuroscience

Subject code	Course Number	Academic Level
PHIL	401	Undergraduate

Course Description
An examination of the inter-relation of philosophy and neuroscience. Our growing knowledge of the brain and nervous system has profound implications for a range of traditional philosophical issues including the nature of consciousness, personal identity, free will, action-theory and ethics/decision-making. Reciprocally, philosophy provides critical and interpretive tools for better understanding the methods and significance of findings in neuroscience. Topics covered in this course include: perception, the self and self-awareness, neuroscience of free will, neuroethics, and the cognitive neuroscience of language.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

PHIL407 - Political and Social Philosphy

Course Information

Course Title
Political and Social Philosphy

Subject code	Course Number	Academic Level
PHIL	407	Undergraduate

Course Description
An examination of political and social philosophies with a view to discovering their relation to present political and social realities. Offered periodically.

PHIL460 - Philosophy of Law & Humn Right

Course Information

Course Title
Philosophy of Law & Humn Right

Subject code	Course Number	Academic Level
PHIL	460	Undergraduate

Course Description
Examines theories and practices related to philosophy of law, including topics in legal studies/legal theory, legal reasoning and deliberation, jurisprudence, and human rights.

PHIL471 - Advanced Seminar in Philosophy

Course Information

Course Title
Advanced Seminar in Philosophy

Subject code	Course Number	Academic Level
PHIL	471	Undergraduate

Course Description
Explores the core philosophical issues concerning theories of truth, knowledge and objective values. Emphasizes the development of the skills of critical reading and writing as well as performing philosophical research. May be taken any number of times for credit. Offered annually. Prereq: ENGL 110 and 3 credits in PHIL at the 200 level or higher or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Course Prerequisites

Type
Prerequisite

Philosophy Credits at the PHIL 200 Level or Higher

Earn at least 3 credits
Or must have permission of instructor.

PHIL479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PHIL	479	Undergraduate

Course Description
Experimental

PHIL498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
PHIL	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section.

PHIL499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
PHIL	499	Undergraduate

Course Description
Departmental Honors

PHIL500 - Co-Op Ed Exp In Phil

Course Information

Course Title
Co-Op Ed Exp In Phil

Subject code	Course Number	Academic Level
PHIL	500	Graduate

Course Description
Co-Op Ed Exp In Phil

SOSC203H - H:Exploratns in Hist of Ideas

Course Information

Course Title
H:Exploratns in Hist of Ideas

Subject code	Course Number	Academic Level
SOSC	203H	Undergraduate

Course Description
Topics in intellectual history, with an emphasis on the development of the “West” and its interactions with other civilizations and cultures. Required of freshman Honors students. Prereq or coreq: member of University Honors College and ENGL110H.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110H or ENGL 110

Complete ANY of the following Courses:

- ENGL110H - Hnrs:Introduction to College Writing
- ENGL110 - Introduction to College Writing

University Honors College Member

Must be a member of University Honors College.

Integrated Studies Department

Integrated Studies is a non-degree certificate program for young adults aged 18-26 with an intellectual disability. The Integrated Studies initiative at Millersville provides students with access to full-time, inclusive postsecondary education and an integrated residential experience. The curriculum immerses each student in undergraduate courses, internships, student employment, student housing and a vibrant campus life of organizations and events. The goals of the program are to provide an opportunity for students to develop and enhance their social, academic, and employment connections, as well as to develop their self-determination and self-advocacy capabilities.

Programs

Integrated Studies

Overview

We are an inclusive post-secondary education initiative for young adults with intellectual disabilities. Our campus community of administration, faculty, staff, and coaches supports each student as they develop a person-centered plan to guide their journey at Millersville University. It is A non-degree certificate program where students audit classes aligned to the learning outcomes in their plan. Students enrolled in Integrated Studies become fully immersed in the Millersville campus by engaging in academics, career exploration, and building relationships. The curriculum immerses each student in undergraduate courses, internships, student employment, student housing and a vibrant campus life of organizations and events. We strive to create inclusive communities where students feel connected, challenged, and supported while participating in a high quality inclusive post-secondary college experience.

For more information, visit https://www.millersville.edu/integratedstudies/index.php.

Latino/a Studies Department

Latino studies is an 18-credit interdisciplinary minor that consists of courses from a wide variety of academic disciplines, including anthropology, sociology, education, geography, history, humanities, mathematics, music, philosophy and Spanish, as well as an introductory and senior-level course in Latino studies. The Latino studies minor will allow students to become conversant with the language, roots, culture, history and socioeconomic perspectives of the rapidly growing Latino population in the United States. Because the program is both multicultural and multidisciplinary, it promotes the holistic liberal arts approach to learning. Courses in the minor will emphasize Latino perspectives, the development of critical thinking as well as written and oral communication skills within this field of study and across other disciplines.

This program will be particularly effective when combined with majors that offer an organic relationship to Latino issues (such as business administration, government and political affairs, history, sociology, social work or education, to name a few). Successful completion of the Latino studies minor will enable graduates to become effective employees, as they take their place in an increasingly diverse workplace.

FACULTY LIST		
Dr. Bertha DeJesus, Coordinator		

Programs

Latino/a Studies Minor

Overview

The purpose of the Latina/o Studies Minor is to teach undergraduate students about Latina/o experiences, cultures, and contributions to the United States. The 18 credit minor offers courses from a variety of disciplines. Spanish fluency is not required.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Latino Studies (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- LAAS201 - Introduction to Latino Studies

AND

Internship or Senior Seminar or Independent Study (3 credits)

Complete at least 1 of the following courses:

- LAAS300 - Co-Op Ed Experience in LATS
- LAAS488 - Latina/o Studies Senior Seminar
- LAAS498 - Ind Stdy:

AND

Race, Culture and Ethnicity Courses (9 credits)

Complete at least 3 of the following courses:

- ANTH336 - Language & Communication
- ANTH344 - Gender, Race, and Class
- GEOG343 - Latin America & the Caribbean
- GOVT361 - Politics of Race and Ethnicity
- HUMN380 - Latino Issues of Identity
- LAAS325 - Afro-Latino Cultural Experiences
- LAAS340 - U.S. - Mexico Border Issues
- LAAS491 - Topics in Latina/o Studies
- SPAN303 - Spanish for Heritage Speakers
- SPAN371 - Spanish in the US

AND

Elective Course (3 credits)

Complete at least 1 of the following courses:

- COMM317 - Intercultural Communication **OR** COMM317H - Hon: Intercultural Communication
- EDUC433 - Gender and Race Issues **OR** EDUC433H - Hnrs:Gender and Race Issues
- HIST283 - Colonial Latin America
- HIST284 - Modern Latin America
- MATH102 - Math in Non-European Cultures
- PHIL407 - Political and Social Philosphy
- PSYC318 - Psychology of Racism **OR** PSYC318H - H:Psychology of Racism
- SOCI216 - Human Population
- SOCI308 - Soc of Afr-Amer and Lat Educ
- SOWK350 - Encounters in Human Diversity **OR** SOWK350H - H:Encounters in Human Diversity
- SPAN201 - Intermediate Spanish 1
- SPAN202 - Intermediate Spanish 2
- SPAN361 - Oral Spanish 1

OR SPAN361H - Hon: Oral Spanish 1

Courses

LAAS179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
LAAS	179	Undergraduate

Course Description
Experimental

LAAS201 - Introduction to Latino Studies

Course Information

Course Title
Introduction to Latino Studies

Subject code	Course Number	Academic Level
LAAS	201	Undergraduate

Course Description
An introductory course designed to study the history, politics, economics and culture of the major Latino groups in the United States: Mexicans, Puerto Ricans, Cubans, Dominicans and Central Americans.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

LAAS300 - Co-Op Ed Experience in LATS

Course Information

Course Title
Co-Op Ed Experience in LATS

Subject code	Course Number	Academic Level
LAAS	300	Undergraduate

Course Description
Allows students to volunteer or work at a Latino/a serving organization.

LAAS325 - Afro-Latino Cultural Experiences

Course Information

Course Title
Afro-Latino Cultural Experiences

Subject code	Course Number	Academic Level
LAAS	325	Undergraduate

Course Description
Critical examination of the complex diversity of experiences among U.S. Latinos, with a specific emphasis on Afro-Latino experiences. Afro-Latinos are Latinos with strong African phenotypic features and whose experiences as both "Black" and "Latino" mark them as distinct from both the larger African American and broader Latino communities, even though Afro-Latinos hold certain connections to both groups. Primary focus will be places on Afro-Latino historical and contemporary experiences, efforts to establish local, national, and transnational recognition, and Afro-Latino struggles against racism within the broader American society and from the larger Latino community.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

LAAS340 - U.S. - Mexico Border Issues

Course Information

Course Title
U.S. - Mexico Border Issues

Subject code	Course Number	Academic Level
LAAS	340	Undergraduate

Course Description
This course provides a multi-disciplinary perspective on issues at the U.S. - Mexico border from the perspectives of sociology, anthropology, geography, art, and political affairs. Women's non-governmental organizations that serve the border region are also discussed.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing
- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech

LAAS379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
LAAS	379	Undergraduate

Course Description
Experimental

LAAS488 - Latina/o Studies Senior Seminar

Course Information

Course Title
Latina/o Studies Senior Seminar

Subject code	Course Number	Academic Level
LAAS	488	Undergraduate

Course Description
Upper-level interdisciplinary study of Latino cultures through readings, attendance at Latinx cultural events, and independent student research. Prerequisites: LAAS 201 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and LAAS201

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- LAAS201 - Introduction to Latino Studies

LAAS491 - Topics in Latina/o Studies

Course Information

Course Title
Topics in Latina/o Studies

Subject code	Course Number	Academic Level
LAAS	491	Undergraduate

Course Description
Investigation of topics related to the cultures, contributions and experiences of Latinas/os living in the United States. Pre/co-requisite of LAAS 201.

Simple Requirements

Course Prerequisite or Corequisite

Type
Prerequisite

LAAS201

Complete ALL of the following Courses:

- LAAS201 - Introduction to Latino Studies

LAAS498 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
LAAS	498	Undergraduate

Course Description
Allows students to pursue an academic area of interest not available through an established course under the guidance and supervision of a faculty member. For further information, see the Special Academic Opportunities section of the catalog, and consult with the director of Latino studies or your adviser.

Library Department

The Library Department offers research support for the Universitycommunity at all levels and across all degree programs and disciplines. Librarians liaise with every department at Millersville University to ensure that students in all classes have the resources and support they need to succeed. Librarians also instruct students in information literacy within classes across all departments and support the broader information literacy needs of the University’s curricula.

Additionally, the Library Department offers numerous ways to support students' self-directed learning. The Curriculum Materials Center supports all student educators with resources including lesson supplies, juvenile literature, and curriculum kits. The Archives & Special Collections supports primary source instruction and research across all departments and degree programs. Numerous research fellowships are offered by the Library Department to support students' academic growth outside of the classroom. Librarians also provide essential research support services including the Ask-A-Librarian service, collections and database management, inter-library loan, and more. The Library Department occasionally offers courses, including both FYEX and LIST courses.

The Library Department was established in 1961 as a professional faculty body, distinct from the now-closed Library Education Department.

Faculty List

Anderson, Scott; Associate Professor University College B.S., Indiana University Bloomington, 1992; M.L.I.S., Indiana University Bloomington, 1994; M.B.A., Pennsylvania State University, 1998
Auger, Kim; Assistant Professor University College B.A., Georgian Court University, 1989; M.L.I.S., Wayne State University, 2017; M.S., Millersville University, 2021
Gold, Melissa; Associate Professor University College B.S., Iowa State University, 2002; M.A., University of Florida, 2005; M.S.L.I.S., University of Illinois Urbana-Champaign, 2009
Higham, Krista; Associate Professor University College B.S, Messiah College, 1992; M.S.L.S., Clarion University, 2006; M.S., Pennsylvania State University, 2011
Pashkova-Balkenhol, Tatiana; Associate Professor University College B.A, Udmurt State University, 1998; M.A, Emporia State University, 2002, M.L.S, Emporia State University, 2003
Santamaría, Michele; Assistant Professor University College B.A, Emory University, 1997; M.Litt., University of St. Andrews (United Kingdom), 1998; M.F.A., University of Oregon, 2000; M.S.L.I.S., Long Island University Post, 2005
Szczyrbak, Greg; Associate Professor University College B.A., Millersville University, 1995; M.S.L.I.S., Drexel University, 2000; M.D.E., University of Maryland University College, 2011.
Thompson, Stephanie; Assistant Professor University College B.S.Ed., Kutztown University, 2001; M.S.L.S., Clarion University, 2003; Ed.D., Liberty University, 2016; M.B.A., Bloomsburg - Commonwealth University, 2025
Vitale, Frank; Assistant Professor University College B.A., Dickinson College, 2016; M.Sc., University of Oxford (United Kingdom), 2018; M.L.I.S., University of Wisconsin Milwaukee, 2021
Weisser, Teresa; Assistant Professor University College B.A., Franklin & Marshall College, 1984; M.S. in I.S., Drexel University, 1986; M.A., Pennsylvania State University, 2003

Courses

LIST221 - Introduction to Archives Administration

Course Information

Course Title
Introduction to Archives Administration

Subject code	Course Number	Academic Level
LIST	221	Undergraduate

Course Description
Survey of theories and practices of managing archives , including personal papers, institutional records, electronic records, and other published and unpublished materials. Topics will include the archival profession, records appraisal and acquisition, arrangement and description, reference and outreach, preservation and disaster planning, and repository management and ethics. Offered occasionally.

Gateway Stage Labels
Technological Competency (TC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete ALL of the following Courses:
- FYEX100 - First Year Seminar

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

LIST223 - Institutional Histories and Legacies

Course Information

Course Title
Institutional Histories and Legacies

Subject code	Course Number	Academic Level
LIST	223	Undergraduate

Course Description
Introduction to institutional history and legacy studies, with a focus on American higher education history. Explores Millersville University's history and that of other universities/ colleges. Training in intermediate information literacy skills including archival research. Offered occasionally in fall/ spring.

Gateway Stage Labels
Information Literacies (IL), Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete ALL of the following Courses:
- FYEX100 - First Year Seminar

Course Prerequisites

Type
Prerequisite

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Management, Marketing and Information Technology Department

The Management, Marketing, and Information Technology Department is one of the largest at MU, with over 400 students enrolled in our core programs including Marketing, Management and Information Technology. We also have fully online degree programs and online degree completion programs, concentrations in Human Resources Management and Cybersecurity, and a certificate in marketing. We offer skills that are sought after by businesses large and small in both the for profit and non-profit sectors. We offer a wide array of courses in the business core curriculum as well as a number of elective courses for business majors, minors and students seeking general electives, or simply greater business knowledge. All of our degrees have a required internship component, allowing our students to build real-world experiences that go hand-in-hand with their coursework and allow them to thrive as they embark on their careers.

Our faculty and numerous adjuncts are experts in their field. You will find them to be accessible, helpful and supportive on your journey toward graduation. We are also accommodating and flexible with our course offerings, by actively offering a variety of courses in the summer and winter terms, and many of our classes are also available online.

FACULTY LIST
Afzali, Farhad; Assistant Professor Lombardo College of Business B.S. (Computer Science), Kardan University (Kabul, Afghanistan), 2010; M.S., University of Nebraska at Omaha, 2016; Ph.D., Ibid., 2022
DiRusso, David; Department Chairperson, Professor Lombardo College of Business B.S., Shippensburg University, 2004; M.B.A., Temple University, 2005; Ph.D., Temple University, 2009
Douglas, Michael; Associate Professor Lombardo College of Business B.S., Kansas State University, 1997; M.B.A, Fontbonne University, 1999; Ph.D., University of South Florida, 2006
Ghoreishi, Minoo; Professor Lombardo College of Business B.S., Tehran College of Insurance, 1975; M.B.A., Oklahoma City University, 1977; Ph.D., University of Arkansas, 1987
Hong, Jong Seok; Assistant Professor Lombardo College of Business B.A., University of Kansas, 2007; M.S., Sogang University (South Korea), 2016; Ph.D., University of Rhode Island, 2021
Hutto, Alexandra; Associate Professor Lombardo College of Business B.A., Northwestern University, 1978; M.B.A., Indiana University, 1980; Ph.D., University of Pittsburgh, 1981
Nandedkar, Ankur; Associate Professor Lombardo College of Business B.S. Rajiv Gandhi University (India), 2003; M.S., University of Texas-Pan American, 2005; Ph.D., University of Texas-Rio Grande Valley, 2011
Wang, Jianfeng; Professor Lombardo College of Business B.S., Shanghai Fudan University (China), 1988; M.S., University of Science and Technology (China), 1999; M.B.A., University of Toledo, 2002; Ph.D., Ibid., 2006

Programs

Cybersecurity Minor

Overview

The Cybersecurity minor provides students with the necessary and durable skills needed to effectively protect personal and organizational information systems and tomorrow's technological threats and risks in the cyber world.

The Cybersecurity minor in the information technology program provides coursework that helps students develop technical skills to identify threats and recognize system vulnerabilities to mitigate cybersecurity risks and respond to cyberattacks. This minor teaches students the risk-management strategies, and how to identify security risks. Students will also learn how to develop communication plans for interacting with businesses and their users when it comes to integrating Cybersecurity plans.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Cybersecurity (19-20 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- ITAN120 - Integrated Information Technology Application Projects
- ITAN350 - Cybersecurity
- ITAN360 - IT Risk Management and Security

AND

Network Concepts, Security and Administration or Computer Networks (4 credits)

Complete at least 1 of the following courses:

- ITAN230 - Network Concepts, Security and Administration
- CMSC395 - Computer Networks

AND

Cybersecurity Elective (3-4 credits)

Complete at least 1 of the following courses:

- ITAN435 - IT Security, Privacy & Ethics
- ITAN465 - Data Analytics in Health Care
- ITAN466 - Ethical Hacking and Penetration Testing
- CMSC415 - Computer and Network Security

Additional Comments:
This minor requires Computer Science courses (CMSC CMSC151 Intro Prog for Data Science I or CMSC161 Introduction to Programming 1) that and with appropriate advising and can be incorporated into the General Education program requirements.

Note: Only 1 CMSC course can be used in fulfillment of the cybersecurity minor.

Information Technology Minor

Overview

Information Technology is the application of technology to solve organizational problems and increase business operation efficiency. Information Technology incorporates the selection, creation, application, communication technologies, integration, and administration of computing devices to meet the organizational needs, individual user demands, and society at large. This program addresses the importance of applied skills and practical experiences in Information Technology by allowing students to gain hands on experiences with fundamental Information Technology topics and get prepared for emerging careers in Information Technology.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Information Technology (19 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (16 credits)

Complete ALL of the following Courses:

- ITAN120 - Integrated Information Technology Application Projects
- ITAN130 - Fundamentals of Information Technology
- ITAN230 - Network Concepts, Security and Administration
- ITAN360 - IT Risk Management and Security

AND

300- or 400- level ITAN Elective (3 credits)

Complete at least 1 course in the following course sets:

- Any 3-level ITAN course(s)
- Any 4-level ITAN course(s)

Management Minor

Overview

The Management Minor is a highly flexible curriculum designed for non-business majors who wish to attain a leadership position in their chosen discipline at some point in their careers and is a popular choice for a wide array of different types of students across MU. It allows for a high degree of high level Management Course options so that students can choose the best set of classes to match their interests.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Management (18 credits)

Type
Completion Requirement

Management Minor Requirements

Fulfill ALL of the following requirements:

Intro to Business (3 credits)

Complete at least 1 of the following courses:

- BUSN101A - Introduction to Business
- BUSN101B - Introduction to Business

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- BUSN251 - Principles of Management
  OR BUSN251H - Hnrs:Principles of Management

AND

Business Electives (12 credits)

Complete at least 4 of the following:

Course Options

Complete ANY of the following Courses:

- BUSN307 - Management Information Systems
- BUSN352 - Human Resource Management
  OR BUSN352H - H:Human Resource Management
- MGMT381 - Data & Information Management
- MGMT405 - Topics in Management

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 35-level MGMT course(s)
- Any 45-level MGMT course(s)
- Any 37-level MGMT course(s)

Choose 4 courses from any of the course options.

Marketing Minor

Overview

The Marketing Minor is for non-business majors who want to learn marketing skills, but without pursuing a full degree option in business and is a popular choice for a variety of different students across MU including but not limited to the following majors: Art/Design, Communications, Psychology and Economics.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Marketing (18 credits)

Type
Completion Requirement

Marketing Minor Requirements

Fulfill ALL of the following requirements:

Intro to Business (3 credits)

Complete at least 1 of the following courses:

- BUSN101A - Introduction to Business
- BUSN101B - Introduction to Business

AND

Required Courses (9 credits)

Complete ALL of the following Courses:

- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing
- MKTG431 - Marketing Research
  OR MKTG431H - Hon: Marketing Research
- MKTG436 - Marketing Strategy

AND

Marketing Electives (6 credits)

Complete at least 2 courses in the following course sets:

- Any 33-level MKTG course(s)
- Any 43-level MKTG course(s)

May also take MKTG405 Topics in Marketing.

Information Technology, B.S.

Overview

The Information Technology (INTE) major at Millersville University helps students to gain comprehensive knowledge in this field with practical hands-on skills crucial to support organizational Information Technology infrastructure and users. Information Technology is the application of technology to solve organizational problems and increase business operation efficiency. Information Technology incorporates the selection, creation, application, communication technologies, integration, and administration of computing devices to meet the organizational needs, individual user demands, and society at large. This program addresses the importance of applied skills and practical experiences in Information Technology by allowing students to gain hands on experiences with fundamental Information Technology topics and get prepared for emerging careers in Information Technology.

Curriculum

Simple Requirements

Major in Information Technology, BS (41-50 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (32 credits)

Complete ALL of the following Courses:

- ITAN120 - Integrated Information Technology Application Projects
- ITAN130 - Fundamentals of Information Technology
- ITAN230 - Network Concepts, Security and Administration
- ITAN240 - The Fundamentals of Web Technology
- ITAN360 - IT Risk Management and Security
- ITAN410 - IT Project Management
- ITAN420 - Fundamentals of Operating Systems Management
- ITAN440 - Human-Computer Interaction

AND

Requirements for Information Technology and General (9-18 credits)

Fulfill ALL of the following requirements:

Interdisciplinary Course Requirements (6 credits)

Earn at least 6 credits from the following:

- COMM225 - Nonprofit Sector Communication
- COMM317 - Intercultural Communication
  OR COMM317H - Hon: Intercultural Communication
- COMM371 - Crisis Emergency & Risk Comm
  OR COMM371H - Hon: Crisis Emergency & Risk Comm
- COMM380 - Digital Media Writing
- COMM390 - Social Media Campaigns
- DESN201 - Understanding Web Design
- DESN247 - Intro to Web, Experience and Interaction Design
- PHIL281 - Bus. & Prof. Ethics
- ECON101 - Principles of Macroeconomics
  OR ECON101H - Hnrs:Principles of Macroeconomics
- BUSN251 - Principles of Management
  OR BUSN251H - Hnrs:Principles of Management

AND

ITAN & CMSC Elective Courses (3-12 credits)

Complete at least 3 of the following courses:

- ITAN255 - Intro to Data Analytics
- ITAN350 - Cybersecurity
- ITAN300 - Co-Op/Internship in INTE
- ITAN400 - Co-Op/Internship INTE
- ITAN425 - Data Explor and Visualization
- ITAN435 - IT Security, Privacy & Ethics
- ITAN489 - Honors Course
- ITAN498 - Independent Study
- ITAN499 - Departmental Honors
- CMSC362 - Data Structures
- CMSC370 - Computer Architecture
- CMSC380 - Operating Systems

OR CMSC380H - Operating Systems (Inactive)
- CMSC395 - Computer Networks
- CMSC415 - Computer and Network Security
- MATH255 - Intro to Data Analytics

ITAN/CMSC Electives can include up to FOUR total credits from ITAN498 Independent Study, ITAN300 Co-Op/Internship in INTE/ITAN400 Co-Op/Internship INTE and ITAN489 Honors Course/ITAN499 Departmental Honors.

Req Related for Information Technology, BS (20-28 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Computer Science (12 credits)

Complete ALL of the following Courses:
- CMSC161 - Introduction to Programming 1 **OR** CMSC151 - Intro to Programming for Data Science I
- CMSC162 - Introduction to Programming 2 **OR** CMSC152 - Intro to Programming for Data Science II
- CMSC366 - Database Systems

AND

Mathematics

Fulfill ALL of the following requirements:

Statistics (G2) (3-4 credits)

Complete at least 1 of the following courses:
- MATH130 - Elements of Statistics 1
- MATH234 - Statistics for Health Sciences
- MATH235 - Survey of Statistics

AND

Required Courses (2 credits)

Complete ALL of the following Courses:
- MATH120 - Logic for Information Technology

AND

Economics (3 credits)

Complete ALL of the following Courses:
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

AND

Recommended Courses (Not Required) (7 credits)

Complete ALL of the following Courses:
- COMM335 - Comm & Emerging Technologies
- MATH151 - Calculus for Management

Information Technology, B.S. - Cybersecurity

Overview

The Cybersecurity Concentration adds to the fundamental topics in Information Technology that ITAN students learn through the program's core requirements, providing students with the necessary and durable skills needed to effectively protect personal and organizational information systems and tomorrow's technological threats and risks in the cyber world.

There is a huge demand in Cybersecurity experts in industry including non-tech companies. Cybersecurity training is the practice of implementing policies, processes, and technologies to protect organizations and their critical information systems and sensitive data from digital attacks.

The Cybersecurity concentration in ITAN program provides training that helps students develop technical skills to identify threats and recognize system vulnerabilities to mitigate cybersecurity risks and respond to cyberattacks. This concentration teaches students the risk-management strategies, and how to identify security risks. Students will also learn how to develop communication plans for interacting with businesses and their users when it comes to integrating Cybersecurity plans. Students will practice methods on how to align Cybersecurity strategies with business operations by the benefit of communication management. As part of risk assessment strategies, the program teaches students how to make prediction of potential problems before they turn into genuine threats.

Curriculum

Simple Requirements

Major in Information Technology, BS (32 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (32 credits)

Complete ALL of the following Courses:

- ITAN120 - Integrated Information Technology Application Projects
- ITAN130 - Fundamentals of Information Technology
- ITAN230 - Network Concepts, Security and Administration
- ITAN240 - The Fundamentals of Web Technology
- ITAN360 - IT Risk Management and Security
- ITAN410 - IT Project Management
- ITAN420 - Fundamentals of Operating Systems Management
- ITAN440 - Human-Computer Interaction

AND

Option in Cybersecurity

See separate block

Option in Cybersecurity (19-21 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Cybersecurity Requirements

Fulfill ALL of the following requirements:

Advanced Computer Networking or Computer Networks (3-4 credits)

Complete at least 1 of the following courses:

- ITAN335 - Advanced Computer Networking
- CMSC395 - Computer Networks

AND

Required Courses (7 credits)

Complete at least 1 of the following courses:

- ITAN350 - Cybersecurity
- ITAN435 - IT Security, Privacy & Ethics

AND

Internship in Cybersecurity (3 credits)

Complete ALL of the following Courses:

- ITAN400 - Co-Op/Internship INTE

AND

Cybersecurity Elective (6-7 credits)

Complete at least 2 of the following courses:

- ITAN425 - Data Explor and Visualization
- ITAN466 - Ethical Hacking and Penetration Testing
- CMSC415 - Computer and Network Security

Req Related for Information Technology, BS (20-21 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Computer Science (12 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1
- CMSC162 - Introduction to Programming 2
- CMSC366 - Database Systems

AND

Mathematics

Fulfill ALL of the following requirements:

Statistics (G2) (3-4 credits)

Complete at least 1 of the following courses:

- MATH130 - Elements of Statistics 1
- MATH234 - Statistics for Health Sciences
- MATH235 - Survey of Statistics

AND

Required Courses (2 credits)

Complete ALL of the following Courses:

- MATH120 - Logic for Information Technology

AND

Economics (3 credits)

Complete ALL of the following Courses:

- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

AND

Recommended Courses (Not Required) (7 credits)

Complete ALL of the following Courses:

- COMM335 - Comm & Emerging Technologies
- MATH151 - Calculus for Management

Management, B.S.

Overview

The Management program at Millersville University equips students for a variety of roles and allows them to enter the business field at a high-level position upon graduation. A BS in Management helps students earn a leadership role in a business or non-profit firm. All organizations require leaders, and our management program teaches the fundamentals of managing resources, hiring, training, and developing teams, as well as creating effective organizational structures. Our management program exposes students to all major functional areas of a business but also will allow you to focus on courses in human resources, entrepreneurship, operations, or leadership based on your individual career goals.

Curriculum

Simple Requirements

Major in Management (63 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Business Foundations Block (9 credits)

Earn a minimum grade of C- in the following:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN202 - Legal Environment of Business

AND

Required Business Courses (24 credits)

Complete ALL of the following Courses:

- BUSN206 - Business Research Methods
- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management
  OR BUSN251H - Hnrs:Principles of Management
- BUSN307 - Management Information Systems
- BUSN341 - Managerial Finance 1
- BUSN352 - Human Resource Management
  OR BUSN352H - H:Human Resource Management
- BUSN358 - Management Science
- BUSN455 - Strategy and Policy

A grade of C- or higher is required in BUSN231 Principles of Marketing (Marketing) and BUSN251 Principles of Management (Management) and and BUSN341 Managerial Finance 1 (Finance) as a pre-requisite for the upper level courses in the respective areas.

AND

Upper Level Management Courses (24 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- MGMT355 - Business, Society, and Ethics
- MGMT357 - International Management
- MGMT452 - Operations and Supply Chain Management
- MGMK300 - Co-Op Ed Exp in Mgmt/ Mktg

AND

Seminar in Business Administration (3 credits)

Complete at least 1 of the following courses:

- BUSN488A - Seminar in Accounting and Finance
- BUSN488B - Seminar in Management and Marketing

AND

Management Electives (credits)

Complete at least 3 of the following:

Course Options

Complete ANY of the following Course Sets:

- Any 35-level MGMT course(s)
- Any 45-level MGMT course(s)
- Any 37-level MGMT course(s)

OR

Additional Course Options

Complete ANY of the following Courses:

- MGMT381 - Data & Information Management
- MGMT405 - Topics in Management

Must total at least 9 credits.

AND

Departmental Electives (6 credits)

Earn at least 6 credits from the following:

- Any ACCT course(s)
- Any BUSN course(s)
- Any FINA course(s)
- Any MGMT course(s)
- Any MKTG course(s)
- Any ACFN course(s)
- Any MGMK course(s)
- Any INTB course(s)
- Any ITAN course(s)

For 'Departmental Electives', you may select any two BUSN courses (including COOP/Internships), or you may also take certain approved non-business elective courses to fill this requirement. View the current list of non-business electives. Declaring a concentration, a second major, or a minor will waive departmental electives.

Note: This requirement may not be satisfied with BUSN 161, BUSN 162, BUSN 202, BUSN 206, BUSN 231, BUSN 251, BUSN 307, BUSN 341, BUSN 352, BUSN 358, or BUSN 455.

Req Related for Management (13-16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C- in the following:

- ECON101 - Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

AND

Data Visualization and Communication (1-4 credits)

Complete at least 1 of the following courses:

- MATH256 - Data Visualization and Communication
- MATH279 - Experimental

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics
- WRIT316 - Business Writing

Management, B.S. - Human Resources Management

Overview

The Human Resource Management (HRM) concentration is designed for students who are pursuing a Management Degree from the Lombardo College of Business. The concentration will prepare them for general management and human resource management careers. In general, positions in the HRM include but are not limited to the employee relations specialists, HR staff, HR directors, staffing managers, compensation and benefits managers, corporate recruiters, and training managers. Students are encouraged to become involved in the Society for Human Resource Management (SHRM) and take SHRM exam for acquiring HR certificate after completing the program and internships. Management majors who seek the concentration will take HRM specific courses instead of general management or business electives, thus keeping the total credit hours required to achieve the Bachelor's of Science in Management the whether students pursue this concentration or not.

Curriculum

Simple Requirements

Major in Management (48 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Business Foundations Block (9 credits)

Earn a minimum grade of C- in the following:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN202 - Legal Environment of Business

AND

Required Business Courses (24 credits)

Complete ALL of the following Courses:

- BUSN206 - Business Research Methods
- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management
- BUSN307 - Management Information Systems
- BUSN341 - Managerial Finance 1
- BUSN352 - Human Resource Management **OR** BUSN352H - H:Human Resource Management
- BUSN358 - Management Science
- BUSN455 - Strategy and Policy

A grade of C- or higher is required in BUSN231 Principles of Marketing (Marketing) and BUSN251 Principles of Management (Management) and and BUSN341 Managerial Finance 1 (Finance) as a pre-requisite for the upper level courses in the respective areas.

AND

Upper Level Management Courses (24 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- MGMT355 - Business, Society, and Ethics
- MGMT357 - International Management
- MGMT452 - Operations and Supply Chain Management
- MGMK300 - Co-Op Ed Exp in Mgmt/ Mktg

AND

Seminar in Business Administration (3 credits)

Complete at least 1 of the following courses:

- BUSN488A - Seminar in Accounting and Finance
- BUSN488B - Seminar in Management and Marketing

AND

Concentration in Human Resource Management

See separate block

Concentration in Human Resource Management (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- MGMT354 - Compensation Management
- MGMT374 - Leadership
  OR MGMT374H - Hon: Leadership
- MGMT353 - Labor-Management Relations
- MGMT454 - Talent Acquisition

AND

Organizational Behavior or Management Skills (3 credits)

Complete at least 1 of the following courses:

- MGMT372 - Organizational Behavior
- MGMT373 - Management Skills

Req Related for Management (13-16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C- in the following:

- ECON101 - Principles of Macroeconomics
- ECON102 - Principles of Microeconomics
  OR ECON102H - Hnrs:Principles of Microeconomics

AND

Data Visualization and Communication (1-4 credits)

Complete at least 1 of the following courses:

- MATH256 - Data Visualization and Communication
- MATH279 - Experimental

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics
- WRIT316 - Business Writing

Marketing, B.S.

Overview

Millersville University's Marketing program produces creative professionals who are well versed in interacting with customers and researching market trends. The marketing program helps students understand how to effectively develop attractive products and services, how to price offerings competitively, and how to stand out from other firms by using cutting edge advertising strategies. Through our courses in consumers behavior, marketing research, marketing strategy and our multiple marketing elective courses, students develop strong communication skills, consumer research ability, and strategic business acumen.

Curriculum

Simple Requirements

Major in Marketing (63 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Business Foundations Block (9 credits)

Earn a minimum grade of C- in the following:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN202 - Legal Environment of Business

AND

Required Business Courses (24 credits)

Complete ALL of the following Courses:

- BUSN206 - Business Research Methods
- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management
- BUSN307 - Management Information Systems
- BUSN341 - Managerial Finance 1
- BUSN352 - Human Resource Management **OR** BUSN352H - H:Human Resource Management
- BUSN358 - Management Science
- BUSN455 - Strategy and Policy

A grade of C- or higher is required in BUSN231 Principles of Marketing (Marketing) and BUSN251 Principles of Management (Management) and and BUSN341 Managerial Finance 1 (Finance) as a pre-requisite for the upper level courses in the respective areas.

AND

Upper Level Marketing Courses (24 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- MKTG332 - Consumer Behavior **OR** MKTG332H - Hon: Consumer Behavior
- MKTG431 - Marketing Research **OR** MKTG431H - Hon: Marketing Research
- MKTG436 - Marketing Strategy
- MGMK300 - Co-Op Ed Exp in Mgmt/ Mktg

AND

Seminar in Business Administration (3 credits)

Complete at least 1 of the following courses:

- BUSN488A - Seminar in Accounting and Finance
- BUSN488B - Seminar in Management and Marketing

AND

Marketing Electives (9 credits)

Complete at least 3 of the following:

Course Options

Complete ANY of the following Courses:

- MKTG405 - Topics in Marketing

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 33-level MKTG course(s)
- Any 43-level MKTG course(s)

Must total 9 credits minimum

AND

Departmental Electives (6 credits)

Earn at least 6 credits from the following:

- Any ACCT course(s)
- Any BUSN course(s)
- Any FINA course(s)
- Any MGMT course(s)
- Any MKTG course(s)
- Any ACFN course(s)
- Any MGMK course(s)
- Any INTB course(s)
- Any ITAN course(s)

For 'Departmental Electives', you may select any two BUSN courses (including COOP/Internships), or you may also take certain approved non-business elective courses to fill this requirement. View the current list of non-business electives. Declaring a concentration, a second major, or a minor will waive departmental electives.

Note: This requirement may not be satisfied with BUSN 161, BUSN 162, BUSN 202, BUSN 206, BUSN 231, BUSN 251, BUSN 307, BUSN 341, BUSN 352, BUSN 358, or BUSN 455.

Req Related for Marketing (13-16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C- in the following:

- ECON101 - Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

AND

Data Visualization and Communication (1-4 credits)

Complete at least 1 of the following courses:

- MATH256 - Data Visualization and Communication
- MATH279 - Experimental

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics
- WRIT316 - Business Writing

Marketing, Sub-Baccalaureate Certificate

Overview

Marketing Certificate (post-associate/pre-baccalaureate). The undergraduate certificate in marketing offers a higher-level credential to students with an associate degree who need additional expertise in marketing to fulfill their career goals.

The undergraduate certificate in marketing offers a higher-level credential to students with an associate degree who need additional expertise in marketing to fulfill their career goals. Through selected courses in consumers behavior, marketing research, marketing strategy and our multiple marketing elective courses, students develop strong communication skills, consumer research ability, and strategic business acumen.

Curriculum

Simple Requirements

Major in Marketing (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing
- MKTG332 - Consumer Behavior
  OR MKTG332H - Hon: Consumer Behavior

AND

Marketing Electives (9 credits)

Complete at least 3 of the following courses:

- MKTG333 - Personal Selling
- MKTG335 - Advertising
- MKTG336 - Retail Marketing
- MKTG337 - Sales Force Administration
- MKTG431 - Marketing Research
  OR MKTG431H - Hon: Marketing Research
- MKTG435 - International Marketing
- MKTG436 - Marketing Strategy

Courses

BUSN101B - Introduction to Business

Course Information

Course Title
Introduction to Business

Subject code	Course Number	Academic Level
BUSN	101B	Undergraduate

Course Description
Introduction of basic business concepts such as institutional setting, organizational structures, decision making, accounting, finance, labor relations, management, marketing and government-business relations. No credit for BUSN majors, except as departmental elective if taken before becoming a BUSN major. Offered in spring, fall.

BUSN206 - Business Research Methods

Course Information

Course Title
Business Research Methods

Subject code	Course Number	Academic Level
BUSN	206	Undergraduate

Course Description
The theory and practice of a number of widely used research techniques as an aid to decision making. Business application will be emphasized with cases and problems from the areas of management, marketing, finance and accounting. Uses computer programs for data analysis, interpretation and presentation of research results. Prereq: MATH 235.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 235

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics

BUSN231 - Principles of Marketing

Course Information

Course Title
Principles of Marketing

Subject code	Course Number	Academic Level
BUSN	231	Undergraduate

Course Description
Explores the role of marketing in the free enterprise system. Defines marketing and its relationship to society. Reviews the controllable elements of the marketing mix: product, place, promotion, and price. Explains marketing concepts and terminology. Applies terminology and concepts to real world problems. Covers basic analytic skills needed to solve marketing problems. Offered in fall, spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM100 or COMM100H

Complete ALL of the following Courses:

- COMM100 - Fundamentals of Speech **OR** COMM100H - Hnrs:Fundamentals of Speech

BUSN231H - H:Principles of Marketing

Course Information

Course Title
H:Principles of Marketing

Subject code	Course Number	Academic Level
BUSN	231H	Undergraduate

Course Description
H:Principles of Marketing

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM100 or COMM100H

Complete ALL of the following Courses:

- COMM100 - Fundamentals of Speech **OR** COMM100H - Hnrs:Fundamentals of Speech

BUSN251 - Principles of Management

Course Information

Course Title
Principles of Management

Subject code	Course Number	Academic Level
BUSN	251	Undergraduate

Course Description
Examines management processes of planning, organizing, leading and controlling and provides basic knowledge of management history, managers roles and functions, environment influences, effective decision making, leadership and team management, ethical and social responsibilities, and current trends in management. Prereq: ENGL110 Or ENGL110H

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Earn a minimum grade of C- in the following:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BUSN251H - Hnrs:Principles of Management

Course Information

Course Title
Hnrs:Principles of Management

Subject code	Course Number	Academic Level
BUSN	251H	Undergraduate

Course Description
Hnrs:Organizatn and Managemnt

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Earn a minimum grade of C- in the following:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BUSN307 - Management Information Systems

Course Information

Course Title
Management Information Systems

Subject code	Course Number	Academic Level
BUSN	307	Undergraduate

Course Description
Technology, application and management of computer-based management information systems. Covers identification of the need for management information, the assignment of resources and establishment of an information system. Includes case studies. Offered in fall, spring. Prereq: BUSN 162, 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 162 and BUSN 251 or BUSN 251H

Complete ALL of the following Courses:

- BUSN162 - Intro to Managerial Accounting
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

BUSN352 - Human Resource Management

Course Information

Course Title
Human Resource Management

Subject code	Course Number	Academic Level
BUSN	352	Undergraduate

Course Description
Survey course familiarizes students with the human resource function. Topics include recruitment, orientation, training, compensation, safety, performance evaluation and labor relations. Offered in fall, spring. Prereq: C- or higher in BUSN 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:

- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

BUSN352H - H:Human Resource Management

Course Information

Course Title
H:Human Resource Management

Subject code	Course Number	Academic Level
BUSN	352H	Undergraduate

Course Description
H:Human Resource Management

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:

- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

BUSN358 - Management Science

Course Information

Course Title
Management Science

Subject code	Course Number	Academic Level
BUSN	358	Undergraduate

Course Description
An introduction to management science techniques in order to facilitate quantitative reasoning as an aid for managerial decision making. Emphasis on developing analytical skills. Decision-making cases and problems presented with the aid of computers. Topics include linear programming (including modeling, computer solution and sensitivity analysis), assignment/transportation/transshipment problems, project management techniques (PERT/CPM), queuing models, simulation, inventory control models, decision theory, analytic hierarchy process (AHP) and Markov processes. Prereq: MATH 235, and BUSN 206 (306).

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 235 and BUSN 206

Complete ALL of the following Courses:

- MATH235 - Survey of Statistics
- BUSN206 - Business Research Methods

BUSN455 - Strategy and Policy

Course Information

Course Title
Strategy and Policy

Subject code	Course Number	Academic Level
BUSN	455	Undergraduate

Course Description
Theory and practice of modern strategic management. Includes strategy formulation, planning, decision techniques, organizational design to implement change and control systems to monitor change. Prereq: BUSN 202, 206, 307, 231, 358, 341, 352 and ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 202 or BUSN 202H and BUSN 206 and BUSN 307 and BUSN 231 or BUSN 231H and BUSN 358 and BUSN 341 and BUSN 352 or BUSN 352H and ENGL 110 or ENGL 110H

Complete ALL of the following Courses:

- BUSN202 - Legal Environment of Business **OR** BUSN202H - Hon: Legal Environment of Business
- BUSN206 - Business Research Methods
- BUSN307 - Management Information Systems
- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN358 - Management Science
- BUSN341 - Managerial Finance 1
- BUSN352 - Human Resource Management **OR** BUSN352H - H:Human Resource Management
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing

BUSN488B - Seminar in Management and Marketing

Course Information

Course Title
Seminar in Management and Marketing

Subject code	Course Number	Academic Level
BUSN	488B	Undergraduate

Course Description
Research on a topic including preparation and critical analysis of a paper. Topic need not be from student's option. Offered in fall, spring. Prereq: ENGL 110 and senior status. Prerequisites will vary.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

FYEX100J - Success in Business

Course Information

Course Title
Success in Business

Subject code	Course Number	Academic Level
FYEX	100J	Undergraduate

Course Description

First-Year Seminar (FYEX) courses are designed to support students' successful transition to university life. These courses use at least one high-impact educational practice to develop and foster skills that will lead to success in college, career, and personal life.
Each seminar focuses on a different topic/theme of strong interest to faculty and students. Student Learning Outcomes A student will be able to 1. Demonstrate autonomy and competence in planning for personal and academic goals. 2. Identify resources and practice strategies to support personal and academic success. 3. Develop effective communication, critical thinking skills and dispositions, and information literacy skills to explore academic content. 4. Recognize the value of diverse perspectives as a citizen of the university community.
Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

INTB321B - Intro to Internationl Business

Course Information

Course Title
Intro to Internationl Business

Subject code	Course Number	Academic Level
INTB	321B	Undergraduate

Course Description
A survey of international business (IB). Introduces major issues, institutions, opportunities, problems and managerial processes unique to international business. Includes micro and macro context, theory, impact of environmental factors on international business operations, and identification and analysis of managerial issues. Course content relates to current events. Offered in fall, spring. Prereq: ECON 101, 102.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ECON101 or ECON101H and ECON102 or ECON102H

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics **OR** ECON102H - Hnrs:Principles of Microeconomics

INTB499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
INTB	499	Undergraduate

Course Description
Departmental Honors

ITAN120 - Integrated Information Technology Application Projects

Course Information

Course Title
Integrated Information Technology Application Projects

Subject code	Course Number	Academic Level
ITAN	120	Undergraduate

Course Description
Introduction to the use of information technology to retrieve, filter, process, classify, sort, and evaluate data and information in a business environment. Developing word processing, spreadsheets, database, scripting, and presentation skills to create integrated projects for business and workplace environments.

Gateway Stage Labels
Technological Competency (TC)

ITAN130 - Fundamentals of Information Technology

Course Information

Course Title
Fundamentals of Information Technology

Subject code	Course Number	Academic Level
ITAN	130	Undergraduate

Course Description
This course provides students with a working knowledge of the terminology, processes, and components associated with information technology. Students will be introduced to the creation, organization, analysis, storage, retrieval, representation, and transmission of data and information as well as work force considerations, and related societal and ethical issues with respect to IT.

Gateway Stage Labels
Technological Competency (TC)

ITAN230 - Network Concepts, Security and Administration

Course Information

Course Title
Network Concepts, Security and Administration

Subject code	Course Number	Academic Level
ITAN	230	Undergraduate

Course Description
An introduction to computer network concepts that includes fundamental protocols and administration. Computer network communications will be discussed including LAN and WAN topologies, protocols and services, such as TCP/IP, and Ethernet, within the context of the OSI Reference Model, multimedia, and content distribution networks. Topics in network management will also be covered, including users/groups, file permissions, system maintenance, and trouble shooting. Network management, packet analyzer, and network simulation tools may be used.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ITAN130 and CMSC161

Complete ALL of the following Courses:
- ITAN130 - Fundamentals of Information Technology
- CMSC161 - Introduction to Programming 1

ITAN240 - The Fundamentals of Web Technology

Course Information

Course Title
The Fundamentals of Web Technology

Subject code	Course Number	Academic Level
ITAN	240	Undergraduate

Course Description
Introduction to web-based information systems that includes the principles and practices of website development process, website project implementation, and evaluation of web-based applications including related software, databases, programming interfaces, and platforms. Security and privacy issues related to web-based information systems are explored. Applications of architectural principles of scalability, reliability, and redundancy in website development are discussed.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC161 and ITAN130

Complete ALL of the following Courses:
- CMSC161 - Introduction to Programming 1
- ITAN130 - Fundamentals of Information Technology

ITAN300 - Co-Op/Internship in INTE

Course Information

Course Title
Co-Op/Internship in INTE

Subject code	Course Number	Academic Level
ITAN	300	Undergraduate

Course Description
Internship in Information Technology

ITAN335 - Advanced Computer Networking

Course Information

Course Title
Advanced Computer Networking

Subject code	Course Number	Academic Level
ITAN	335	Undergraduate

Course Description
This is an advanced-level course on computer networks. This course is the continuation discussion on ITAN 230 Network Concepts. The course has a comprehensive overview on advanced topics in network protocols, and networked systems. This course starts with a brief overview of TCP/IP protocol suite and reference model. The main discussions are fundamentals of network technology, Routing Algorithms, Routing Among the ISPs, Software Defined Networking (SDN), Network Management and SNMP, Error-Detection and Correction Techniques in Link Layer, Link-Layer Addressing and ARP, Virtual Local Area Networks (VLANs), Data Center Networking, Wireless and Mobile Networks, Mobility Management, and Security in Computer Networks. Some Network security topics are discussed such as: Principles of Cryptography, Digital Signatures, End-Point Authentication, Securing E-Mail, Transport Layer Security (TLS), Virtual Private Networks (VPNs), and Firewalls. Prerequisites: ITAN 230

Simple Requirements

Course Prerequisites

Type
Prerequisite

ITAN230

Complete ALL of the following Courses:
- ITAN230 - Network Concepts, Security and Administration

ITAN350 - Cybersecurity

Course Information

Course Title
Cybersecurity

Subject code	Course Number	Academic Level
ITAN	350	Undergraduate

Course Description
Investigate vulnerability of computer networks, systems, and computer applications. Learn methods of mitigation and/or prevention of cybercrime. Attributes of cybercrime such as virus attacks, identity theft, electronic funds transfers, and phishing will be examined along with an introduction to the cybersecurity script programming paradigm.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ITAN230

Complete ALL of the following Courses:
- ITAN230 - Network Concepts, Security and Administration

ITAN360 - IT Risk Management and Security

Course Information

Course Title
IT Risk Management and Security

Subject code	Course Number	Academic Level
ITAN	360	Undergraduate

Course Description
Explores Networking Security from the perspective of risk management to develop strategies to mitigate and manage risks. Focuses on assessment strategies for effective mitigation measures and risk management practices in terms of cybersecurity. Risk Management Fundamentals and Managing Risks as Threats, Vulnerabilities, and Exploits will be covered and methods on how they are applied in cyber security decisions will be investigated.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ITAN230

Complete ALL of the following Courses:

- ITAN230 - Network Concepts, Security and Administration

ITAN365 - Health Care Information Management

Course Information

Course Title
Health Care Information Management

Subject code	Course Number	Academic Level
ITAN	365	Undergraduate

Course Description
Students will apply fundamental skills in information technology to database design, data structures, software applications, and their management functions in health services organizations. Techniques in database design and management in the health care system will be discussed.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC366 and NURS310 and NURS312

Complete ALL of the following Courses:

- CMSC366 - Database Systems
- NURS310 - Health Issues from a Population Health Perspective
- NURS312 - Value-Based Care

ITAN400 - Co-Op/Internship INTE

Course Information

Course Title
Co-Op/Internship INTE

Subject code	Course Number	Academic Level
ITAN	400	Undergraduate

Course Description
Internship in Information Technology

ITAN410 - IT Project Management

Course Information

Course Title
IT Project Management

Subject code	Course Number	Academic Level
ITAN	410	Undergraduate

Course Description
This course covers technical and behavioral aspects of the successful management of information systems developments. Topics include needs identification, system project manager and team, system project organizations, project communications, system project planning, scheduling, control, associated costs, and using project management software tools. Examples of IT project management process will be explored for different industry lines with respect to system development activities and System Development Life Cycle. ITAN 360 is recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ITAN360

Complete ALL of the following Courses:
- ITAN360 - IT Risk Management and Security

ITAN420 - Fundamentals of Operating Systems Management

Course Information

Course Title
Fundamentals of Operating Systems Management

Subject code	Course Number	Academic Level
ITAN	420	Undergraduate

Course Description
This is an introduction to the foundational principles of operating systems. Topics include system management in memory, processor, process and thread mechanics, devices, network, file and directory, graphical and command line user interfaces. Essentials for effective administration and maintenance of an operating system and its services will be discussed. In addition, students will learn to install, manage, and secure an operating system.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC162 and ITAN230

Complete ALL of the following Courses:
- CMSC162 - Introduction to Programming 2
- ITAN230 - Network Concepts, Security and Administration

ITAN425 - Data Explor and Visualization

Course Information

Course Title
Data Explor and Visualization

Subject code	Course Number	Academic Level
ITAN	425	Undergraduate

Course Description
Students will learn dataset elements, data collection, representation and querying techniques, visual variables and statistical tools for graphing, and preparation of data for further analysis, with emphasis on issues related to healthcare. Students will also be introduced to data science tools and related coding techniques.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC366

Complete ALL of the following Courses:
- CMSC366 - Database Systems

ITAN435 - IT Security, Privacy & Ethics

Course Information

Course Title
IT Security, Privacy & Ethics

Subject code	Course Number	Academic Level
ITAN	435	Undergraduate

Course Description
Examination of information technology security and privacy issues in the context of law and ethics. This course explores the civil and common law issues that apply to information technology. The course studies jurisdictional, statutes, and constitutional issues related to cybercrime and privacy issues in the information age.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ITAN230

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- ITAN230 - Network Concepts, Security and Administration

ITAN440 - Human-Computer Interaction

Course Information

Course Title
Human-Computer Interaction

Subject code	Course Number	Academic Level
ITAN	440	Undergraduate

Course Description
This course studies the effective and productive information systems, including interactive computer systems, input and output devices, screen layouts, machine design, health issues, organizational impacts, and access for people with disabilities. Topics include interaction system design, conceptualizing interaction, cognitive aspect of users, social interaction, emotional interaction with systems, and interfaces. The process of designing user-friendly interfaces will be discussed including data gathering, data analysis, interpretation, and presentation.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ITAN410 or CMSC362

Complete ANY of the following Courses:
- ITAN410 - IT Project Management
- CMSC362 - Data Structures

ITAN465 - Data Analytics in Health Care

Course Information

Course Title
Data Analytics in Health Care

Subject code	Course Number	Academic Level
ITAN	465	Undergraduate

Course Description
An introduction into the uses of data analytics in population health practices and their administration. Students will explore the development of validated predictive analytics and their application in clinical interventions. The intersection of data analytics with ethics will also be discussed.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ITAN365

Complete ALL of the following Courses:
- ITAN365 - Health Care Information Management

ITAN466 - Ethical Hacking and Penetration Testing

Course Information

Course Title
Ethical Hacking and Penetration Testing

Subject code	Course Number	Academic Level
ITAN	466	Undergraduate

Course Description
Discussion of advanced topics in Cybersecurity, such as security testing, system defense, and countermeasures. The implications of information security vulnerabilities in systems, networks, and applications are explored. Students will be able to identify solutions before adversaries exploit the flaws. In this course, students discover techniques that attackers use to compromise network and systems security. Demonstrating how an adversary could hack into systems by simulate a hack of systems to uncover and exploit vulnerabilities in an isolated penetration test computer laboratory. The course offers learning on how to protect network and systems through hands-on lab activities utilizing the tools and methods that intruders use. Methods of security assessments for the strength of the organizational cybersecurity posture are discussed. Additional topics include firewall and intrusion detection system exploration, denial of service attack issues, Internet security mechanisms, spoofing, session hijacking, and sniffers.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ITAN335 and ITAN350

Complete ALL of the following Courses:

- ITAN335 - Advanced Computer Networking
- ITAN350 - Cybersecurity

ITAN489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
ITAN	489	Undergraduate

Course Description
Honors Course Information Technology

ITAN498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
ITAN	498	Undergraduate

ITAN499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
ITAN	499	Undergraduate

Course Description
Departmental Honors Thesis Course

MGMK300 - Co-Op Ed Exp in Mgmt/Mktg

Course Information

Course Title
Co-Op Ed Exp in Mgmt/Mktg

Subject code	Course Number	Academic Level
MGMK	300	Undergraduate

Course Description
Cooperative Education in Management and/or Marketing

MGMK400 - Co-Op Ed Exp in Mgmt/Mktg

Course Information

Course Title
Co-Op Ed Exp in Mgmt/Mktg

Subject code	Course Number	Academic Level
MGMK	400	Undergraduate

Course Description
Cooperative Education Experience in Management/ Marketing

MGMK500 - Co-Op Ed Exp in Mgmt/Mktg

Course Information

Course Title
Co-Op Ed Exp in Mgmt/Mktg

Subject code	Course Number	Academic Level
MGMK	500	Graduate

Course Description
Cooperative Education Experience in Management/ Marketing

MGMK489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
MGMK	489	Undergraduate

Course Description
Honors Course

MGMT179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MGMT	179	Undergraduate

Course Description
Experimental Course in Management

MGMK498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
MGMK	498	Undergraduate

Course Description
Independent Study. See catalog or department for eligibility and registration information.

MGMT279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MGMT	279	Undergraduate

Course Description
Experimental Course in Management

MGMT351 - Organization Theory & Design

Course Information

Course Title
Organization Theory & Design

Subject code	Course Number	Academic Level
MGMT	351	Undergraduate

Course Description
Introduction of the perspective of business as a system dedicated to the reduction of uncertainties. Focus is on determining strategy and building a structure that supports organizational effectiveness. Factors considered include the external environment, interorganizational relationships, globalization, internal technologies and control systems, organizational life cycle, cultural and ethical values, innovation, and change management. Prereq: C- or higher in BUSN 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:

- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT353 - Labor-Management Relations

Course Information

Course Title
Labor-Management Relations

Subject code	Course Number	Academic Level
MGMT	353	Undergraduate

Course Description
Course covers roles of management and labor unions using an analytical framework for labor relations problems, contract negotiations and administration. Offered periodically. Prereq: C- or higher in BUSN 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:

- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT354 - Compensation Management

Course Information

Course Title
Compensation Management

Subject code	Course Number	Academic Level
MGMT	354	Undergraduate

Course Description
Specific focus on methods for determining wages. Salaries, incentive payments, point classification and factor comparison systems are discussed in detail. Management of benefits, including hospitalization, major medical, life insurance, long-term disability and pension administration is emphasized. Offered periodically. Prereq: BUSN 352.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 352 or BUSN 352H

Complete ANY of the following Courses:

- BUSN352 - Human Resource Management
- BUSN352H - H:Human Resource Management

MGMT355 - Business, Society, and Ethics

Course Information

Course Title
Business, Society, and Ethics

Subject code	Course Number	Academic Level
MGMT	355	Undergraduate

Course Description
Relationships between economic decision-makers (business) and the various interests affected by their decisions (society). Emphasis on the ethical dimensions of decision making in business. Specific issues include cultural relativism, social and economic justice, private property and the choice of an economic system, corporate social responsibility, acceptable risks for consumers, acceptable risks to the environment, affirmative action and reverse discrimination, sexual harassment and comparable worth, disclosing and concealing information in sales, insider trading and whistleblowing. Offered in fall, spring.

Simple Requirements

Untitled Requirement

Type
Prerequisite

Complete ALL of the following :
Junior Status

Complete ALL of the following :

MGMT356 - Entrepreneurial Management

Course Information

Course Title
Entrepreneurial Management

Subject code	Course Number	Academic Level
MGMT	356	Undergraduate

Course Description
Managing a new venture while continually juggling vital issues such as: mission and values statement; goals and objectives; growth strategy; people and resources; organizational capabilities; financing strategy; vision of success. The course addresses differences between Entrepreneurial Management and Corporate Management. Prereq: BUSN 231 and C- or better in BUSN 251

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 231 or BUSN 231H

Complete ANY of the following Courses:
- BUSN231 - Principles of Marketing
- BUSN231H - H:Principles of Marketing

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT357 - International Management

Course Information

Course Title
International Management

Subject code	Course Number	Academic Level
MGMT	357	Undergraduate

Course Description
Examination of management challenges associated with developing strategies and managing operations of firms whose activities extend across national boundaries. Theoretical, institutional, and case analysis of major issues, including the impact of international codes and organizations on corporate policies, the effect of government policies, techniques for assessing foreign environments, and strategies for managing international business operations are covered. Prereq: C- or higher in BUSN 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT371 - Principles of Entrepreneurship

Course Information

Course Title
Principles of Entrepreneurship

Subject code	Course Number	Academic Level
MGMT	371	Undergraduate

Course Description
Introduction to the process of turning an idea into a successful start-up business. The entrepreneurial mind-set, initiating ventures, developing the plan through understanding legal, marketing, and financial challenges, strategic growth, valuation of the enterprise, and harvesting the enterprise are studied within the context of the entrepreneurial process. Pre-req: C- or better in BUSN 231 and 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 231 or BUSN 231H and BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:

- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT372 - Organizational Behavior

Course Information

Course Title
Organizational Behavior

Subject code	Course Number	Academic Level
MGMT	372	Undergraduate

Course Description
Examines individual, group, and organizational-level behavioral and social science theories and applies those theories to managing human behavior in diverse organizations operating in a global business environment. Topics include personality, values, perception, motivation, teams, leadership, conflict resolution, communication, organizational culture, and change management. Pre-req: C- or better in BUSN 251

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:

- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT373 - Management Skills

Course Information

Course Title
Management Skills

Subject code	Course Number	Academic Level
MGMT	373	Undergraduate

Course Description
Focuses on developing business and interpersonal skills through engaging in activities designed to assess, practice, and improve various skill areas such as time management, teamwork, stress management, coaching and counseling, creativity, conflict management, problem solving, critical thinking, and motivating others. Students will be expected to demonstrate skills during semester activities. Prereq: C- or higher in BUSN 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:

- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT374 - Leadership

Course Information

Course Title
Leadership

Subject code	Course Number	Academic Level
MGMT	374	Undergraduate

Course Description
Examines various concepts related to leadership. Topics include trait, contingency, and behavioral approaches to leadership; values and ethics, diversity, motivation, power, and multiculturalism in leadership etc. The emphasis will be on learning and application of behaviors that are critical to effective leadership. Prereq: C- or higher in BUSN 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:

- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT374H - Hon: Leadership

Course Information

Course Title
Hon: Leadership

Subject code	Course Number	Academic Level
MGMT	374H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:

- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT375 - Business Web Development

Course Information

Course Title
Business Web Development

Subject code	Course Number	Academic Level
MGMT	375	Undergraduate

Course Description
Prepares individuals to plan, manage, supervise, and market electronic business operations, products, and services provided online via the Internet. Builds skills to develop a modern business website using technologies such as HTML, CSS and JavaScript. Includes coverage of web client-server architecture, security, performance issues, monetization, website promotion, database integration through server-side scripting and commercial deployment. The course supports Entrepreneurial and Small Business Operations. Offered periodically. Prereq: BUSN 307

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 307

Complete ALL of the following Courses:

- BUSN307 - Management Information Systems

MGMT379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MGMT	379	Undergraduate

Course Description
Experimental Course in Management

MGMT381 - Data & Information Management

Course Information

Course Title
Data & Information Management

Subject code	Course Number	Academic Level
MGMT	381	Undergraduate

Course Description
Builds on the core concepts of data and information management. It is centered around the core skills of identifying organizational information requirements, modeling them using conceptual data modeling techniques, converting the conceptual data models into relational data models and verifying its structural characteristics with normalization techniques, and implementing and utilizing a relational database using an industrial-strength database management system. Includes coverage of basic database administration tasks. In addition to developing database applications, the course helps the students understand how large-scale packaged systems are highly dependent on the use of DBMSs. Building on the transactional database understanding, the course also provides an introduction to data and information management technologies that provide decision support capabilities under the broad business intelligence umbrella. Prereq: BUSN 307

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 307

Complete ALL of the following Courses:

- BUSN307 - Management Information Systems

MGMT405 - Topics in Management

Course Information

Course Title
Topics in Management

Subject code	Course Number	Academic Level
MGMT	405	Undergraduate

Course Description
Advanced, innovative, or exploratory topics and disciplines within management. Specific content items developed by instructor. Most topics will be for business majors only. Offered periodically. Prerequisites may vary. Consult the current course offering.

MGMT452 - Operations and Supply Chain Management

Course Information

Course Title
Operations and Supply Chain Management

Subject code	Course Number	Academic Level
MGMT	452	Undergraduate

Course Description
Survey of basic principles, concepts and techniques of operations management applicable to manufacturing as well as service organizations. Examines positioning, design and operating decisions and their interrelationships in the context of the overall competitive strategy of the firm. Explores current trends and innovations in operations management theory and practice. Topics include operations strategy, quality control/TQM, product/service design, capacity planning, process design, facility layout, design of work systems, location planning, supply chain management, inventory control, MRP/ERP, just-in-time systems, scheduling and project management. Prereq: MATH 130 or 235 and C- or higher in BUSN 251.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 130 or MATH 235

Complete ANY of the following Courses:
- MATH130 - Elements of Statistics 1
- MATH235 - Survey of Statistics

BUSN 251 or BUSN 251H

Earn a minimum grade of C- in the following:
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT453 - Supply Chain Logistics Mgmnt

Course Information

Course Title
Supply Chain Logistics Mgmnt

Subject code	Course Number	Academic Level
MGMT	453	Undergraduate

Course Description
Study of the forward and reverse logistics supply chain management and arising globalization and sustainability challenges. Topics include strategic design of supply chain; management and control of flow and storage of products, services, and information from suppliers to consumers; and effective management of the reverse flow of returns, buybacks and end-of-life products to recapture value through refurbishing, remanufacturing, recycling, or proper disposal. Identification and analysis of emerging managerial issues in meeting complex mandated and competitive requirements of lean and green logistics systems. Prereq: MATH 235 and BUSN 231 (C- or higher) or BUSN 251 (C- or higher).

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 235

Complete ALL of the following Courses:
- MATH235 - Survey of Statistics

BUSN 231 or BUSN 231H or BUSN 251 or BUSN 251H

Earn a minimum grade of B- in the following:
- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management

MGMT454 - Talent Acquisition

Course Information

Course Title
Talent Acquisition

Subject code	Course Number	Academic Level
MGMT	454	Undergraduate

Course Description
Focused on providing a detailed understanding of the staffing process in organizations. The role of staffers is analyzed; major trends and the legal framework associated with staffing process is highlighted. Topics include: staffing strategies, strategic job analysis and competency modeling, forecasting, measurement, interviewing techniques etc.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN352 or BUSN352H

Complete ANY of the following Courses:

- BUSN352 - Human Resource Management
- BUSN352H - H:Human Resource Management

MGMT479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MGMT	479	Undergraduate

Course Description
Experimental Course in Management

MGMT499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
MGMT	499	Undergraduate

Course Description
Departmental Honors

MGMT605 - Business and Its Environment

Course Information

Course Title
Business and Its Environment

Subject code	Course Number	Academic Level
MGMT	605	Graduate

Course Description
Business and Its Environment

MGMT650 - The Management Process

Course Information

Course Title
The Management Process

Subject code	Course Number	Academic Level
MGMT	650	Graduate

Course Description
The Management Process

MGMT653 - Operations Management

Course Information

Course Title
Operations Management

Subject code	Course Number	Academic Level
MGMT	653	Graduate

Course Description
Examines positioning, design and operating decisions and their interrelationships in the context of the overall competitive strategy of the firm. The international dimensions of operations management, as well as the relationships of operations management to other functional areas are stressed. Topics include operations strategy, quality management, product and service design, process design, capacity planning, facilities layout, design of work systems, location planning, total quality control, aggregate planning, independent demand inventory system, push and pull systems, enterprise resources planning, supply chain management, and scheduling.

MGMT670 - Strategy and Policy

Course Information

Course Title
Strategy and Policy

Subject code	Course Number	Academic Level
MGMT	670	Graduate

Course Description
Capstone seminar in the formulation and administration of organizational planning and policy. The student is expected to utilize integrate, and apply the theories, concepts, principles and techniques relevant to business problems and situations. Uses case studies, course projects, library research, field research, group decision making, role-playing, simulations and other strategic planning and management process exercises. Emphasizes the global nature of business and utilizes technology to coordinate the activities of the group efforts. Prereq: Demonstrated proficiency in general business concepts at the introductory level through job experiences or coursework.

MKTG179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MKTG	179	Undergraduate

Course Description
Experimental Course in Marketing

MKTG279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MKTG	279	Undergraduate

Course Description
Experimental Course in Marketing

MKTG332 - Consumer Behavior

Course Information

Course Title
Consumer Behavior

Subject code	Course Number	Academic Level
MKTG	332	Undergraduate

Course Description
Analysis of individual and collective consumer behavior patterns both within and outside the marketplace through theoretical model building and empirical research findings. Emphasis on the role of consumer research in identifying, planning, implementing and evaluating both short-term and long-term marketing strategies. Offered annually. Prereq: C- or higher in BUSN 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 231 or BUSN 231H

Earn a minimum grade of C- in the following:

- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing

MKTG332H - Hon: Consumer Behavior

Course Information

Course Title
Hon: Consumer Behavior

Subject code	Course Number	Academic Level
MKTG	332H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 231 or BUSN 231H

Earn a minimum grade of C- in the following:

- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing

MKTG333 - Personal Selling

Course Information

Course Title
Personal Selling

Subject code	Course Number	Academic Level
MKTG	333	Undergraduate

Course Description
Covers skills and knowledge required of sales representatives to understand customers' needs and make effective presentations. Includes prospecting and contacting customers, making presentations, handling objections, closing the sale and developing long-term relationships. Emphasis on individual role-play and group presentations. Offered annually. Prereq: C- or higher in BUSN 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 231 or BUSN 231H

Earn a minimum grade of C- in the following:

- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing

MKTG335 - Advertising

Course Information

Course Title
Advertising

Subject code	Course Number	Academic Level
MKTG	335	Undergraduate

Course Description
Economic and social roles of advertising in a contemporary business setting. Emphasis on the creation, development, implementation and evaluation of advertising campaigns through the analysis of creative processes, managerial techniques, media resources, budgeting methods and the concept of social responsibility. Offered annually. Prereq: C- or higher in BUSN 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 231 or BUSN 231H

Earn a minimum grade of C- in the following:

- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing

MKTG336 - Retail Marketing

Course Information

Course Title
Retail Marketing

Subject code	Course Number	Academic Level
MKTG	336	Undergraduate

Course Description
The role of retail institutions in the marketing system. Emphasis on strategy development in the retailing context. Offered infrequently. Prereq: C- or higher in BUSN 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN231 or BUSN231H

Complete ANY of the following Courses:
- BUSN231 - Principles of Marketing
- BUSN231H - H:Principles of Marketing

MKTG337 - Sales Force Administration

Course Information

Course Title
Sales Force Administration

Subject code	Course Number	Academic Level
MKTG	337	Undergraduate

Course Description
Planning, direction and control of the sales force. Includes recruiting, selecting, training, supervising, compensating, motivating and evaluating sales representatives. Emphasis on acquisition of basic sales and managerial skills. Offered annually. Prereq: C- or higher in BUSN 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 231 or BUSN 231H

Earn a minimum grade of C- in the following:
- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing

MKTG379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MKTG	379	Undergraduate

Course Description
Experimental Course in Marketing

MKTG405 - Topics in Marketing

Course Information

Course Title
Topics in Marketing

Subject code	Course Number	Academic Level
MKTG	405	Undergraduate

Course Description
Advanced, innovative, or exploratory topics and disciplines within marketing. Specific content items developed by instructor. Most topics will be for business majors only. Offered periodically. Prerequisites may vary. Consult the current course offering.

MKTG431 - Marketing Research

Course Information

Course Title
Marketing Research

Subject code	Course Number	Academic Level
MKTG	431	Undergraduate

Course Description
Research theory and techniques used in marketing activities. Stresses formulation of research objectives, instrument design, sample selection, data collection, statistical analysis, computer applications and report writing for managerial use. Offered fall, spring. Prereq: MATH 235, C- or higher in BUSN 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 235

Complete ALL of the following Courses:
- MATH235 - Survey of Statistics

BUSN 231 or BUSN 231H

Earn a minimum grade of C- in the following:
- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing

MKTG431H - Hon: Marketing Research

Course Information

Course Title
Hon: Marketing Research

Subject code	Course Number	Academic Level
MKTG	431H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 235

Complete ALL of the following Courses:
- MATH235 - Survey of Statistics

BUSN 231 or BUSN 231H

Earn a minimum grade of C- in the following:
- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing

MKTG435 - International Marketing

Course Information

Course Title
International Marketing

Subject code	Course Number	Academic Level
MKTG	435	Undergraduate

Course Description
The development of marketing strategy for entering and competing with businesses in foreign countries. Uniqueness of foreign markets and their impact on the marketing manager's decision-making processes are examined. Offered annually. Prereq: C- or higher in BUSN 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BUSN 231 or BUSN 231H

Earn a minimum grade of C- in the following:

- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing

MKTG436 - Marketing Strategy

Course Information

Course Title
Marketing Strategy

Subject code	Course Number	Academic Level
MKTG	436	Undergraduate

Course Description
Analysis of opportunities and problems confronting the marketing manager in decision making. Includes market segmentation, target marketing, positioning, market research, product life cycle strategies, marketing mix implementation and social responsibility. Emphasis on case analysis to bridge the gap between marketing theory and application. Offered annually. Prereq: MKTG (Formerly BUSN) 431 and 90 credits (Senior Standing).

Simple Requirements

Course Prerequisites

Type
Prerequisite

MKTG 431 or MKTG 431H

Complete ANY of the following Courses:

- MKTG431 - Marketing Research
- MKTG431H - Hon: Marketing Research

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

MKTG479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MKTG	479	Undergraduate

Course Description
Experimental Course in Marketing

MKTG499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
MKTG	499	Undergraduate

Course Description
Departmental Honors

Math and Physics Department

Mathematics offers three baccalaureate-degree programs with a major in mathematics. It also offers minors in mathematics and statistics.

The recommended course sequences in the three mathematics programs are virtually identical through the first two years. The Bachelor of Arts (B.A.) degree program in mathematics is a flexible curriculum designed to accommodate the widest possible range of career objectives. It is structured according to the traditional liberal arts approach to college education. The second semester of a foreign language is required in the B.A. program. The Bachelor of Science (B.S.) degree program is more specifically applications oriented. With more required courses in mathematical analysis and science, it is somewhat less flexible than the B.A. program. The Bachelor of Science in Education (B.S.Ed.) degree program is the degree and certification degree program for prospective secondary teachers of mathematics. In addition to having mathematics course requirements comparable to those of the two other programs, the B.S.Ed. requires appropriate educational methods courses.

Mathematics majors may elect an option in actuarial science, applied mathematics or statistics designed to prepare students for careers in these applied fields.

For admission as a major in mathematics, a student is expected to have a sound preparation in high school academic mathematics: algebra I and II, plane geometry and precalculus (trigonometry and analytic geometry). Such students normally begin their mathematics sequence with Calculus I. Students who have completed a calculus course in high school are encouraged to take the College Board Advanced Placement Exam and have their score sent to Millersville University for evaluation. University credit for first year-level mathematics courses may be offered to students with scores of 3 or higher. For further information, see Advanced Placement Examinations in the Admissions section.

In an effort to ensure that each student is properly placed, the department administers mathematics placement assessments. For more information, see the Academic Requirements: Proficiency Requirements section.

The cooperative education program allows students valuable experience in a full-time or part-time professional position related to their career goals, adding practical relevance to their program of study as well as significant financial remuneration. This often leads to full-time employment after graduation. Students may elect one or more cooperative education experiences.

Physics offers several programs leading to the baccalaureate degree with a major in physics. The course structure recommended by the department is essentially identical during the first two years of all programs so that a revision in a student's plan need not involve any loss of time.

The Bachelor of Science degree in physics involves the greatest depth in physics and mathematics. This program prepares the student for employment in a technical position upon graduation and also provides a solid foundation for entrance into a graduate program in physics or other technical field.

The B.S. Ed. program in secondary education prepares students for careers in precollege teaching, providing certification in physics.

Outstanding students majoring in physics may pursue departmental honors during their senior year. Participation in the departmental honors program is highly selective and offers students in each of our major programs an opportunity to strengthen their background in physics and to work closely with a faculty mentor on an extended research project. General information on departmental honors is found in the Special Academic Opportunities section of this catalog. Specific requirements for honors in each of our major programs are available from the department chairperson.

Two minor programs are also available for students who do not elect to major in physics. The physics minor offers students an exposure to physics through the intermediate level of our major program. In addition, there is also available an interdisciplinary minor in physics and earth sciences.

The department has prepared a student handbook which provides more detailed information on our programs, faculty and resources. This handbook, as well as additional information on any of the above programs, is available from the department.

FACULTY LIST
Buchanan, J; Professor College of Science and Technology B.S., Davidson College, 1983; M.S., North Carolina State University, 1985; Ph.D., Ibid., 1993
Cardwell, Antonia; Associate Professor College of Science and Technology B.S., University of the Witwatersrand (Johannesburg), 1998; M.A., Kent State University, 2001; Ph.D., Ibid., 2005
Dever, Lindsay; Assistant Professor College of Science and Technology B.S., The College of New Jersey, 2015; M.A., Bryn Mawr College, 2019; Ph.D., Bryn Mawr College, 2022
Garber, Diana; Instructor College of Science and Technology B.A., Millersville University, 1991; M.Ed., Ibid., 1997
Gilani, Tariq; Professor College of Science and Technology B.Sc., University of the Punjab (Pakistan), 1986; M.Sc., Ibid., 1989; M.S., Quaid-i-Azam University (Pakistan), 1991; Ph.D., Kyoto University (Japan), 1997
Goksu, Mehmet; Professor College of Science and Technology B.S., Istanbul Technical University (Turkey), 1991; Ph.D., Case Western Reserve University, 2002
Han, Zhigang; Associate Professor College of Science and Technology B.A., Fudan University (China), 1997; Ph.D., Stony Brook University, 2006
Heitmann, Noel; Associate Professor College of Science and Technology B.S., The Pennsylvania State University, 1989; B.S., University of Pittsburgh, 1996; M.A., Ibid., 1998; Ph.D., Ibid., 2003
Hendrick, Sean; Associate Professor College of Science and Technology B.A., University of Virginia, 1994; Ph.D., North Carolina State University, 2003
Li, Xin; Physics Program Coordinator, Associate Professor College of Science and Technology B.Sc., Beijing Institute of Tech., 2006; M.S., Ibid., 2008, M.S., Mississippi State University, 2008; M.S., Ibid., 2011; Ph.D., Ibid., 2010
Ma, Baoling; Associate Professor College of Science and Technology B.S., Ocean University of China, 2007; Ph.D., University of Louisiana-Lafayette, 2012
Mikula, Richard; Professor College of Science and Technology B.S., Temple University, 1998; Ph.D., Rutgers, The State University of New Jersey, 2006
Moss, Erin; Professor College of Science and Technology B.A., University of North Carolina at Asheville, 2001; M.S., University of Connecticut, 2003; Ph.D., Purdue University, 2009
Reinfried, Shawn; Physics Lab Technician College of Science and Technology B.S. Millersville University

FACULTY LIST
Robinson, Kevin; Associate Professor College of Science and Technology B.A., Messiah College, 1993; M.S., University of Florida, 1995; Ph.D., Ibid., 2000
Stewart, Patrick; Associate Professor College of Science and Technology B.S., Marshall University, 2011; M.A., Ibid., 2014; M.S., Virginia Polytechnic Institute and State University, 2015; Ph.D., Bowling Green State University, 2020
Taylor, Cynthia; Professor College of Science and Technology B.S., Indiana University of Pennsylvania, 1988; M.S., Rensselaer Polytechnic Institute, 2002; Ph.D., University of Missouri, 2011
Uy, Zenaida; Professor College of Science and Technology B.S., University of the Philippines, 1964; M.A., State University of New York at Stony Brook, 1969; Ph.D., Ibid., 1972
Washington, H. Tyrone; Department Chairperson, Associate Professor College of Science and Technology B.S., Fayetteville State University, 1998; M.S., North Carolina State University, 2001; Ph.D., Ibid., 2012
Wismer, Michael; Assistant Professor College of Science and Technology B.A., Messiah College, 1987; M.A., West Chester University, 1991; Ph.D., University of Delaware, 1997
Zhan, Mingquan; Professor College of Science and Technology B.S., Nanjing Normal University, 1990; M.S., Ibid., 1997; Ph.D., West Virginia University, 2003

Programs

Mathematics Post-Baccalaureate Certificate

Overview

For post-baccalaureate information please see the "Post-Bacc Teacher Certification"section of the Graduate Course Catalog.

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Course Requirements for APS: Foundations Courses (6 credits)

Complete at least 1 of the following:

Option 1. Foundations Graduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Major in Mathematics, Post-Baccalaureate Cert (41-44)

Type
Completion Requirement

Requirements

Credits Required for Major

Minimum GPA

Earn a minimum GPA of 2.0

Required Mathematics Courses

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
- MATH211 - Calculus 2
- MATH311 - Calculus 3

AND

History of Mathematics (3 credits)

Complete at least 1 of the following:

Option 1

Earn a minimum grade of C- in the following:

- MATH301 - History of Mathematics

OR

Option 2

Earn a minimum grade of C- in the following:

- MATH603 - History of Mathematics

AND

Intro Math Proof (3 credits)

Complete at least 1 of the following:

Option 1

Earn a minimum grade of C- in the following:

- MATH310 - Intro to Mathematical Proof

OR

Option 2

Earn a minimum grade of C- in the following:

- MATH520 - Logic and Foundations of Math

AND

Linear Algebra 1 (4 credits)

Complete at least 1 of the following:

Option 1

Earn a minimum grade of C- in the following:

- MATH322 - Linear Algebra 1

OR

Option 2

Earn a minimum grade of C- in the following:

- MATH502 - Linear Algebra

AND

Abstract Algebra 1 (3 credits)

Complete at least 1 of the following:

Option 1

Earn a minimum grade of C- in the following:

- MATH345 - Abstract Algebra 1

OR

Option 2

Earn a minimum grade of C- in the following:

- MATH504 - Modern Algebra for Teachers

AND

Survey of Geometry or Transfrmtnl Geometry (3-4 credits)

Complete at least 1 of the following:

Option 1

Earn a minimum grade of C- in the following:

- MATH353 - Survey of Geometry

OR

Option 2

Earn a minimum grade of C- in the following:

- MATH355 - Transformational Geometry

OR

Option 3

Earn a minimum grade of C- in the following:

- MATH505 - Classical & Modern Geometry

OR

Option 4

Earn a minimum grade of C- in the following:

- MATH650 - Topics in Geometry

AND

Real Analysis I (3 credits)

Complete at least 1 of the following:

Option 1

Complete ALL of the following Courses:

- MATH464 - Real Analysis 1

OR

Option 2

Earn a minimum grade of C- in the following:

- MATH506 - Modern Analysis for Teachers

Required Options Courses

Fulfill ALL of the following requirements:

Statistics Requirement

Fulfill ALL of the following requirements:

Option 1. Intro to Probability and Statistics

Complete at least 1 of the following courses:

- MATH333 - Probablity and Statistics
- MATH503 - Probability and Statistics for Teachers

AND

Option 2. Math Statistics I and Statistics II

Complete at least 2 of the following courses:

- MATH335 - Mathematical Statistics 1
- MATH435 - Mathematical Statistics 2
- MATH535 - Statistical Methods 1

AND

Mathematics Electives (6 credits)

Earn at least 6 credits from the following:

- MATH333 - Probablity and Statistics
- MATH335 - Mathematical Statistics 1
- MATH353 - Survey of Geometry
- MATH355 - Transformational Geometry
- MATH365 - Ordinary Differential Equations
- MATH370 - Operations Research
- MATH375 - Numerical Analysis
- MATH393 - Number Theory
- MATH395 - Introduction Combinatorics
- MATH408 - Topics in Mathematics
- MATH418 - Topics in Math Education
- MATH422 - Linear Algebra 2
- MATH435 - Mathematical Statistics 2
- MATH438 - Topics in Statistics
- MATH445 - Abstract Algebra 2
- MATH457 - Elementary Differential Geometry
- MATH465 - Real Analysis 2
- MATH467 - Partial Differential Equations
- MATH471 - Mathematical Modeling
- MATH472 - Financial Mathematics II
- MATH478 - Topics in Applied Mathematics
- MATH483 - Point-Set Topology
- MATH498 - Independent Study
- MATH503 - Probability and Statistics for Teachers
- MATH535 - Statistical Methods 1
- MATH536 - Statistical Methods 2
- MATH566 - Complex Variables
- MATH577 - Problems in Applied Math
- MATH592 - Graph Theory

Or choose from Any 600-level MATH course(s)

Req Related for Mathematics, Post-Bacc Cert (8 credits)

Type
Completion Requirement

Required Related Courses

Fulfill ALL of the following requirements:

Intro. to Computing I (4 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1

AND

Required Courses (4 credits)

Complete ALL of the following Courses:

- CMSC140 - Discrete Structures

Professional Education - Certification (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern

Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/EDFN241 Psyc Foundation of Teaching and please register for both courses in the same block.

AND

APS - Professional Bloc

Fulfill ALL of the following requirements:

Issues in Secondary Education (3 credits)

Complete at least 1 of the following courses:

- SEED521 - Issues in Second Education
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education

AND

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- MATH405 - Teaching Math in Secondary Schools 2

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc and but prior to Student Teaching.

AND

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Access the Student teaching Website

AND

Student Teaching Semester (9 credits)

Complete ALL of the following Courses:

- EDMA461 - Student Teaching in Math
- EDMA462 - Student Teaching in Math

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

Physics Post-Baccalaureate Certification

Overview

For post-baccalaureate information please see the "Post-Bacc Teacher Certification" section of the Graduate Course Catalog.

Curriculum

Simple Requirements

Major in Physics, Post-Bacc Certification (39 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

Credits Required for Major

AND

Minimum GPA

Earn a minimum GPA of 2.0

AND

Required Physics Courses (39 credits)

Fulfill ALL of the following requirements:

Required Courses (39 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus
- PHYS233 - Wave-Particle Theory
- PHYS266 - Electronics
- PHYS311 - Mechanics 1
- PHYS321 - Electromagnetic Fields 1
- PHYS331 - Fundamentals of Optics
- PHYS334 - Macroscopic Physics
- PHYS351 - Intermediate Physics Lab 1
- PHYS352 - Intermediate Physics Lab 2
- PHYS395 - Techniques of Mathematical Physics
- PHYS451 - Advanced Physics Lab 1
- PHYS471 - Quantum Mechanics
- PHYS492 - Physics Research and Seminar
- PHYS498 - Independent Study/Research

Req Related for Physics, Post-Bacc Certification (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Mathematics (15 credits)

Fulfill ALL of the following requirements:

Calculus I or Calculus Honors (4 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1

AND

Required Courses (8 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3

AND

Ord Diff Equations (3 credits)

Complete ALL of the following Courses:

- MATH365 - Ordinary Differential Equations

AND

Chemistry (8 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1
- CHEM112 - Introductory Chemistry 2
  OR CMSC151 - Intro to Programming for Data Science I

AND

Earth Science or Physics Elective (7 credits)

Fulfill ALL of the following requirements:

Intro to Astronomy & Astrophysics (3 credits)

Complete ALL of the following Courses:

- PHYS317 - Introduction to Astronomy

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- ESSC241 - Meteorology

Professional Education - Certification (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc (6 credits)

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/241 and please register for both courses in the same block.

AND

Professional Bloc (15 credits)

Fulfill ALL of the following requirements:

Instructional Technology, Design & Assessment (3 credits)

Complete at least 1 of the following courses:

- EDFN530 - Instructional Technology, Design and Assessment
- EDFN330 - Instructional Technology, Design & Assessment

AND

Issues in Secondary Education (3 credits)

Complete at least 1 of the following courses:

- SEED521 - Issues in Second Education
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education

AND

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- SEED435 - Teaching of Science in Secondary Schools

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc, but prior to Student Teaching.

AND

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. View the Student Teaching Website.

AND

Student Teaching Semester (9 credits)

Complete ALL of the following Courses:

- SCED461 - Student Teaching in Science
- SCED462 - Student Teaching in Science

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Course Requirements for APS: Foundations Courses (6 credits)

Complete at least 1 of the following:

Option 1. Foundations Graduate Level

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Mathematics Minor

Overview

A minor in Mathematics will be beneficial for developing strong critical thinking skills and understanding abstract concepts. Study in Mathematics supports careers in business, science, agriculture, and engineering. The mathematics minor may be a complement one's primary major.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Mathematics (22-25 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (12 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1

AND

Mathematics Electives (6-8 credits)

Complete at least 2 of the following:

Course Options

Complete ANY of the following Courses:

- MATH503 - Probability and Statistics for Teachers
- MATH535 - Statistical Methods 1
- MATH566 - Complex Variables
- MATH592 - Graph Theory

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 3-level MATH course(s)
- Any 4-level MATH course(s)

Choose any 2 courses from the listed options.

Note: This requirement may not be satisfied with MATH 301, MATH 304, MATH 405, or MATH 418.

Physics Minor

Overview

A minor in physics is a great option for students in any STEM field that is interested a deeper understanding of the physical principles that form the basis of chemistry, biology, astronomy, and earth sciences. It is also a good choice for students interested in pursuing advanced degrees in any of those fields.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Requirements

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Calculus Sequence Requirement

Completion of the Calculus sequence (MATH161 Calculus 1 , MATH211 Calculus 2, MATH311 Calculus 3) is a prerequisite for the minor in Physics.

AND

Required Courses

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus
- PHYS233 - Wave-Particle Theory
- PHYS334 - Macroscopic Physics

AND

Physics Elective Course

Complete at least 1 of the following courses:

- PHYS311 - Mechanics 1
- PHYS317 - Introduction to Astronomy
- PHYS321 - Electromagnetic Fields 1
- PHYS331 - Fundamentals of Optics
- PHYS395 - Techniques of Mathematical Physics
- PHYS431 - Solid State Physics
- PHYS435 - Statistical Mechanics
- PHYS471 - Quantum Mechanics

Statistics Minor

Overview

A minor in Statistics focuses on the quantitative aspects of research and includes Calculus and Statistics courses. This minor can be beneficial for agriculture, business, education, sciences, and sports management. Students may apply this knowledge in industry and government. The Statistics minor may complement one's primary major.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Statistics

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Calculus I or Honors Calculus I (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (12 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH311 - Calculus 3
- MATH535 - Statistical Methods 1
- MATH537 - Statistical Problem Solving Seminar

AND

Probability and Statistics or Mathematical Statistics (4-6 credits)

Complete at least 1 of the following:

Option 1. Probability and Statistics

Complete ALL of the following Courses:

- MATH333 - Probablity and Statistics

OR

Option 2. Mathematical Statistics I and II

Complete ALL of the following Courses:

- MATH335 - Mathematical Statistics 1
- MATH435 - Mathematical Statistics 2

AND

Topics in Statistics or Statistical Methods II

Complete at least 1 of the following courses:

- MATH438 - Topics in Statistics
- MATH536 - Statistical Methods 2

Mathematics, B.A.

Overview

The B.A. degree program in mathematics is a flexible curriculum designed to accommodate the widest possible range of career objectives. It is structured according to the traditional liberal arts approach to college education. The second semester of a foreign language is required.

Curriculum

Simple Requirements

Major in Mathematics, BA (43-44 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

AND

Minimum GPA for Major

Earn a minimum GPA of 2.0

AND

Required Mathematics Courses

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (21 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1
- MATH345 - Abstract Algebra 1
- MATH464 - Real Analysis 1

AND

Required Courses if No Option Declared

Fulfill ALL of the following requirements:

Mathematic Stats I or Differential Equations (3 credits)

Complete at least 1 of the following courses:

- MATH335 - Mathematical Statistics 1
- MATH365 - Ordinary Differential Equations

AND

Additional Required Mathematics Course (3 credits)

Complete at least 1 of the following courses:

- MATH422 - Linear Algebra 2
- MATH435 - Mathematical Statistics 2
- MATH445 - Abstract Algebra 2
- MATH467 - Partial Differential Equations

AND

Elective Mathematics Courses (12 credits)

Complete at least 4 of the following:

Course Options

Earn at least 12 credits from the following:

- MATH335 - Mathematical Statistics 1
- MATH354 - Classical and Transformational Geometry
- MATH365 - Ordinary Differential Equations
- MATH370 - Operations Research
- MATH372 - Financial Mathematics I
- MATH375 - Numerical Analysis
- MATH393 - Number Theory
- MATH395 - Introduction Combinatorics
- MATH422 - Linear Algebra 2

- MATH435 - Mathematical Statistics 2
- MATH445 - Abstract Algebra 2
- MATH457 - Elementary Differential Geometry
- MATH465 - Real Analysis 2
- MATH467 - Partial Differential Equations
- MATH471 - Mathematical Modeling
- MATH472 - Financial Mathematics II
- MATH483 - Point-Set Topology
- MATH498 - Independent Study
- MATH535 - Statistical Methods 1
- MATH536 - Statistical Methods 2
- MATH566 - Complex Variables
- MATH592 - Graph Theory

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 4@8 MATH course

To satisfy this requirement, a minimum of 12 credit hours must be taken.

Req Related for Mathematics, BA

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Intro. to Computing I (4 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1

AND

Additional Required Related Courses

Complete at least 1 of the following:

Option 1. College of Science and Technology Courses (6 credits)

Fulfill ANY of the following requirements:

Course Options

Complete ANY of the following Course Sets:

- Any BIOL course(s)
- Any CHEM course(s)
- Any CMSC course(s)
- Any ESSC course(s)
- Any PHYS course(s)

OR

Additional Course Options

Complete ANY of the following Courses:

- PHIL312 - Mathematical Logic

OR

Option 2. Three courses from a SINGLE department

If you select Option 2. Three courses from a SINGLE department, your advisor must email a list of courses to degreeaudit@millersville.edu for them to fulfill this requirement.

Note: This requirement may not be satisfied with BIOL 100, BIOL 108H, BIOL 204, BIOL 205, BIOL 207, BIOL 208, BIOL 247, BIOL 257, any CHEM 101-104 course(s), CHEM 110, CHEM 188, CHEM 235, CMSC 101, CMSC 111, CMSC 121, ESSC 101, ESSC 102, ESSC 104, ESSC 105, ESSC 107, ESSC 110, PHYS 103, PHYS 117, PHYS 131, PHYS 132, PHYS 198, or PHYS 205.

AND

Foreign Language Competency

Language competency through the elementary level (102 or higher) is required. FORL 101 is needed only if necessary to progress to 102.

Mathematics, B.A. – Actuarial Sciences Option

Overview

The Actuarial Science option will prepare you to combine mathematics and statistics to assess risk in insurance, finance, and other industries. Students successfully completing the option will be prepared to take the first two examinations administered by the Society of Actuaries.

Curriculum

Simple Requirements

Major in Mathematics, BA (25-26 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

AND

Minimum GPA for Major

Earn a minimum GPA of 2.0

AND

Required Mathematics Courses

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (21 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1
- MATH345 - Abstract Algebra 1
- MATH464 - Real Analysis 1

AND

Actuarial Option Requirements

See separate block

Concentration in Actuarial Science

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (16 credits)

Complete ALL of the following Courses:

- MATH335 - Mathematical Statistics 1
- MATH372 - Financial Mathematics I
- MATH375 - Numerical Analysis
- MATH419 - Actuarial Science Seminar
- MATH435 - Mathematical Statistics 2
- MATH535 - Statistical Methods 1

AND

Additional Required Courses

Complete at least 1 of the following:

Course Options

Complete ANY of the following Courses:

- MATH354 - Classical and Transformational Geometry
- MATH365 - Ordinary Differential Equations
- MATH370 - Operations Research
- MATH393 - Number Theory
- MATH395 - Introduction Combinatorics
- MATH422 - Linear Algebra 2
- MATH445 - Abstract Algebra 2
- MATH457 - Elementary Differential Geometry

- MATH465 - Real Analysis 2
- MATH467 - Partial Differential Equations
- MATH471 - Mathematical Modeling
- MATH472 - Financial Mathematics II
- MATH483 - Point-Set Topology
- MATH536 - Statistical Methods 2
- MATH566 - Complex Variables
- MATH592 - Graph Theory
  OR MATH592H - HNRS: Graph Theory

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 4@8 MATH course

Req Related for Mathematics, BA

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses

Fulfill ALL of the following requirements:

Intro. to Computing I (4 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1

AND

Prin of Macroeconomics (3 credits)

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics
  OR ECON101H - Hnrs:Principles of Macroeconomics

AND

Prin of Microeconomics (3 credits)

Complete ALL of the following Courses:

- ECON102 - Principles of Microeconomics
  OR ECON102H - Hnrs:Principles of Microeconomics

AND

Additional Required Related Courses

Complete at least 1 of the following:

Option 1. College of Science and Technology Courses (6 credits)

Fulfill ANY of the following requirements:

Course Options

Complete ANY of the following Course Sets:

- Any BIOL course(s)
- Any CHEM course(s)
- Any CMSC course(s)
- Any ESSC course(s)
- Any PHYS course(s)

OR

Additional Course Options

Complete ANY of the following Courses:

- PHIL312 - Mathematical Logic

OR

Option 2. Three courses from a SINGLE department

If you select Option 2. Three courses from a SINGLE department, your advisor must email a list of courses to degreeaudit@millersville.edu for them to fulfill this requirement.

Note: This requirement may not be satisfied with BIOL 100, BIOL 108H, BIOL 204, BIOL 205, BIOL 207, BIOL 208, BIOL 247, BIOL 257, any CHEM 101-104 course(s), CHEM 110, CHEM 188, CHEM 235, CMSC 101, CMSC 111, CMSC 121, ESSC 101, ESSC 102, ESSC 104, ESSC 105, ESSC 107, ESSC 110, PHYS 103, PHYS 117, PHYS 131, PHYS 132, PHYS 198, or PHYS 205.

AND

Foreign Language Competency

Language competency through the elementary level (102 or higher) is required. FORL 101 is needed only if necessary to progress to 102.

Mathematics, B.A. – Statistics Option

Overview

Studying Statistics at Millersville University will prepare students to develop and apply mathematical and statistical theory and methods to collect, organize, interpret, and summarize numerical data. Students who complete the Statistics Option find that it prepares them well for graduate school or careers in agriculture, business, education, government, industry, social or applied sciences.

Curriculum

Simple Requirements

Major in Mathematics, BA (25-26 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

AND

Minimum GPA for Major

Earn a minimum GPA of 2.0

AND

Calculus I (4-5 credits)

Complete at least 1 of the following courses:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (21 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1

- MATH345 - Abstract Algebra 1
- MATH464 - Real Analysis 1

AND

Statistics Option Requirements

See separate block

Concentration in Statistics

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (13 credits)

Complete ALL of the following Courses:

- MATH335 - Mathematical Statistics 1
- MATH435 - Mathematical Statistics 2
- MATH535 - Statistical Methods 1
- MATH536 - Statistical Methods 2
- MATH537 - Statistical Problem Solving Seminar

AND

Additional Math Courses

Complete at least 2 of the following:

Course Options

Complete ALL of the following Courses:

- MATH354 - Classical and Transformational Geometry
- MATH365 - Ordinary Differential Equations
- MATH370 - Operations Research
- MATH372 - Financial Mathematics I
- MATH375 - Numerical Analysis
- MATH393 - Number Theory
- MATH395 - Introduction Combinatorics
- MATH422 - Linear Algebra 2
- MATH445 - Abstract Algebra 2
- MATH457 - Elementary Differential Geometry
- MATH465 - Real Analysis 2
- MATH467 - Partial Differential Equations
- MATH471 - Mathematical Modeling
- MATH472 - Financial Mathematics II
- MATH483 - Point-Set Topology
- MATH566 - Complex Variables
- MATH592 - Graph Theory

OR

Additional Course Options

Complete ANY of the following Course Sets:

- Any 4@8 MATH course

MATH370 Operations Research, MATH375 Numerical Analysis and MATH422 Linear Algebra 2 are recommended electives.

Req Related for Mathematics, BA

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Intro. to Computing I (4 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1

AND

Additional Required Related Courses

Complete at least 1 of the following:

Option 1. College of Science and Technology Courses (6 credits)

Fulfill ANY of the following requirements:

Course Options

Complete ANY of the following Course Sets:

- Any BIOL course(s)
- Any CHEM course(s)
- Any CMSC course(s)
- Any ESSC course(s)
- Any PHYS course(s)

OR

Additional Course Options

Complete ANY of the following Courses:

- PHIL312 - Mathematical Logic

OR

Option 2. Three courses from a SINGLE department

If you select Option 2. Three courses from a SINGLE department, your advisor must email a list of courses to degreeaudit@millersville.edu for them to fulfill this requirement.

Note: This requirement may not be satisfied with BIOL 100, BIOL 108H, BIOL 204, BIOL 205, BIOL 207, BIOL 208, BIOL 247, BIOL 257, any CHEM 101-104 course(s), CHEM 110, CHEM 188, CHEM 235, CMSC 101, CMSC 111, CMSC 121, ESSC 101, ESSC 102, ESSC 104, ESSC 105, ESSC 107, ESSC 110, PHYS 103, PHYS 117, PHYS 131, PHYS 132, PHYS 198, or PHYS 205.

AND

Foreign Language Competency

Language competency through the elementary level (102 or higher) is required. FORL 101 is needed only if necessary to progress to 102.

Mathematics, B.S.Ed.

Overview

The Bachelor of Science in Education for Mathematics Majors provides training in Secondary Mathematics Education and is the degree program for prospective teachers of mathematics in secondary schools. Students receive thorough mathematical content knowledge and pedagogical training to prepare them to teach. In order to graduate in 4 years, students in the B.S.E. program must complete all their academic coursework in 7 semesters, as their final semester is spent in a full-time student teaching field placement. Successful graduates will be certified to teach mathematics in grades 7 through 12 in Pennsylvania and can easily transfer this certification to any state.

Curriculum

Simple Requirements

Major in Mathematics, BSE (47-50 credits)

Type
Completion Requirement

Minimum GPA

Earn a minimum GPA of 2.0

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

Requirements

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

AND

Required Courses (33 credits)

Earn a minimum grade of C- in the following:

- MATH211 - Calculus 2
- MATH301 - History of Mathematics
- MATH305 - Teaching Math in Secondary Schools 1

- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1
- MATH325 - Mathematical Connections
- MATH345 - Abstract Algebra 1
- MATH354 - Classical and Transformational Geometry
- MATH405 - Teaching Math in Secondary Schools 2

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- MATH464 - Real Analysis 1

AND

Requirements for No Option Declared

Fulfill ALL of the following requirements:

Statistics Requirement (4-6 credits)

Complete at least 1 of the following:

Option 1. Intro to Probability and Statistics (4 credits)

Complete ALL of the following Courses:

- MATH333 - Probablity and Statistics

OR

Option 2. Math Statistics I and Statistics II (6 credits)

Earn a minimum grade of C- in the following:

- MATH335 - Mathematical Statistics 1
- MATH435 - Mathematical Statistics 2

AND

Mathematics Electives (3 credits)

Fulfill ANY of the following requirements:

Option 1

Earn a minimum grade of C- in the following:

- MATH365 - Ordinary Differential Equations
  OR MATH370 - Operations Research
  OR MATH372 - Financial Mathematics I
  OR MATH375 - Numerical Analysis
  OR MATH393 - Number Theory
  OR MATH395 - Introduction Combinatorics
  OR MATH422 - Linear Algebra 2
  OR MATH445 - Abstract Algebra 2
  OR MATH457 - Elementary Differential Geometry
  OR MATH465 - Real Analysis 2
  OR MATH467 - Partial Differential Equations
  OR MATH471 - Mathematical Modeling
  OR MATH472 - Financial Mathematics II
  OR MATH483 - Point-Set Topology
  OR MATH498 - Independent Study
  OR MATH535 - Statistical Methods 1
  OR MATH536 - Statistical Methods 2
  OR MATH566 - Complex Variables
  OR MATH577 - Problems in Applied Math
  OR MATH592 - Graph Theory

OR

Option 2

Earn a minimum grade of C- in the following:

- Any 4@8 MATH course

Professional Education (27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of

Teaching
OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (3 credits)

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education

AND

Accommodations & Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- EDMA461 - Student Teaching in Math

Req Related for Mathematics, BSE (8 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related Courses (8 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1
- CMSC140 - Discrete Structures

Advanced Professional Studies, BSE

Type
Completion Requirement

APS Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
  OR EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Mathematics, B.S.Ed. - Actuarial Science Option

Overview

The Actuarial Science option will prepare you to combine mathematics and statistics to assess risk in insurance, finance, and other industries. Students successfully completing the option will be prepared to take the first two examinations administered by the Society of Actuaries.

Curriculum

Simple Requirements

Major in Mathematics, BSE (47-50 credits)

Type
Completion Requirement

Minimum GPA

Earn a minimum GPA of 2.0

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

Requirements

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

AND

Required Courses (33 credits)

Earn a minimum grade of C- in the following:

- MATH211 - Calculus 2
- MATH301 - History of Mathematics
- MATH305 - Teaching Math in Secondary Schools 1
- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1
- MATH325 - Mathematical Connections
- MATH345 - Abstract Algebra 1
- MATH354 - Classical and Transformational

Geometry
- MATH405 - Teaching Math in Secondary Schools 2

AND

Required Courses (3 credits)

Complete ALL of the following Courses:
- MATH464 - Real Analysis 1

AND

Actuarial Option Requirements

See separate block

Concentration in Actuarial Science (16 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (16 credits)

Earn a minimum grade of C- in the following:
- MATH335 - Mathematical Statistics 1
- MATH372 - Financial Mathematics I
- MATH375 - Numerical Analysis
- MATH419 - Actuarial Science Seminar
- MATH435 - Mathematical Statistics 2
- MATH535 - Statistical Methods 1

Professional Education (27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (3 credits)

Complete ALL of the following Courses:
- SEED321 - Issues in Secondary Education **OR** SEED321H - H: Issues in Secondary Education

AND

Accommodations & Adaptations (6 credits)

Complete ALL of the following Courses:
- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:
- SEED471 - Student Teaching Seminar
- EDMA461 - Student Teaching in Math

Req Related for Mathematics, BSE (14 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Prin of Macroeconomics (3 credits)

Complete ALL of the following Courses:
- ECON101 - Principles of Macroeconomics **OR** ECON101H - Hnrs:Principles of Macroeconomics

AND

Prin of Microeconomics (3 credits)

Complete ALL of the following Courses:

- ECON102 - Principles of Microeconomics
  OR ECON102H - Hnrs:Principles of Microeconomics

AND

Required Related Courses (8 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1
- CMSC140 - Discrete Structures

Advanced Professional Studies, BSE

Type
Completion Requirement

APS Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
  OR EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Mathematics, B.S.Ed. - Statistics Option

Overview

Studying Statistics at Millersville University will prepare students to develop and apply mathematical and statistical theory and methods to collect, organize, interpret, and summarize numerical data. Students who complete the Statistics Option find that it prepares them well for graduate school or careers in agriculture, business, education, government, industry, social or applied sciences.

Curriculum

Simple Requirements

Major in Mathematics, BSE (47-50 credits)

Type
Completion Requirement

Minimum GPA

Earn a minimum GPA of 2.0

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

Requirements

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

AND

Required Courses (33 credits)

Earn a minimum grade of C- in the following:

- MATH211 - Calculus 2
- MATH301 - History of Mathematics
- MATH305 - Teaching Math in Secondary Schools 1
- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1
- MATH325 - Mathematical Connections
- MATH345 - Abstract Algebra 1
- MATH354 - Classical and Transformational Geometry
- MATH405 - Teaching Math in Secondary Schools 2

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- MATH464 - Real Analysis 1

AND

Statistics Option Requirements

See separate block

Concentration in Statistics (13 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (13 credits)

Earn a minimum grade of C- in the following:

- MATH335 - Mathematical Statistics 1
- MATH435 - Mathematical Statistics 2
- MATH535 - Statistical Methods 1
- MATH536 - Statistical Methods 2
- MATH537 - Statistical Problem Solving Seminar

Professional Education (27 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern

Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (3 credits)

Complete ALL of the following Courses:
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education

AND

Accommodations & Adaptations (6 credits)

Complete ALL of the following Courses:
- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:
- SEED471 - Student Teaching Seminar
- EDMA461 - Student Teaching in Math

Req Related for Mathematics, BSE (8 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related Courses (8 credits)

Complete ALL of the following Courses:
- CMSC161 - Introduction to Programming 1
- CMSC140 - Discrete Structures

Advanced Professional Studies, BSE

Type
Completion Requirement

APS Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:
- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses

designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Physics, B.S.Ed.

Overview

This program is for students who wish to become certified public-school teachers for grades 7-12. The course requirements in Physics and Education are designed to meet the standards set by the Pennsylvania Department of Education for teachers.

Curriculum

Simple Requirements

Major in Physics, BSE (32-33 credits)

Type
Completion Requirement

Minimum GPA

Earn a minimum GPA of 2.0

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

Requirements

Fulfill ALL of the following requirements:

Required Physics Courses

Fulfill ALL of the following requirements:

Required Physics Courses (10 credits)

Earn a minimum grade of C- in the following:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

AND

Required Physics Courses (19 credits)

Complete ALL of the following Courses:

- PHYS233 - Wave-Particle Theory
- PHYS266 - Electronics
- PHYS311 - Mechanics 1
- PHYS321 - Electromagnetic Fields 1
- PHYS334 - Macroscopic Physics
- PHYS351 - Intermediate Physics Lab 1
- PHYS352 - Intermediate Physics Lab 2
- PHYS492 - Physics Research and

Seminar
- PHYS498 - Independent Study/Research

AND

Physics Required Elective: Meteorology or Intro to Astronomy (3-4 credits)

Complete at least 1 of the following courses:
- ESSC241 - Meteorology
- PHYS317 - Introduction to Astronomy

Professional Education (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching

AND

Required Education Courses (9 credits)

Complete ALL of the following Courses:
- SEED321 - Issues in Secondary Education **OR** SEED321H - H: Issues in Secondary Education
- EDFN330 - Instructional Technology, Design & Assessment
- SEED435 - Teaching of Science in Secondary Schools

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:
- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:
- SEED471 - Student Teaching Seminar
- SCED461 - Student Teaching in Science

Req Related for Physics, BSE (23-24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry and Computer Science

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Complete ALL of the following Courses:
- CHEM111 - Introductory Chemistry 1

AND

Introductory Chemistry II or Intro to Prog Data Science (4 credits)

Complete at least 1 of the following courses:
- CHEM112 - Introductory Chemistry 2
- CMSC151 - Intro to Programming for Data Science I

AND

Mathematics

Fulfill ALL of the following requirements:

Calculus I or Calculus Honors (4-5 credits)

Complete at least 1 of the following:

Calculus I (4 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1

OR

Calculus Honors (5 credits)

Complete ALL of the following Courses:

- MATH163H - Honors Calculus 1

AND

Required Courses (4 credits)

Earn a minimum grade of C- in the following:

- MATH211 - Calculus 2

AND

Required Courses (7 credits)

Complete ALL of the following Courses:

- MATH311 - Calculus 3
- MATH365 - Ordinary Differential Equations

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Mathematics, B.S.

Overview

The B.S. degree program in mathematics is more specifically application-oriented than the B.A. degree program in mathematics, requiring a greater concentration in mathematical analysis and science. The program is designed to position its graduates for a career in business, industry, or research in mathematics.

Curriculum

Simple Requirements

Major in Mathematics, BS (43-44 credits)

Type
Completion Requirement

Minimum GPA

Earn a minimum GPA of 2.0

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major Courses

Requirements

Fulfill ALL of the following requirements:

Required Mathematics Courses (34-35 credits)

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

AND

Required Courses (30 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1
- MATH335 - Mathematical Statistics 1
- MATH345 - Abstract Algebra 1
- MATH365 - Ordinary Differential

Equations
- MATH375 - Numerical Analysis
- MATH464 - Real Analysis 1

AND

Requirements for No Declared Option (9 credits)

Fulfill ALL of the following requirements:

Additional Mathematics Course (3 credits)

Complete at least 1 of the following courses:
- MATH422 - Linear Algebra 2
- MATH435 - Mathematical Statistics 2
- MATH467 - Partial Differential Equations
- MATH472 - Financial Mathematics II

AND

Elective Mathematics Courses (6 credits)

Complete at least 2 of the following:

Course Options

Complete ANY of the following Courses:
- MATH354 - Classical and Transformational Geometry
- MATH370 - Operations Research
- MATH372 - Financial Mathematics I
- MATH393 - Number Theory
- MATH395 - Introduction Combinatorics
- MATH422 - Linear Algebra 2
- MATH435 - Mathematical Statistics 2
- MATH445 - Abstract Algebra 2
- MATH457 - Elementary Differential Geometry
- MATH465 - Real Analysis 2
- MATH467 - Partial Differential Equations
- MATH471 - Mathematical Modeling
- MATH472 - Financial Mathematics II
- MATH483 - Point-Set Topology
- MATH535 - Statistical Methods 1
- MATH536 - Statistical Methods 2
- MATH566 - Complex Variables
- MATH592 - Graph Theory

OR

Additional Course Options

Complete ANY of the following Course Sets:
- Any 4@8 MATH course

Note: 6 credits minimum

Req Related for Mathematics, BS

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related - Statistics or No Option (4-5 credits)

Fulfill ALL of the following requirements:

Intro. to Computing I (4 credits)

Complete ALL of the following Courses:
- CMSC161 - Introduction to Programming 1

AND

General Physics I (5 credits)

Complete ALL of the following Courses:
- PHYS231 - Physics 1 with Calculus

Additional Required Related

Complete at least 1 of the following:

Option 1

Complete at least 1 of the following:

Elective Required Related Science (5 credits)

Complete at least 2 courses in the following course sets:
- Any BIOL course(s)
- Any CHEM course(s)
- Any CMSC course(s)
- Any ESSC course(s)
- Any PHYS course(s)

May also take PHIL312 Mathematical Logic.

Note: This requirement may not be satisfied with BIOL100 General Biology, BIOL108H Hnrs:Freshman Biology Seminar, BIOL204 Human Biology, BIOL205 Heredity and Human Affairs, BIOL307 Human Sexuality, BIOL208 Plants and People, BIOL 247, BIOL257 Intro Allied Health, any CHEM101 Chemistry in Society-104 course(s), CHEM110 Fundamentals of Chemistry, CHEM188 Freshman Seminar in Chemistry, CHEM235 Organic Chemistry, CMSC101 Problem Solving with Computers, CMSC 111, CSCI121 Intro to Web Development, ESSC101 Earth Systms and Naturl Hazrds, ESSC102 Origin and Evoltn of the Earth, ESSC104 The World Ocean, ESSC105 World Ocean Laboratory, ESSC107 The Atmosphere, ESSC 110, PHYS103 Elements of Physics, PHYS117 General Astronomy,PHYS131 Physics 1 with Algebra, PHYS132 Physics 2 with Algebra, PHYS198 Seminar In Physics or PHYS205 Musical Acoustics.

OR

Directed Required Related Science (3-5 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- CMSC162 - Introduction to Programming 2
- ESSC340 - Cloud Physics & Precip Process
  OR ESSC340H - H:Cloud Physics & Precip Process
- ESSC341 - Atmospheric Thermodynamics
- ESSC342 - Atmospheric Dynamics 1
- PHYS232 - Physics 2 with Calculus

OR

Option 2. Courses From a Single Department

Fulfill ALL of the following requirements:

Four courses from a SINGLE department

If you select Option B. Four courses from a SINGLE department, your advisor must email a list of courses to degreeaudit@millersville.edu for them to fulfill this requirement.

Mathematics, B.S. - Actuarial Sciences Option

Overview

The Actuarial Science option will prepare you to combine mathematics and statistics to assess risk in insurance, finance, and other industries. Students successfully completing the option will be prepared to take the first two examinations administered by the Society of Actuaries.

Curriculum

Simple Requirements

Major in Mathematics, BS (34-35 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major Courses

AND

Required Mathematics Courses (34-35 credits)

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

AND

Required Courses (30 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1
- MATH335 - Mathematical Statistics 1
- MATH345 - Abstract Algebra 1
- MATH365 - Ordinary Differential Equations
- MATH375 - Numerical Analysis
- MATH464 - Real Analysis 1

AND

Actuarial Option Requirements

See separate block

Concentration in Actuarial Science

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (10 credits)

Complete ALL of the following Courses:

- MATH372 - Financial Mathematics I
- MATH419 - Actuarial Science Seminar
- MATH435 - Mathematical Statistics 2
- MATH535 - Statistical Methods 1

AND

Elective Mathematics Courses

Complete at least 1 of the following:

Option 1

Complete at least 1 of the following courses:

- MATH354 - Classical and Transformational Geometry
- MATH370 - Operations Research
- MATH393 - Number Theory
- MATH395 - Introduction Combinatorics
- MATH422 - Linear Algebra 2
- MATH445 - Abstract Algebra 2
- MATH457 - Elementary Differential Geometry

- MATH465 - Real Analysis 2
- MATH467 - Partial Differential Equations
- MATH471 - Mathematical Modeling
- MATH472 - Financial Mathematics II
- MATH483 - Point-Set Topology
- MATH536 - Statistical Methods 2
- MATH566 - Complex Variables
- MATH592 - Graph Theory

OR

Option 2

Complete at least 1 course in the following course sets:

- Any 4@8 MATH course

Req Related for Mathematics, BS

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Related - Actuarial (15 credits)

Fulfill ALL of the following requirements:

Intro. to Computing I (4 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1

AND

Prin of Macroeconomics (3 credits)

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics
  OR ECON101H - Hnrs:Principles of Macroeconomics

AND

Prin of Microeconomics (3 credits)

Complete ALL of the following Courses:

- ECON102 - Principles of Microeconomics
  OR ECON102H - Hnrs:Principles of Microeconomics

AND

General Physics I (5 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus

AND

Additional Required Related

Complete at least 1 of the following:

Option 1. College of Science and Technology Courses

Complete at least 1 of the following:

Elective Required Related Science

Complete at least 2 courses in the following course sets:

- Any BIOL course(s)
- Any CHEM course(s)
- Any CMSC course(s)
- Any ESSC course(s)
- Any PHYS course(s)

May also take PHIL312 Mathematical Logic.

Note: This requirement may not be satisfied with BIOL100 General Biology, BIOL108H Hnrs:Freshman Biology Seminar, BIOL204 Human Biology, BIOL205 Heredity and Human Affairs, BIOL307 Human Sexuality, BIOL208 Plants and People, BIOL 247, BIOL257 Intro Allied Health, any CHEM101 Chemistry in Society-104 course(s), CHEM110 Fundamentals of Chemistry, CHEM188 Freshman Seminar in Chemistry, CHEM235 Organic Chemistry, CMSC101 Problem Solving with Computers, CMSC 111, CSCI121 Intro to Web Development, ESSC101 Earth Systms and Naturl Hazrds, ESSC102 Origin and Evoltn of the Earth, ESSC104 The World Ocean,

ESSC105 World Ocean Laboratory, ESSC107 The Atmosphere, ESSC 110, PHYS103 Elements of Physics, PHYS117 General Astronomy,PHYS131 Physics 1 with Algebra, PHYS132 Physics 2 with Algebra, PHYS198 Seminar In Physics or PHYS205 Musical Acoustics.

OR

Directed Required Related Science (3-5 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- CMSC162 - Introduction to Programming 2
- ESSC340 - Cloud Physics & Precip Process
  OR ESSC340H - H:Cloud Physics & Precip Process
- ESSC341 - Atmospheric Thermodynamics
- ESSC342 - Atmospheric Dynamics 1
- PHYS232 - Physics 2 with Calculus

OR

Option 2. Courses From a Single Department

Fulfill ALL of the following requirements:

Four courses from a SINGLE department

If you select Option B. Four courses from a SINGLE department, your advisor must email a list of courses to degreeaudit@millersville.edu for them to fulfill this requirement.

Mathematics, B.S. - Applied Mathematics Option

Overview

The Applied Mathematics option is specifically intended to focus on applying mathematical knowledge in fields including (but not limited to): fluid and solid mechanics, physics, chemistry, engineering, biological sciences, economics, finance, and medical science. The program is designed to prepare students for careers or graduate school. Students enrolled in the B.S. program may complete the Applied Mathematics option.

Curriculum

Simple Requirements

Major in Mathematics, BS (34-35 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major Courses

AND

Required Mathematics Courses (34-35 credits)

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

AND

Required Courses (30 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2
- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1
- MATH335 - Mathematical Statistics 1
- MATH345 - Abstract Algebra 1
- MATH365 - Ordinary Differential Equations
- MATH375 - Numerical Analysis
- MATH464 - Real Analysis 1

AND

Applied Math Option Requirements

See separate block

Concentration in Applied Mathematics (7-9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- MATH467 - Partial Differential Equations

AND

Mathematics Electives (4-6 credits)

Complete at least 2 of the following courses:

- MATH370 - Operations Research
- MATH372 - Financial Mathematics I
- MATH471 - Mathematical Modeling
- MATH472 - Financial Mathematics II
- MATH478 - Topics in Applied Mathematics

Req Related for Mathematics, BS

Type
Completion Requirement

Required Related - Applied Math

Fulfill ALL of the following requirements:

Intro to Computing (4 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1

AND

General Physics I (5 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus

AND

Required Science Course (3-5 credits)

Complete at least 1 of the following courses:

- ESSC341 - Atmospheric Thermodynamics
- ESSC342 - Atmospheric Dynamics 1
- PHYS232 - Physics 2 with Calculus

AND

Science Elective

Complete at least 2 courses in the following course sets:

- Any BIOL course(s)
- Any CHEM course(s)
- Any CMSC course(s)
- Any ESSC course(s)
- Any PHYS course(s)

May also take PHIL312 Mathematical Logic.

Recommend: PHYS311 Mechanics 1 and PHYS312 Mechanics 2 and CMSC406 Topics in Computer Science)

Note: This requirement may not be satisfied with BIOL100 General Biology, BIOL108H Hnrs:Freshman Biology Seminar, BIOL204 Human Biology, BIOL205 Heredity and Human Affairs, BIOL307 Human Sexuality, BIOL208 Plants and People, BIOL 247, BIOL257 Intro Allied Health, any CHEM101 Chemistry in Society-104 course(s), CHEM110 Fundamentals of Chemistry, CHEM188 Freshman Seminar in Chemistry, CHEM235 Organic Chemistry, CMSC101 Problem Solving with

Computers, CMSC 111, CSCI121 Intro to Web Development, ESSC101 Earth Systms and Naturl Hazrds, ESSC102 Origin and Evoltn of the Earth, ESSC104 The World Ocean, ESSC105 World Ocean Laboratory, ESSC107 The Atmosphere, ESSC 110, PHYS103 Elements of Physics, PHYS117 General Astronomy,PHYS131 Physics 1 with Algebra, PHYS132 Physics 2 with Algebra, PHYS198 Seminar In Physics or PHYS205 Musical Acoustics.

Mathematics, B.S. - Statistics Option

Overview

Studying Statistics at Millersville University will prepare students to develop and apply mathematical and statistical theory and methods to collect, organize, interpret, and summarize numerical data. Students who complete the Statistics Option find that it prepares them well for graduate school or careers in agriculture, business, education, government, industry, social or applied sciences.

Curriculum

Simple Requirements

Major in Mathematics, BS (34-35 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major Courses

AND

Required Mathematics Courses (34-35 credits)

Fulfill ALL of the following requirements:

Calculus I (4-5 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

AND

Required Courses (30 credits)

Complete ALL of the following Courses:

- MATH211 - Calculus 2

- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1
- MATH335 - Mathematical Statistics 1
- MATH345 - Abstract Algebra 1
- MATH365 - Ordinary Differential Equations
- MATH375 - Numerical Analysis
- MATH464 - Real Analysis 1

AND

Statistics Option Requirements

See separate block

Concentration in Statistics (10 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (10 credits)

Complete ALL of the following Courses:

- MATH435 - Mathematical Statistics 2
- MATH535 - Statistical Methods 1
- MATH535 - Statistical Methods 1
- MATH537 - Statistical Problem Solving Seminar

Req Related for Mathematics, BS

Type
Completion Requirement

Required Courses

Fulfill ALL of the following requirements:

Required Related - Statistics or No Option (8-9 credits)

Fulfill ALL of the following requirements:

Intro. to Computing I (4 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1

AND

General Physics I (4-5 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus

AND

Additional Required Related

Complete at least 1 of the following:

Option 1. College of Science and Technology Courses

Fulfill ANY of the following requirements:

Elective Required Related Science (5 credits)

Complete at least 2 courses in the following course sets:

- Any BIOL course(s)
- Any CHEM course(s)
- Any CMSC course(s)
- Any ESSC course(s)
- Any PHYS course(s)

May also take PHIL312 Mathematical Logic.

Note: This requirement may not be satisfied with BIOL100 General Biology, BIOL108H Hnrs:Freshman Biology Seminar, BIOL204 Human Biology, BIOL205 Heredity and Human Affairs, BIOL307 Human Sexuality, BIOL208 Plants and People, BIOL 247, BIOL257 Intro Allied Health, any CHEM101 Chemistry in Society-104 course(s), CHEM110 Fundamentals of Chemistry, CHEM188 Freshman Seminar in Chemistry, CHEM235 Organic Chemistry, CMSC101 Problem Solving with Computers, CMSC 111, CSCI121 Intro to Web Development, ESSC101 Earth Systms and Naturl Hazrds, ESSC102 Origin and Evoltn of the Earth, ESSC104 The World Ocean, ESSC105 World Ocean Laboratory, ESSC107 The Atmosphere, ESSC 110, PHYS103 Elements of Physics, PHYS117 General

Astronomy,PHYS131 Physics 1 with Algebra, PHYS132 Physics 2 with Algebra, PHYS198 Seminar In Physics or PHYS205 Musical Acoustics.

OR

Directed Required Related Science (3-5 credits)

Complete at least 1 of the following courses:

- BIOL375 - Biometry
  OR BIOL375H - Hon: Biometry
- CMSC162 - Introduction to Programming 2
- ESSC340 - Cloud Physics & Precip Process
  OR ESSC340H - H:Cloud Physics & Precip Process
- ESSC341 - Atmospheric Thermodynamics
- ESSC342 - Atmospheric Dynamics 1
- PHYS232 - Physics 2 with Calculus

OR

Option 2. Courses From a Single Department

Fulfill ALL of the following requirements:

Four courses from a SINGLE department

If you select Option B. Four courses from a SINGLE department, your advisor must email a list of courses to degreeaudit@millersville.edu for them to fulfill this requirement.

Physics, B.S.

Overview

The B.S. (Bachelor of Science) degree in physics demands the most intense concentration of physics and mathematics. Most Physics majors also complete a Minor in Mathematics. Upper-level Physics courses include Electromagnetic Fields, Mechanics, Thermodynamics, Electronics, and Quantum Physics. Students balance lecture courses with extensive laboratory courses that lead to our capstone experience of a two-semester Senior Research project which often results in presentations of their work at local, regional, and national conferences.

Students graduating with the B.S. in Physics go on to graduate school in physics, engineering, and other related fields, while many go directly into the technical workplace.

Curriculum

Simple Requirements

Major in Physics, BS (28-30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Minimum GPA

Earn a minimum GPA of 2.0

AND

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits

AND

Required Physics Courses (24 credits)

Complete ALL of the following Courses:

- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus
- PHYS233 - Wave-Particle Theory
- PHYS266 - Electronics
- PHYS311 - Mechanics 1

- PHYS321 - Electromagnetic Fields 1
- PHYS331 - Fundamentals of Optics
- PHYS334 - Macroscopic Physics
- PHYS351 - Intermediate Physics Lab 1
- PHYS352 - Intermediate Physics Lab 2
- PHYS395 - Techniques of Mathematical Physics
- PHYS451 - Advanced Physics Lab 1
- PHYS471 - Quantum Mechanics
- PHYS492 - Physics Research and Seminar
- PHYS498 - Independent Study/Research

AND

Electives (4-6 credits)

Fulfill ALL of the following requirements:

Mechanics II or Electromagnetic Fields II (3 credits)

Complete at least 1 of the following courses:

- PHYS312 - Mechanics 2
- PHYS322 - Electromagnetic Fields 2

AND

Required Elective (1-3 credits)

Complete at least 1 of the following courses:

- PHYS431 - Solid State Physics
- PHYS435 - Statistical Mechanics
- PHYS462 - Advanced Electronics
- PHYS495 - Topics in PHYS
- PHYS498 - Independent Study/Research

Req Related for Physics, BS (27-28 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Chemistry and Computer Science (8 credits)

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Complete ALL of the following Courses:

- CHEM111 - Introductory Chemistry 1

AND

Introductory Chemistry II or Intro to Prog Data Science (4 credits)

Complete at least 1 of the following courses:

- CHEM112 - Introductory Chemistry 2
- CMSC151 - Intro to Programming for Data Science I

AND

Mathematics Requirements (19-20 credits)

Fulfill ALL of the following requirements:

Calculus I or Calculus Honors (4-5 credits)

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
- MATH163H - Honors Calculus 1

AND

Required Courses (4 credits)

Earn a minimum grade of C- in the following:

- MATH211 - Calculus 2

AND

Required Courses (8 credits)

Complete ALL of the following Courses:

- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1

AND

Ord Diff Equations (3 credits)

Complete ALL of the following Courses:

- MATH365 - Ordinary Differential Equations

Courses

EDMA461 - Student Teaching in Math

Course Information

Course Title
Student Teaching in Math

Subject code	Course Number	Academic Level
EDMA	461	Undergraduate

Course Description
Student Teaching in Math

Simple Requirements

Course Prerequisites

Type
Prerequisite

SEED321 or SEED321H or SEED521 and MATH405 and SEED340 or SEED540 and SPED346 or SPED546

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
  OR SEED521 - Issues in Second Education
- MATH405 - Teaching Math in Secondary Schools 2
- SEED340 - Content Area Literacy for Diverse Classrooms
  OR SEED540 - Cntnt Area Litrcy Divers Class
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings
  OR SPED546 - Sec Stdnts w Disab Inclu Sttgs

EDMA462 - Student Teaching in Math

Course Information

Course Title
Student Teaching in Math

Subject code	Course Number	Academic Level
EDMA	462	Undergraduate

Course Description
Student Teaching in Math

Simple Requirements

Course Prerequisites

Type
Prerequisite

SEED321 or SEED321H or SEED521 and MATH405 and SEED340 and SPED346

Complete ALL of the following Courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
  OR SEED521 - Issues in Second Education
- MATH405 - Teaching Math in Secondary Schools 2
- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings

FYEX100M - From pi to e through i

Course Information

Course Title
From pi to e through i

Subject code	Course Number	Academic Level
FYEX	100M	Undergraduate

Course Description
What? The three numbers Pi, I and e are related? How is this even possible? This seminar jump-starts the process of intellectual inquiry through a free exchange of ideas during and outside of class. Instructors mentor and assist students in developing a meaningful and purposeful approach to their college experiences. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100S - First Year Experience: How Things Work

Course Information

Course Title
First Year Experience: How Things Work

Subject code	Course Number	Academic Level
FYEX	100S	Undergraduate

Course Description
This course will introduce students to a broader picture of physics and will focus on the critical concepts. Students will also be introduced with brief history of physics. Students will learn philosophical differences among Greek's era, Newtonian Physics and Modern Physics. Students will learn how the ideas of physics helped develop the society and technical development. The emphasis will be to reinforce the importance of solid training in fundamental physics concepts as the mechanism for making impacts in areas that are relevant to everyday life. Students will write reports of physics personalities and their contributions to the society using literature survey. Students will also be introduced to test taking skills and time management techniques. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

MATH070 - Essential Mathematics

Course Information

Course Title
Essential Mathematics

Subject code	Course Number	Academic Level
MATH	70	Undergraduate

Course Description
This course focuses on computational and problem-solving skills that students need to prepare them for the mathematical prerequisites in their chosen fields of study. Additionally the course is designed to build financial skills required for life success (e.g. financial management, budgeting, and so forth). The individual mathematical topics will be covered as needed by individual students in the class based on his/her current abilities. Potential topics of study will include addition, subtraction, multiplication, and division of whole numbers, rational numbers; study and application of ratio, proportion, and percent; applied topics dealing with measurement, areas and perimeters of geometric figures, and basic descriptive statistics. This course is taught in a hybrid learning environment including (but not limited to) face-to-face instruction/lecture, online video instruction, individual one-on-one coaching/tutoring, and adaptive learning computer technology. MATH 070 course credit cannot be counted towards fulfillment of a baccalaureate or associate degree.

MATH079 - Experimental/Developmental

Course Information

Course Title
Experimental/Developmental

Subject code	Course Number	Academic Level
MATH	79	Undergraduate

Course Description
Experimental Course for Pre-College Level study in Mathematics. Does not count toward 120 credits for degree completion.

MATH090 - Basic Mathematics

Course Information

Course Title
Basic Mathematics

Subject code	Course Number	Academic Level
MATH	90	Undergraduate

Course Description
For students who need additional preparation before taking a college mathematics course. Remedial in nature and not applicable toward the science/math requirement. After successfully completing MATH 090, students are prepared to take courses that fulfill this requirement. Students who must take MATH 090 earn course credits, and the grade is counted in the cumulative grade point average, but MATH 090 course credit cannot be counted towards fulfillment of the baccalaureate or associate degree.

MATH094 - Math 104 Supplemental

Course Information

Course Title
Math 104 Supplemental

Subject code	Course Number	Academic Level
MATH	94	Undergraduate

Course Description
Mathematics content that elementary and special education teachers of mathematics at any level need to know and understand before beginning to teach. Includes number systems, structure of algorithms, number theory, properties of integers, rational and real numbers, and beginning geometry and measurement. Emphasis on problem solving and reasoning within each topic.

MATH100 - Survey of Mathematical Ideas

Course Information

Course Title
Survey of Mathematical Ideas

Subject code	Course Number	Academic Level
MATH	100	Undergraduate

Course Description
A liberal arts course for students who will not be scheduling a technical/professional math course. A survey of mathematics important to the history of Western civilization and to the modern world. Introductory modules covered usually include number theory, geometry, topology, probability, statistics, graph theory, consumer mathematics and set theory. No credit in math/science block for math and science majors. Prereq: MATH 090 with a grade of C- or higher or math placement testing/evaluation before registration. Only one of MATH 100, 102, 107, and 108 may be taken for general education credit.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 090

Earn a minimum grade of C- in the following:

- MATH090 - Basic Mathematics

Math placement testing/evaluation before registration.

Requirement

MPT 100

MATH101 - College Algebra

Course Information

Course Title
College Algebra

Subject code	Course Number	Academic Level
MATH	101	Undergraduate

Course Description
For students who need to improve their algebraic skills before taking a higher-level course such as MATH 151, 160 or 161; focuses on algebraic topics needed for success in college mathematics and its applications. Includes the real number system, linear equations and inequalities, word problems, polynomials and factoring, rational algebraic expressions, exponents and radicals, quadratic equations, irrational equations, graphs of equations, systems of equations and logarithmic and exponential functions. Prereq: high school algebra I, II and geometry; math placement testing/ evaluation before registration.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 090

Complete ALL of the following Courses:
- MATH090 - Basic Mathematics

Or MPT 101.

MATH102 - Math in Non-European Cultures

Course Information

Course Title
Math in Non-European Cultures

Subject code	Course Number	Academic Level
MATH	102	Undergraduate

Course Description
A survey of mathematical ideas developed by non-European cultures, including, but not limited to, those of Africans, Asians and native North, Central and South Americans. Includes culture and specific examples from the following areas of mathematics: number theory, topology, probability, group theory and logic (3 credits).
For Legacy General Education, this course may be taken for general education credit (D for all majors, G2 for non-math and non-science majors), and satisfies the Foundations for Lifelong Learning Mathematics Requirement.
For Gateway General Education, this course may be taken for Cornerstone-Quantitative Literacy (QL) credit.
No more than one of MATH 100, 102, 107, and 108 may be taken for general education credit.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 090

Earn a minimum grade of C- in the following:
- MATH090 - Basic Mathematics

Math placement testing/evaluation before registration.

Other Requirement

MPT 100.

MATH104 - Fundamentals of Math 1

Course Information

Course Title
Fundamentals of Math 1

Subject code	Course Number	Academic Level
MATH	104	Undergraduate

Course Description
Mathematics content that elementary and special education teachers of mathematics at any level need to know and understand before beginning to teach. Designed to equip all such majors with sufficient knowledge and facility in mathematics for teaching it effectively. Includes number systems, structure of algorithms, number theory, properties of integers, rational numbers and real numbers. Emphasis on problem solving and reasoning within each topic. Required of all early childhood education and middle level majors.

Prereq: MPT 104 or department permission

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

Other Requirement

MPT 104.

MATH105 - Fundamentals of Math 2

Course Information

Course Title
Fundamentals of Math 2

Subject code	Course Number	Academic Level
MATH	105	Undergraduate

Course Description
An extension of MATH 104; covers additional mathematics topics relevant to teaching elementary mathematics. Includes algebra, additional study in geometry and measurement, probability and statistics, graphing and further emphasis on problem solving and reasoning. Required of all early childhood education and special education majors.

Prerequisite: C or higher in MATH 104 or department permission.
MATH 205 and MATH 230 are equivalent courses, credit will not be given for MATH 105, 205 and or 230.

For Legacy General Education, this course may be taken for general education credit (G2) and satisfies the Foundations for Lifelong Learning Mathematics Requirement.
For Gateway General Education, this course may be taken for Cornerstone-Quantitative Literacy (QL) credit.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 104

Earn a minimum grade of C in the following:

- MATH104 - Fundamentals of Math 1

MATH107 - Math Survey: Sports & Games

Course Information

Course Title
Math Survey: Sports & Games

Subject code	Course Number	Academic Level
MATH	107	Undergraduate

Course Description
A liberal arts course for students who will not be scheduling a technical/professional mathematics course. Explores topics in mathematics through the lens of sports, athletic competitions, and games. Introductory modules may include (but not be limited to): number theory, geometry/ measurement, algebra, probability, statistics, voting methods, and graph theory. No credit under G2 block for math or science majors. Only one of MATH 100, 102, 107, and 108 may be taken for general education credit. Prereq: MATH 090 with a grade of C-minus or higher or MPT 100.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 090

Earn a minimum grade of C- in the following:

- MATH090 - Basic Mathematics

Or MPT 100.

MATH108 - Math Survey: Art & Music

Course Information

Course Title
Math Survey: Art & Music

Subject code	Course Number	Academic Level
MATH	108	Undergraduate

Course Description
A liberal arts course for students who will not be scheduling a technical/professional mathematics course. Explores topics in mathematics through the lens of the fine arts, which may include (but is not limited to) architecture, visual arts, music, and dance. Mathematical content covered may include geometry, transformations, patterns, algebra, sequences and series, permutations, number theory, and fractals.
Prereq: MATH 090 with a grade of C-minus or higher or MPT 100.

For Legacy General Education, this course may be taken for general education credit (G2) and satisfies the Foundations for Lifelong Learning Mathematics Requirement.

For Gateway General Education, this course may be taken for Cornerstone-Quantitative Literacy (QL) credit.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 090

Earn a minimum grade of C- in the following:

- MATH090 - Basic Mathematics

MPT 100.

MATH110 - Trigonometry

Course Information

Course Title
Trigonometry

Subject code	Course Number	Academic Level
MATH	110	Undergraduate

Course Description
For students preparing to take calculus who need additional background in trigonometry. Beginning with angles, numerical trigonometry and triangle solving, it develops the concepts and analytical skills required in calculus: identities, inverse functions, trigonometric equations, graphs and applications. Prereq: MATH 101 or math placement testing/ evaluation before registration and high school algebra I, II and geometry.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 101

Complete ALL of the following Courses:
- MATH101 - College Algebra

Or Math placement testing/evaluation before registration and high school algebra I, II and geometry or MPT 160 or higher.

MATH120 - Logic for Information Technology

Course Information

Course Title
Logic for Information Technology

Subject code	Course Number	Academic Level
MATH	120	Undergraduate

Course Description
Discrete mathematics and its applications to technology including formal mathematical notation, propositional logic, predicate logic, set theory, relations, functions, and matrices. No credit toward a math or four-year computer science major. Prereq: C- or higher in MATH 101.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 101

Earn a minimum grade of C- in the following:
- MATH101 - College Algebra

MATH130 - Elements of Statistics 1

Course Information

Course Title
Elements of Statistics 1

Subject code	Course Number	Academic Level
MATH	130	Undergraduate

Course Description
Derivation of basic formulas; measures of central tendency and variability; probability and normal curve; sampling and hypothesis testing; confidence intervals. No credit toward a math or four-year computer science major, or under block G2 for majors in the School of Science and Mathematics except for nursing majors and allied health technology majors. Prereq: any 100-level MATH course or math placement testing/evaluation before registration. MATH 234 and MATH 235 are equivalent courses, credit will not be given for MATH 130, 234 and/or 235.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

Any 100-Level MATH Course

Complete ALL of the following Course Sets:

- Any 1-level MATH course(s)

Or MPT 130 or Math placement testing/evaluation before registration.

MATH151 - Calculus for Management

Course Information

Course Title
Calculus for Management

Subject code	Course Number	Academic Level
MATH	151	Undergraduate

Course Description
Elementary calculus and its applications in business, economics, life and social sciences. Functions, limits and continuity. The derivative, applications in marginal analysis, optimization, differentials and error estimation. Antiderivatives, area under a curve and definite integrals. Exponential and logarithm functions; applications to growth and decay problems. Improper integrals. No credit toward a major or minor in mathematics. Prereq: MATH 101 or equivalent with a grade of C- or higher, or math placement testing/evaluation before registration. Credit will not be granted for more than one course from MATH 151, 161 or 163H. These courses are considered equivalent and will be processed as repeat credit.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 101 or equivalent

Earn a minimum grade of C- in the following:

- MATH101 - College Algebra

Or MPT 151 or Math placement testing/evaluation before registration.

MATH160 - Precalculus

Course Information

Course Title
Precalculus

Subject code	Course Number	Academic Level
MATH	160	Undergraduate

Course Description
For students preparing to take Calculus I (MATH 161) who need additional background. Covers topics in which beginning calculus students are often deficient: elementary functions, curve sketching, theory of equations, inequalities, trigonometry and analytic geometry. No credit toward a math major. Prereq: two years of high school algebra, one year of high school geometry and trigonometry, and math placement testing/evaluation before registration; or C- or higher in MATH 101.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 101 (C- or higher)

Earn a minimum grade of C- in the following:

- MATH101 - College Algebra

Or MPT 160 or 2 years of high school algebra, one year of high school geometry, one year of high school trigonometry, math placement testing/evaluation before registration.

MATH161 - Calculus 1

Course Information

Course Title
Calculus 1

Subject code	Course Number	Academic Level
MATH	161	Undergraduate

Course Description
Introduces concepts and techniques of calculus, beginning with limits. Major emphasis is on the theory and applications of limits, continuity, derivatives, antiderivatives and the definite integral. Includes introductory calculus of trigonometric, inverse trigonometric, exponential and logarithmic functions. Prereq: C- or higher in MATH 160 or math placement testing/evaluation before registration. Credit will not be granted for more than one course from MATH 151, 161 or 163H. These courses are considered equivalent and will be processed as repeat credit.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 160

Earn a minimum grade of C- in the following:

- MATH160 - Precalculus

Or Math placement testing/evaluation before registration.

MATH161H - Hon: Calculus 1

Course Information

Course Title
Hon: Calculus 1

Subject code	Course Number	Academic Level
MATH	161H	Undergraduate

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 160

Earn a minimum grade of C- in the following:

- MATH160 - Precalculus

Or Math placement testing/evaluation before registration.

MATH163H - Honors Calculus 1

Course Information

Course Title
Honors Calculus 1

Subject code	Course Number	Academic Level
MATH	163H	Undergraduate

Course Description
The progression of mathematical concepts, in the context of the thought and civilization of the time, from the Babylonians to the 20th century. Focus on the contributions of the Hellenic and Alexandrian Greeks as a point of departure for the evolution of geometry, number theory, analysis and logic. Proofs of some of the great theorems. Offered in fall, spring and periodically in summer. Credit will not be granted for more than one course from MATH 151, 161 or 163H. These courses are considered equivalent and will be processed as repeat credit.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH160

Complete ALL of the following Courses:

- MATH160 - Precalculus

Or MPT 163.

MATH179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MATH	179	Undergraduate

Course Description
Experimental

MATH204 - Algebraic Foundations for Mid-Level Teacher

Course Information

Course Title
Algebraic Foundations for Mid-Level Teacher

Subject code	Course Number	Academic Level
MATH	204	Undergraduate

Course Description
Designed for middle-level (4-8) teacher candidates. It contains a concrete study of algebraic structures encountered in the middle-level school mathematics curriculum. Content includes sequential patterns and examples and properties of rings and integral domains such as the integers, integers mod n, polynomials and matrices. Prereq: passing score on BST, and grade of C or better in MATH 104 or department permission. For middle level education majors only.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 104

Earn a minimum grade of C in the following:
- MATH104 - Fundamentals of Math 1

Or must have permission of the department.

Passing BST Score

Must have a passing score on BST.

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Middle-Level Educators Majors Only

Restricted to middle level education majors only.

MATH205 - Geometry for the Middle-Level Teacher

Course Information

Course Title
Geometry for the Middle-Level Teacher

Subject code	Course Number	Academic Level
MATH	205	Undergraduate

Course Description
Designed to equip middle-level (4-8) teacher candidates with sufficient knowledge and mathematical experiences for teaching geometry and measurement effectively. Includes the study of two-dimensional and three-dimensional figures, geometric constructions, congruence, similarity, angle measure, distance, area and volume. Connections between geometry and other mathematics topics; nature and art are addressed. Prereq: passing score on BST, and C or better in MATH 104 or department permission. For middle-level education majors only. MATH 105 is an equivalent course, credit will not be given for MATH 105 and 205

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 104

Earn a minimum grade of C in the following:
- MATH104 - Fundamentals of Math 1

Or must have permission of the department.

Passing BST Score

Must have a passing score on BST.

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Middle-Level Educators Majors Only

Restricted to middle level education majors only.

MATH211 - Calculus 2

Course Information

Course Title
Calculus 2

Subject code	Course Number	Academic Level
MATH	211	Undergraduate

Course Description
Continuation of MATH 161. Techniques of integration, applications of the definite integral, improper integrals, parametric equations, polar coordinates, sequences and infinite series. Prereq: C- or higher in MATH 161 or 163.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 161 or MATH 163H

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

MATH230 - Probability and Stats for Mid-Level Teacher

Course Information

Course Title
Probability and Stats for Mid-Level Teacher

Subject code	Course Number	Academic Level
MATH	230	Undergraduate

Course Description
Designed for middle-level (4-8) teaching candidates as an introduction to probability and statistics. Course will cover the following topics at an appropriate level: descriptive statistics, counting and basic probability, concept of random sampling, random variables and probability distributions, and statistical inference involving confidence intervals and hypothesis testing. Prereq: passing score on BST and C or better in MATH 104 or department permission. For middle-level education majors only. MATH 105 is an equivalent course, credit will not be given for MATH 105 and 230.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 104

Earn a minimum grade of C in the following:

- MATH104 - Fundamentals of Math 1

Or must have permission of the department.

Passing BST Score

Must have a passing score on BST.

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Middle-Level Educators Majors Only

Restricted to middle level education majors only.

MATH234 - Statistics for Health Sciences

Course Information

Course Title
Statistics for Health Sciences

Subject code	Course Number	Academic Level
MATH	234	Undergraduate

Course Description
For nursing program and other health science students. Descriptive statistics, odds ratios, counting, basic probability, concept of random sampling, random variables, probability distributions, and statistical inference including confidence interval estimation and hypothesis testing for one and two sample problems involving means and proportions, chi-squared tests, one way ANOVA, simple linear regression, and correlation will be covered at an appropriate level. Prereq: Math Placement or a 100 level MATH course. MATH 130 and MATH 235 are equivalent courses, credit will not be given for MATH 130, 234 and/or 235.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Any 100-Level MATH Course

Complete ALL of the following Course Sets:
- Any 1-level MATH course(s)

Or MPT 130 or higher.

MATH235 - Survey of Statistics

Course Information

Course Title
Survey of Statistics

Subject code	Course Number	Academic Level
MATH	235	Undergraduate

Course Description
A survey of elementary probability theory, estimation, hypothesis testing and simple regression and correlation. Interpretation of statistical inference in the analysis of data. Emphasis on applications in both behavioral and physical sciences. Prereq: MATH 101 or MATH 151 or higher, or math placement of MATH 151 or higher. MATH 130 and MATH 234 are equivalent courses, credit will not be given for MATH 130, 234 and/or 235.

Cornerstone Stage Labels
Quantitative Literacy (QL)

Simple Requirements

Course Prerequisites: Complete 1 of the following

Type
Prerequisite

MATH 101

Complete ALL of the following Courses:
- MATH101 - College Algebra

MATH 151 or Higher

Complete ANY of the following Course Sets:
- Any MATH 151 or higher course(s)

Other Requirement

Math placement of MATH 151 or higher.

MATH236 - Elements of Statistics 2

Course Information

Course Title
Elements of Statistics 2

Subject code	Course Number	Academic Level
MATH	236	Undergraduate

Course Description
An extension of MATH 130 or MATH 235. Includes estimation, hypothesis testing, design of experiments with analysis of variance, regression analysis, covariance analysis and nonparametric approaches. Includes experiences using a variety of computing devices. A substantial methods course for any major who needs to use statistical techniques. No credit toward math major. Offered in spring. Prereq: MATH 130 or MATH 235.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 130 or MATH 235

Complete ANY of the following Courses:
- MATH130 - Elements of Statistics 1
- MATH235 - Survey of Statistics

MATH255 - Intro to Data Analytics

Course Information

Course Title
Intro to Data Analytics

Subject code	Course Number	Academic Level
MATH	255	Undergraduate

Course Description
Introduction to data analysis techniques and programming that enables real-time decision making in IT organizations. Includes skills and applications in pre-processing, preparing, and reporting data for further analysis. (Cross-listed with ITAN 255, credit may not be received for both courses.)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH130 or MATH234 or MATH235

Earn a minimum grade of C- in the following:
- MATH130 - Elements of Statistics 1
  OR MATH234 - Statistics for Health Sciences
  OR MATH235 - Survey of Statistics

MATH256 - Data Visualization and Communication

Course Information

Course Title
Data Visualization and Communication

Subject code	Course Number	Academic Level
MATH	256	Undergraduate

Course Description
This course is the continued exploration and application of data analysis techniques and programming that allows for the cleanup, analysis, interpretation, and presentation of business-related data. Includes skills and applications in pre-processing, preparing, reporting, and presenting data for further analysis. Students will be exposed to datasets created and managed by business organizations, and learn to ask salient strategic and operational questions based on the information contained within the datasets. Students will analyze statistical relations between variables, create visual depictions of the relations inherent in the data, and communicate their findings to broad audiences in oral and written formats.

Gateway Stage Labels
Technological Competency (TC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 235

Earn a minimum grade of C- in the following:

- MATH235 - Survey of Statistics

MATH279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MATH	279	Undergraduate

Course Description
Experimental

MATH300 - Co-Op Ed Experience in Math

Course Information

Course Title
Co-Op Ed Experience in Math

Subject code	Course Number	Academic Level
MATH	300	Undergraduate

Course Description
Co-Op Ed Experience in Math

MATH301 - History of Mathematics

Course Information

Course Title
History of Mathematics

Subject code	Course Number	Academic Level
MATH	301	Undergraduate

Course Description
The progression of mathematical concepts in the context of the thought and civilization of the time, from the Babylonians to the 20th century. Focus on the contributions of the Hellenic and Alexandrian Greeks as a point of departure for the evolution of geometry, number theory, analysis and logic. Proofs of some of the great theorems. Prereq: COMM 100, ENGL 110, MATH 151 or 161 or 163, and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 151 or MATH 161

Earn a minimum grade of C- in the following:
- MATH151 - Calculus for Management **OR** MATH161 - Calculus 1

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

MATH301H - Hnrs:History of Mathematics

Course Information

Course Title
Hnrs:History of Mathematics

Subject code	Course Number	Academic Level
MATH	301H	Undergraduate

Course Description
The progression of mathematical concepts in the context of the thought and civilization of the time, from the Babylonians to the 20th century. Focus on the contributions of the Hellenic and Alexandrian Greeks as a point of departure for the evolution of geometry, number theory, analysis and logic. Proofs of some of the great theorems. Prereq: COMM 100, ENGL 110, MATH 151 or 156 or 161 or 163, and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 151 or MATH 161

Earn a minimum grade of C- in the following:
- MATH151 - Calculus for Management **OR** MATH161 - Calculus 1

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

MATH304 - Matrix Algebra & Applications

Course Information

Course Title
Matrix Algebra & Applications

Subject code	Course Number	Academic Level
MATH	304	Undergraduate

Course Description
An introduction to matrix algebra with emphasis on applications: systems of linear equations, matrix algebra, determinants, Euclidean and gen- eral vector spaces, inner product spaces, eigenvalues and eigenvectors, matrix transformations, numerical methods for matrices, selected appli- cations such as Markov chains, strategy games, cryptography, bar codes, Hadamard matrices, error-correcting codes, graph theory, computer graphics and internet search engines. Credit will not be granted for both MATH 304 and 322. Prereq: C- or better in MATH 161/163H.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 161 or MATH 163H

Earn a minimum grade of C- in the following:

- MATH161 - Calculus 1
  OR MATH163H - Honors Calculus 1

MATH305 - Teaching Math in Secondary Schools 1

Course Information

Course Title
Teaching Math in Secondary Schools 1

Subject code	Course Number	Academic Level
MATH	305	Undergraduate

Course Description
The first of two secondary mathematics methods courses, participants will investigate mathematics teaching and learning from both teacher and student perspectives. Course participants will engage in mathematical problem solving and in the study of mathematics as the foundation for understanding current curriculum and standards. Lesson planning follows from the consideration of different types of mathematical content, including skills and concepts. Looking specifically at the learning of mathematics and questioning to promote higher-level thinking, this course prepares students for field experiences in subsequent semesters. Recommended: take concurrently with EDFN 211 and EDFN 241. Pre/Coreq: C- or higher in MATH 211.

Simple Requirements

Course Prerequisite or Corequisite

Type
Prerequisite

MATH211

Earn a minimum grade of C- in the following:

- MATH211 - Calculus 2

MATH310 - Intro to Mathematical Proof

Course Information

Course Title
Intro to Mathematical Proof

Subject code	Course Number	Academic Level
MATH	310	Undergraduate

Course Description
Emphasizes mathematical reasoning and communication of mathematical ideas both orally and in writing. Symbolic logic. Techniques of mathematical proof. Algebra of sets, binary relations and functions. Infinite sets, both countable and uncountable. Prereq: ENGL 110 and C- or higher in MATH 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

MATH 211

Earn a minimum grade of C- in the following:
- MATH211 - Calculus 2

MATH310H - Hon: Intro to Mathematical Proof

Course Information

Course Title
Hon: Intro to Mathematical Proof

Subject code	Course Number	Academic Level
MATH	310H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

MATH 211

Earn a minimum grade of C- in the following:
- MATH211 - Calculus 2

MATH311 - Calculus 3

Course Information

Course Title
Calculus 3

Subject code	Course Number	Academic Level
MATH	311	Undergraduate

Course Description
Continuation of MATH 211. Vector calculus, functions of several real variables, partial differentiation, implicit functions, multiple integrals, line and surface integrals and applications. Prereq: C- or higher in MATH 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 211

Earn a minimum grade of C- in the following:

- MATH211 - Calculus 2

MATH312 - Software for Multivariable Calculus

Course Information

Course Title
Software for Multivariable Calculus

Subject code	Course Number	Academic Level
MATH	312	Undergraduate

Course Description
This course will introduce students to a computer algebra system and programming language of use in understanding multivariable calculus. Assuming no prior experience with this software, the students will learn how to evaluate algebraic expressions, plot functions and perform many operations common in calculus, such as integration and differentiation. Students will develop skills with this software that are useful for the visualization and manipulation of multivariable and vector-valued functions. Offered infrequently. Coreq: C- or higher in MATH 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH311

Earn a minimum grade of C- in the following:

- MATH311 - Calculus 3

MATH319 - Calculus and Actuarial Problem Solving

Course Information

Course Title
Calculus and Actuarial Problem Solving

Subject code	Course Number	Academic Level
MATH	319	Undergraduate

Course Description
An extension and synthesis of the calculus sequence that provides students with the problem-solving skills emphasized in such examinations as the Society of Actuaries Exam 1. Does not count as an upper-division elective for the mathematics major or minor. Offered in spring. Prereq: C- or higher in MATH 311.

Simple Requirements

Course Prerequisite or Corequisite

Type
Prerequisite

MATH 311

Earn a minimum grade of C- in the following:
- MATH311 - Calculus 3

MATH322 - Linear Algebra 1

Course Information

Course Title
Linear Algebra 1

Subject code	Course Number	Academic Level
MATH	322	Undergraduate

Course Description
A rigorous introduction to linear algebra. Includes systems of linear equations, matrix algebra, determinants, vector spaces, inner product spaces geometry in Rn, linear transformations, orthogonal transformations, eigentheory and diagonalization. Prereq or coreq: C- or higher in MATH 311; MATH 310 recommended. Credit will not be given for this course and MATH 304. MATH 322 is intended for mathematics majors and is more theory and proof-based. MATH 304 is more application oriented and intended for computer science or data science majors

Simple Requirements

Course Prerequisite or Corequisite

Type
Prerequisite

MATH311

Earn a minimum grade of C- in the following:
- MATH311 - Calculus 3

MATH325 - Mathematical Connections

Course Information

Course Title
Mathematical Connections

Subject code	Course Number	Academic Level
MATH	325	Undergraduate

Course Description
Mathematical Connections is a 3-credit required course for BSE mathematics majors. Pre-service secondary mathematics teachers (middle and high school) will explore the nature of the mathematics that they will teach through the lens of the undergraduate mathematics courses that they have taken as part of their required program. Mathematical topics will include number systems, functions, number theory, trigonometry, geometry (Euclidean and non-Euclidean), calculus, and statistics. The course will include an examination of concept analysis, problem analysis and mathematical connections between standard secondary mathematics content and post-secondary mathematics coursework. The course will actively involve pre-service teachers in a productive dialogue about and rigorous investigation into the mathematics that they will teach. Restricted to BSE majors. Pre/Coreq: C- or higher in MATH 333, and MATH 345, and MATH 354 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 333 and MATH 345

Earn a minimum grade of C- in the following:
- MATH333 - Probablity and Statistics
  OR MATH345 - Abstract Algebra 1

MATH 354

Earn a minimum grade of C- in the following:
- MATH354 - Classical and Transformational Geometry

Or must have permission of instructor.

MATH333 - Probablity and Statistics

Course Information

Course Title
Probablity and Statistics

Subject code	Course Number	Academic Level
MATH	333	Undergraduate

Course Description
Designed for mathematics education majors. A rigorous study of probability, distribution theory and the basics of statistical inference. Includes probability, expectation, discrete and continuous distributions, descriptive statistics and both estimation and hypothesis testing for one- and twosample problems. Credit will not be granted for both MATH 333 and MATH 335. Prereq: C- or higher in MATH 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 311

Earn a minimum grade of C- in the following:
- MATH311 - Calculus 3

MATH335 - Mathematical Statistics 1

Course Information

Course Title
Mathematical Statistics 1

Subject code	Course Number	Academic Level
MATH	335	Undergraduate

Course Description
Probability, random variables and probability distributions, mathematical expectation, special probability distributions and probability densities. MATH 335 may be considered as an introductory course in probability theory. Offered in fall. Credit will not be granted for both MATH 333 and MATH 335. Prereq: C- or higher in MATH 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 311

Earn a minimum grade of C- in the following:
- MATH311 - Calculus 3

MATH345 - Abstract Algebra 1

Course Information

Course Title
Abstract Algebra 1

Subject code	Course Number	Academic Level
MATH	345	Undergraduate

Course Description
Groups, rings, fields, integral domains. Emphasis on structure of algebra. Prereq: C- or higher in MATH 310 and 322.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310 and MATH 322

Earn a minimum grade of C- in the following:
- MATH310 - Intro to Mathematical Proof
- MATH322 - Linear Algebra 1

MATH353 - Survey of Geometry

Course Information

Course Title
Survey of Geometry

Subject code	Course Number	Academic Level
MATH	353	Undergraduate

Course Description
Various examples of axiom systems, axiomatic development of Neutral Geometry followed by Euclidean and Hyperbolic Geometry. Models for Euclidean and Hyperbolic Geometry. Emphasis on proving geometic theorems, both orally and in writing. Offered in fall. Prereq: C- or higher in MATH 310 and 322 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310 and MATH 322

Earn a minimum grade of C- in the following:

- MATH310 - Intro to Mathematical Proof
- MATH322 - Linear Algebra 1

Or must have permission of instructor.

MATH354 - Classical and Transformational Geometry

Course Information

Course Title
Classical and Transformational Geometry

Subject code	Course Number	Academic Level
MATH	354	Undergraduate

Course Description
Geometry from both classical and transformational points of view. The classical part of the course will focus on the axiomatic development of neutral geometry followed by Euclidean and hyperbolic geometry. The transformational part of the course will begin with the study of two families of transformations: isometries and similarities, followed by the investigation of various geometric theorems in terms of these two families of transformations. Emphasis on proving geometric theorems using both classical and transformational approaches. Prereq: C- or better: MATH 310 and MATH 322.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Earn a minimum grade of C- in the following:

- MATH310 - Intro to Mathematical Proof
- MATH322 - Linear Algebra 1

MATH355 - Transformational Geometry

Course Information

Course Title
Transformational Geometry

Subject code	Course Number	Academic Level
MATH	355	Undergraduate

Course Description
The study of geometry from a transformational point of view. The group of affine transformations, with the subgroups of similarities and motions, is studied with investigation of invariant properties. Some exposure to transformations in the complex plane. Offered in spring and periodically in summer. Prereq: C- or higher in MATH 310 and 322 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310 and MATH 322

Earn a minimum grade of C- in the following:

- MATH310 - Intro to Mathematical Proof
- MATH322 - Linear Algebra 1

Or permission of instructor.

MATH355H - H: Transformational Geometry

Course Information

Course Title
H: Transformational Geometry

Subject code	Course Number	Academic Level
MATH	355H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310 and MATH 322

Earn a minimum grade of C- in the following:

- MATH310 - Intro to Mathematical Proof
- MATH322 - Linear Algebra 1

Or permission of instructor.

MATH365 - Ordinary Differential Equations

Course Information

Course Title
Ordinary Differential Equations

Subject code	Course Number	Academic Level
MATH	365	Undergraduate

Course Description
First-order differential equations; linear first- and second-order initial-value problems; power series solutions; applications. Also includes at least one of the following topics: special functions of mathematical physics, Laplace transforms, systems of first-order equations. Offered in fall, spring. Prereq: C- or higher in MATH 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 211

Earn a minimum grade of C- in the following:
- MATH211 - Calculus 2

MATH370 - Operations Research

Course Information

Course Title
Operations Research

Subject code	Course Number	Academic Level
MATH	370	Undergraduate

Course Description
Principles of model building; examples from linear optimization, network analysis, dynamic programming, probabilistic decision theory, Markov chains, queuing theory, simulation and inventory models. Applications and theory will be examined. Offered periodically. Prereq: C- or higher in MATH 322 and one of MATH 235, 333 or 335 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 322

Earn a minimum grade of C- in the following:
- MATH322 - Linear Algebra 1

MATH 235 or MATH 333 or MATH 335

Earn a minimum grade of C- in the following:
- MATH235 - Survey of Statistics
  OR MATH333 - Probablity and Statistics
  OR MATH335 - Mathematical Statistics 1

Or must have permission of instructor.

MATH372 - Financial Mathematics I

Course Information

Course Title
Financial Mathematics I

Subject code	Course Number	Academic Level
MATH	372	Undergraduate

Course Description
Provides an understanding of the fundamental concepts of financial mathematics, and how those concepts are applied in calculating present and accumulated values for various streams of cash flows as a basis for future use in: reserving, valuation, pricing, asset/liability management, investment income, capital budgeting, and valuing contingent cash flows. Prereq: C- or better in MATH 211

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 211

Earn a minimum grade of C- in the following:
- MATH211 - Calculus 2

MATH375 - Numerical Analysis

Course Information

Course Title
Numerical Analysis

Subject code	Course Number	Academic Level
MATH	375	Undergraduate

Course Description
Numerical methods for solving systems of linear equations, solving nonlinear equations, integration, interpolation, approximation and least squares curve fitting. Error theory. Offered in spring. Prereq: C- or higher in CMSC 161, MATH 311 and 322.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 161 and MATH 311 and MATH 322

Earn a minimum grade of C- in the following:
- CMSC161 - Introduction to Programming 1
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1

MATH379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MATH	379	Undergraduate

Course Description
Experimental

MATH393 - Number Theory

Course Information

Course Title
Number Theory

Subject code	Course Number	Academic Level
MATH	393	Undergraduate

Course Description
The study of the properties of integers with respect to the fundamental operations. Primary emphasis on the logical derivations of these properties. Includes induction, divisibility, congruences, theorems of Fermat and Euler, continued fractions and quadratic reciprocity. Offered periodically. Prereq: C- or higher in MATH 310.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310

Earn a minimum grade of C- in the following:
- MATH310 - Intro to Mathematical Proof

MATH393H - H:Number Theory

Course Information

Course Title
H:Number Theory

Subject code	Course Number	Academic Level
MATH	393H	Undergraduate

Course Description
H:Number Theory

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310

Earn a minimum grade of C- in the following:
- MATH310 - Intro to Mathematical Proof

MATH395 - Introduction Combinatorics

Course Information

Course Title
Introduction Combinatorics

Subject code	Course Number	Academic Level
MATH	395	Undergraduate

Course Description
Mathematical foundation for the concepts and techniques used in combinatorics. Topics include recurrence relations, finite differences, generating functions, pigeonhole principle, special sequences of integers (such as Fibonacci, Sterling and Bell sequences), principle of inclusion and exclusion, and an introduction to the theory of graphs. Applications will be indicated. Offered periodically. Prereq: C- or higher in MATH 322.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 322

Earn a minimum grade of C- in the following:
- MATH322 - Linear Algebra 1

MATH400 - Co-Op Ed Experience in Math

Course Information

Course Title
Co-Op Ed Experience in Math

Subject code	Course Number	Academic Level
MATH	400	Undergraduate

Course Description
Co-Op Ed Experience in Math

MATH405 - Teaching Math in Secondary Schools 2

Course Information

Course Title
Teaching Math in Secondary Schools 2

Subject code	Course Number	Academic Level
MATH	405	Undergraduate

Course Description
The second of two secondary mathematics methods courses, participants will focus on: lesson planning, unit development, and implementation; assessment and evaluation; classroom management and organization within school communities; and continued professional growth as reflective practitioners. A considerable portion of class time will be devoted to teaching mathematics to secondary school students. Must be taken simultaneously with SEED 321, SEED 340, SPED 346. Offered fall.Prereq/Co-requisite: C- or higher in MATH 305. Prereq: C- or higher in MATH 325, MATH 333 (or 335/435), MATH 345, and MATH 354.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 325 and MATH 333 or MATH 335 or MATH 435 and MATH 345 and MATH 354

Earn a minimum grade of C- in the following:
- MATH325 - Mathematical Connections
- MATH333 - Probablity and Statistics
  OR MATH335 - Mathematical Statistics 1
  OR MATH435 - Mathematical Statistics 2
- MATH345 - Abstract Algebra 1
- MATH354 - Classical and Transformational Geometry

Course Prerequisite or Corequisite

Type
Prerequisite

MATH 305

Earn a minimum grade of C- in the following:
- MATH305 - Teaching Math in Secondary

Schools 1

MATH408 - Topics in Mathematics

Course Information

Course Title
Topics in Mathematics

Subject code	Course Number	Academic Level
MATH	408	Undergraduate

Course Description
Topics in Mathematics. Topics courses are scheduled by arrangement with the instructor; semester hours of credit and meeting times for those courses are set by agreement.

MATH418 - Topics in Math Education

Course Information

Course Title
Topics in Math Education

Subject code	Course Number	Academic Level
MATH	418	Undergraduate

Course Description
Topics in Mathematics Education. Topics courses are scheduled by arrangement with the instructor; semester hours of credit and meeting times for those courses are set by agreement.

MATH419 - Actuarial Science Seminar

Course Information

Course Title
Actuarial Science Seminar

Subject code	Course Number	Academic Level
MATH	419	Undergraduate

Course Description
A synthesis of calculus and probability that will develop the knowledge of the fundamental probability tools for quantitatively assessing risk. Students will be provided with the skills required in such examinations as the SOA Exam P and CAS Exam 1. Does not count as an upper-division elective for the mathematics major or minor. Offered in spring.

Simple Requirements

Course Prerequisite or Corequisite

Type
Prerequisite

MATH435

Complete ALL of the following Courses:

- MATH435 - Mathematical Statistics 2

MATH422 - Linear Algebra 2

Course Information

Course Title
Linear Algebra 2

Subject code	Course Number	Academic Level
MATH	422	Undergraduate

Course Description
A continuation of MATH 322. Topics include further theory of linear transformations and their matrix representations: invariant subspaces, equivalent and similar matrices, canonical forms. The vector space L (V, W). Orthogonal transformations and isometries; analysis of Euclidean motions in R3. Least squares approximation and theory of generalized inverses. Bilinear and quadratic forms and their matrix representations; applications to conic sections in R2 and quadric surfaces in R3. Complex vector spaces. Offered periodically. Prereq: MATH 310 and C- or higher in MATH 322.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310

Complete ALL of the following Courses:
- MATH310 - Intro to Mathematical Proof

MATH 322

Earn a minimum grade of C- in the following:
- MATH322 - Linear Algebra 1

MATH435 - Mathematical Statistics 2

Course Information

Course Title
Mathematical Statistics 2

Subject code	Course Number	Academic Level
MATH	435	Undergraduate

Course Description
A continuation of MATH 335. Functions of random variables, sampling distributions, point estimation, interval estimation, hypotheses-testing theory and applications. Offered in spring. Prereq: C- or higher in MATH 335.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 335

Earn a minimum grade of C- in the following:
- MATH335 - Mathematical Statistics 1

MATH435H - HNRS:Mathematical Statistics 2

Course Information

Course Title
HNRS:Mathematical Statistics 2

Subject code	Course Number	Academic Level
MATH	435H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 335

Earn a minimum grade of C- in the following:
- MATH335 - Mathematical Statistics 1

MATH438 - Topics in Statistics

Course Information

Course Title
Topics in Statistics

Subject code	Course Number	Academic Level
MATH	438	Undergraduate

Course Description
Topics in Statistics. Topics courses are scheduled by arrangement with the instructor; semester hours of credit and meeting times for those courses are set by agreement.

MATH445 - Abstract Algebra 2

Course Information

Course Title
Abstract Algebra 2

Subject code	Course Number	Academic Level
MATH	445	Undergraduate

Course Description
Continuation of MATH 345. Introduction to field theory, rings of polynomials, introduction to Galois theory. Offered periodically. Prereq: C- or higher in MATH 345.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 345

Earn a minimum grade of C- in the following:

- MATH345 - Abstract Algebra 1

MATH457 - Elementary Differential Geometry

Course Information

Course Title
Elementary Differential Geometry

Subject code	Course Number	Academic Level
MATH	457	Undergraduate

Course Description
Frenet frames; curvature and torsion of curves in 3-space. Calculus of vector fields; geodesics and curvature of surfaces in 3-space. Surface area and volume. The Euler characteristic of a surface and the Gauss-Bonnet theorem. Rigid motions and isometries. Riemannian metrics, parallelism, non-Euclidean geometries and applications. Offered periodically. Prereq: C- or higher in MATH 310, 311, 322.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310 and MATH 311 and MATH 322

Earn a minimum grade of C- in the following:

- MATH310 - Intro to Mathematical Proof
- MATH311 - Calculus 3
- MATH322 - Linear Algebra 1

MATH464 - Real Analysis 1

Course Information

Course Title
Real Analysis 1

Subject code	Course Number	Academic Level
MATH	464	Undergraduate

Course Description
Rigorous development of the concepts and methods of calculus. The real number system and its topology; theory of limits and continuity; differentiable functions and their properties, the Reimann integral. Prereq: C- or higher in MATH 311 and MATH 345 or department permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 311

Earn a minimum grade of C- in the following:
- MATH311 - Calculus 3

MATH 345

Earn a minimum grade of C- in the following:
- MATH345 - Abstract Algebra 1

Or must have permission of department.

MATH464H - Hnrs: Real Analysis 1

Course Information

Course Title
Hnrs: Real Analysis 1

Subject code	Course Number	Academic Level
MATH	464H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 311

Earn a minimum grade of C- in the following:
- MATH311 - Calculus 3

MATH 345

Earn a minimum grade of C- in the following:
- MATH345 - Abstract Algebra 1

Or must have permission of department.

MATH465 - Real Analysis 2

Course Information

Course Title
Real Analysis 2

Subject code	Course Number	Academic Level
MATH	465	Undergraduate

Course Description
Continuation of MATH 464. Topics chosen from the following: convergence and uniform convergence of infinite sequences and series of functions; topology of Euclidean n-space Rn; differential calculus of functions RnR and RnRm; extreme values; implicit and inverse function theorems;Riemann integration in Rn; metric spaces; function spaces; Riemann-Stieltjes integration. Offered infrequently. Prereq: C- or higher in MATH 464.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 464

Earn a minimum grade of C- in the following:
- MATH464 - Real Analysis 1

MATH467 - Partial Differential Equations

Course Information

Course Title
Partial Differential Equations

Subject code	Course Number	Academic Level
MATH	467	Undergraduate

Course Description
Fourier series and the method of separation of variables; the wave equation, heat equation and Laplaces equation; dAlemberts formula. Maximum principles, energy integrals and uniqueness. Sturm-Liouville problems and eigenfunction expansions. Offered in fall. Prereq: C- or higher in MATH 365.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 365

Earn a minimum grade of C- in the following:
- MATH365 - Ordinary Differential Equations

MATH471 - Mathematical Modeling

Course Information

Course Title
Mathematical Modeling

Subject code	Course Number	Academic Level
MATH	471	Undergraduate

Course Description
Applications of mathematics to real-world problems drawn from industry, research laboratories, the physical sciences, and engineering and the scientific literature. May include parameter estimation, curve fitting, elementary probability, optimization, computer programming, and ordinary and partial differential equations. Offered periodically. Prereq: C- or higher in MATH 365.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 365

Earn a minimum grade of C- in the following:

- MATH365 - Ordinary Differential Equations

MATH472 - Financial Mathematics II

Course Information

Course Title
Financial Mathematics II

Subject code	Course Number	Academic Level
MATH	472	Undergraduate

Course Description
Develops knowledge of the theoretical basis of actuarial models and the application of those models to insurance and other financial risks. Pricing formulas for forwards, futures, and options are developed and used in financial strategies designed to reduce risk. Prereq: C- or better in MATH 335 or MATH 333 and C- or better in MATH 372.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 335 or MATH 333 and MATH 372

Earn a minimum grade of C- in the following:

- MATH335 - Mathematical Statistics 1
  OR MATH333 - Probablity and Statistics
- MATH372 - Financial Mathematics I

MATH478 - Topics in Applied Mathematics

Course Information

Course Title
Topics in Applied Mathematics

Subject code	Course Number	Academic Level
MATH	478	Undergraduate

Course Description
Topics in Applied Mathematics. Topics courses are scheduled by arrangement with the instructor; semester hours of credit and meeting times for those courses are set by agreement.

MATH479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MATH	479	Undergraduate

Course Description
Experimental

MATH483 - Point-Set Topology

Course Information

Course Title
Point-Set Topology

Subject code	Course Number	Academic Level
MATH	483	Undergraduate

Course Description
Foundation course for extensive study in modern higher analysis, topology and related areas. Infinite set theory, metric spaces, topological spaces, separation properties, continuous mappings, homeomorphisms, convergence theory, product spaces, quotient spaces, connectedness, compactness, function spaces, applications. Offered infrequently. Prereq: C- or higher in MATH 464 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 464

Earn a minimum grade of C- in the following:

- MATH464 - Real Analysis 1

Or must have permission of instructor.

MATH489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
MATH	489	Undergraduate

Course Description
For the definition of honors course/thesis and eligibility, refer to the Special Academic Opportunities section of this catalog.

MATH498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
MATH	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section.

MATH499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
MATH	499	Undergraduate

Course Description
For the definition of honors course/thesis and eligibility, refer to the Special Academic Opportunities section of this catalog.

MATH500 - Co-Op Ed Experience in Math

Course Information

Course Title
Co-Op Ed Experience in Math

Subject code	Course Number	Academic Level
MATH	500	Graduate

Course Description
Co-Op Ed Experience in Math

MATH502 - Linear Algebra

Course Information

Course Title
Linear Algebra

Subject code	Course Number	Academic Level
MATH	502	Graduate

Course Description
Systems of linear equations, matrix algebra and determinants; real vector spaces, linear independence, basis and dimension; real inner product spaces, Gram-Schmidt orthogonalization; eigen theory and diagonalization; linear transformations and matrix representation. Prereq or Coreq: MATH 311; MATH 310/520 recommended.

Simple Requirements

Course Prerequisites or Corequisites

Type
Prerequisite

MATH 311

Complete ALL of the following Courses:

- MATH311 - Calculus 3

MATH 310/520 recommended.

MATH503 - Probability and Statistics for Teachers

Course Information

Course Title
Probability and Statistics for Teachers

Subject code	Course Number	Academic Level
MATH	503	Graduate

Course Description
A rigorous one-semester study of probability, distribution theory and the basics of statistical inference. Topics include probability, expectation, discrete and continuous distributions, descriptive statistics and both estimation and hypothesis testing for one- and two-sample problems. Prereq: MATH 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 311

Complete ALL of the following Courses:

- MATH311 - Calculus 3

MATH504 - Modern Algebra for Teachers

Course Information

Course Title
Modern Algebra for Teachers

Subject code	Course Number	Academic Level
MATH	504	Graduate

Course Description
Algebraic properties of complex number systems, set theory, groups, rings, integral domains and fields. MATH 310/520 and MATH 322/502.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310 or MATH 310H or MATH 520 and MATH 322 or MATH 502

Earn a minimum grade of C- in the following:

- MATH310 - Intro to Mathematical Proof
  OR MATH310H - Hon: Intro to Mathematical Proof
  OR MATH520 - Logic and Foundations of Math
- MATH322 - Linear Algebra 1
  OR MATH502 - Linear Algebra

MATH505 - Classical & Modern Geometry

Course Information

Course Title
Classical & Modern Geometry

Subject code	Course Number	Academic Level
MATH	505	Graduate

Course Description
Study of geometry from both classical and transformational points of view. The classical part will focus on the axiomatic development of various forms of geometry; the transformational part will focus on the study of geometry in terms of two families of transformations: isometries and similarities. Emphasis on investigating geometry using both classical and transformational approaches and their interactions.

MATH506 - Modern Analysis for Teachers

Course Information

Course Title
Modern Analysis for Teachers

Subject code	Course Number	Academic Level
MATH	506	Graduate

Course Description
Real number system, limits of sequences and functions, theory of differentiation, Reimann integration, infinite series. Prereq: MATH 310/520, 311, 322/502. MATH 345/504 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 310 or MATH 310H or MATH 520 and MATH 322 or MATH 502

Earn a minimum grade of C- in the following:

- MATH310 - Intro to Mathematical Proof
  OR MATH310H - Hon: Intro to Mathematical Proof
  OR MATH520 - Logic and Foundations of Math
- MATH322 - Linear Algebra 1
  OR MATH502 - Linear Algebra

MATH 345 or MATH 504 recommended.

MATH520 - Logic and Foundations of Math

Course Information

Course Title
Logic and Foundations of Math

Subject code	Course Number	Academic Level
MATH	520	Graduate

Course Description
Theory of inference, symbolic logic, nature of axiom systems, validity of proofs, consistency, independence, completeness, theory of sets and cardinal numbers.

MATH535 - Statistical Methods 1

Course Information

Course Title
Statistical Methods 1

Subject code	Course Number	Academic Level
MATH	535	Graduate

Course Description
Survey of statistical methods used in research, education, behavioral science and biomedical applications. Experimental designs discussed regarding advantages, disadvantages, sampling problems and analysis. Regression and analysis of variance. Prereq: An elementary probability or statistics course. Offered in fall and periodically in summer.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH503 or MATH130 or MATH235 or MATH 333 or MATH 435

Earn a minimum grade of C- in the following:

- MATH503 - Probability and Statistics for Teachers
  OR MATH130 - Elements of Statistics 1
  OR MATH235 - Survey of Statistics
  OR MATH333 - Probablity and Statistics
  OR MATH435 - Mathematical Statistics 2

MATH536 - Statistical Methods 2

Course Information

Course Title
Statistical Methods 2

Subject code	Course Number	Academic Level
MATH	536	Graduate

Course Description
Continuation and extension of statistical methods introduced in Statistical Methods I (Math 535). Advanced topics in analysis of variance, randomized block designs and experimental designs. Prereq: Math 535 or permission of instructor. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 535

Complete ALL of the following Courses:
- MATH535 - Statistical Methods 1

Or must have permission of instructor.

MATH536H - Hon: Statistical Methods 2

Course Information

Course Title
Hon: Statistical Methods 2

Subject code	Course Number	Academic Level
MATH	536H	Graduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 535

Complete ALL of the following Courses:
- MATH535 - Statistical Methods 1

Or must have permission of instructor.

MATH537 - Statistical Problem Solving Seminar

Course Information

Course Title
Statistical Problem Solving Seminar

Subject code	Course Number	Academic Level
MATH	537	Graduate

Course Description
Capstone course designed to serve as outcome assessment for math majors enrolled in statistics option. Course involves problem solving, data analysis and statistical consulting. Materials drawn from real-world problems. Prereq: Math 535. Coreq: Math 536. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 535

Complete ALL of the following Courses:
- MATH535 - Statistical Methods 1

Course Corequisite

Type
Corequisite

MATH 536

Enroll in the following Courses:
- MATH536 - Statistical Methods 2

MATH566 - Complex Variables

Course Information

Course Title
Complex Variables

Subject code	Course Number	Academic Level
MATH	566	Graduate

Course Description
Complex number system, analytic functions, elementary functions, contour integration, residues and poles, conformal mapping. Prereq: MATH 506 or equivalent. Offered infrequently.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 506 or equivalent

Complete ANY of the following Courses:
- MATH506 - Modern Analysis for Teachers

MATH577 - Problems in Applied Math

Course Information

Course Title
Problems in Applied Math

Subject code	Course Number	Academic Level
MATH	577	Graduate

Course Description
An investigation of one or more topics of current interest in applied mathematics. Specific topics to be covered vary but are announced each time the course is offered. Offered infrequently.

MATH592 - Graph Theory

Course Information

Course Title
Graph Theory

Subject code	Course Number	Academic Level
MATH	592	Graduate

Course Description
Finite graphs, multigraphs, digraphs and networks from theoretical, practical and historical perspectives. Specific topics include isomorphisms, graph variants, planarity and nonplanarity, traversability, colorings, flows, matchings and optimization algorithms. Prereq: MATH 502 or equivalent. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 502 or equivalent

Complete ANY of the following Courses:
- MATH502 - Linear Algebra

MATH592H - HNRS: Graph Theory

Course Information

Course Title
HNRS: Graph Theory

Subject code	Course Number	Academic Level
MATH	592H	Graduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 502 or equivalent

Complete ANY of the following Courses:
- MATH502 - Linear Algebra

MATH602 - Equity Issues in Math Ed

Course Information

Course Title
Equity Issues in Math Ed

Subject code	Course Number	Academic Level
MATH	602	Graduate

Course Description
Designed for graduate level students with an interest in equity issues in mathematics education. In this course, we examine issues of equity in mathematics education from various theoretical and practical perspectives and long lines of race, gender, culture and socioeconomic status. It is a reading-intensive course that spans such topics as the achievement gap, tracking, culturally-relevant pedagogy, multiculturalism, the nature of mathematics and mathematics for democracy and social justice. Course assignments will be differentiated to ensure they are relevant to the concerns of both practicing teachers as well as students without a teaching background that intend to pursue further graduate study.

MATH603 - History of Mathematics

Course Information

Course Title
History of Mathematics

Subject code	Course Number	Academic Level
MATH	603	Graduate

Course Description
Evolution of mathematical concepts from antiquity to the present century. Emphasis on eras of great mathematical activity.

MATH604 - Ethnomathematics

Course Information

Course Title
Ethnomathematics

Subject code	Course Number	Academic Level
MATH	604	Graduate

Course Description
This course aims to introduce Ethnomathematics as a field by examining mathematics across and within cultures. In addition, the course is designed to strengthen and expand students' understanding of mathematical topics (e.g., number systems, geometry, combinatorics, group theory) through study of the mathematics of world cultures. Furthermore, students will discuss ways in what is done in the course may be used to refresh or augment 7-12 school mathematics courses and develop school materials in Ethnomathematics.

MATH606 - Noyce - Transitioning

Course Information

Course Title
Noyce - Transitioning

Subject code	Course Number	Academic Level
MATH	606	Graduate

Course Description
Intended to address topics and concerns relevent to recently-certified NOYCE secondary mathematics teachers as they transition to their first year of teaching in a high-needs school district. Through readings, class discussions, individual presentations, and written assignments, participants reflect on their student teaching experiences, further explore challenges of working with diverse groups of students, and develop strategies to increase their effectiveness as a teacher in the context of a high-needs district. Instructor Permission required.

MATH607 - Noyce - Moving to Tenure

Course Information

Course Title
Noyce - Moving to Tenure

Subject code	Course Number	Academic Level
MATH	607	Graduate

Course Description
Intended as an extension to MATH 606 and meant to address topics and concerns relevant to recently-certified NOYCE secondary mathematics teachers as they complete their first year of teaching in a high-needs school district. Through readings, class discussions, individual presentations, and written assignments, participants reflect on their experiences during the first year of teaching, further explore challenges of working with diverse groups of students, and develop strategies to increase their effectiveness as a teacher in the context of a high-needs district. Instructor Permission required.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Instructor Permission

Must have permission of instructor.

MATH610 - Problem Solving Seminar

Course Information

Course Title
Problem Solving Seminar

Subject code	Course Number	Academic Level
MATH	610	Graduate

Course Description
Develops students problem-solving abilities in mathematics and teaching of problem solving to high school students. Includes discussion of solutions to problems and the theories of problem solving. For both teachers and nonteachers. Offered periodically.

MATH611 - Learning Mathematics

Course Information

Course Title
Learning Mathematics

Subject code	Course Number	Academic Level
MATH	611	Graduate

Course Description
Investigation of the learning theory of constructivism and its application to the learning of mathematics. Emphasis on higher-order concept acquisition and schema development, and their relationship to mathematical instruction and teacher decision making. Individual differences in learning styles are also discussed. Prereq: teaching experience or permission of the instructor. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Teaching Experience or Instructor Permission

Must have teaching experience or permission of instructor.

MATH613 - Elem/Sec Math Connections

Course Information

Course Title
Elem/Sec Math Connections

Subject code	Course Number	Academic Level
MATH	613	Graduate

Course Description
This course is designed for graduate level students and will be of particular interest to practicing mathematics teachers of grades 7-12. In this course, we will explore the foundational concepts of the K-6 mathematics curriculum in significant depth while reflecting on ways to build strong connections between this elementary content and the content in the 7-12 curriculum. The goal is for students to see where their own teaching fits in the broader scheme of K-12 mathematics education so that they can design instruction that builds on their own students' prior understanding and contributes to a more holistic development for mid-level, middle, and high school mathematics learners. Course assignments may involve presentations, discussions, reading, written exams, papers, problem solving, problem posing, and instructional design.

MATH614 - Current Issues in Middle School

Course Information

Course Title
Current Issues in Middle School

Subject code	Course Number	Academic Level
MATH	614	Graduate

Course Description
Current issues relating to middle school mathematics instruction, including issues associated with teaching strategies as well as curricular issues. Central to this discussion will be the NCTMs Principles and Standards for School Mathematics and the PA Academic Standards for Mathematics. Prereq: teaching experience or permission of the instructor. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Teaching Experience or Instructor Permission

Must have teaching experience or permission of instructor.

MATH615 - Current Issues in Secondary School

Course Information

Course Title
Current Issues in Secondary School

Subject code	Course Number	Academic Level
MATH	615	Graduate

Course Description
Current issues relating to secondary school mathematics instruction, including issues associated with teaching strategies as well as curricular issues. Central to this discussion will be the NCTMs Principles and Standards for School Mathematics and the PA Academic Standards for Mathematics. Prereq: teaching experience or permission of the instructor. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Teaching Experience or Instructor Permission

Must have teaching experience or permission of instructor.

MATH617 - Middle/Secondary School Innovations

Course Information

Course Title
Middle/Secondary School Innovations

Subject code	Course Number	Academic Level
MATH	617	Graduate

Course Description
Current curricular issues and teaching strategies associated with educational innovations that are invariant with respect to the middle school-secondary school boundary. Central to this discussion will be the NCTMs Principles and Standards for School Mathematics and the PA Academic Standards for Mathematics. Prereq: teaching experience or permission of the instructor. Offered periodically

Simple Requirements

Course Prerequisites

Type
Prerequisite

Teaching Experience or Instructor Permission

Must have teaching experience or permission of instructor.

MATH618 - 7-12 Assessment

Course Information

Course Title
7-12 Assessment

Subject code	Course Number	Academic Level
MATH	618	Graduate

Course Description
Course for secondary mathematics teachers who wish to explore the nature of the mathematics assessment from a variety of perspectives. The course will examine traditional and non-traditional forms to assessment as well as the purpose of formative and summative assessments - allowing for discussion of the pros and cons to each. The course will also examine the impact of assessment tools on individual classroom instruction as well as within local departments, schools, districts, states and national education issues. The course will seek to actively involve teachers in a productive dialogue about the mathematics that they teach and explore a variety of levels at which the mathematics can be assessed. In otder to do this, it will be necessary at times to expand and explore K-16 mathematics assessment at some length.

MATH619 - Advanced Perspectives

Course Information

Course Title
Advanced Perspectives

Subject code	Course Number	Academic Level
MATH	619	Graduate

Course Description
Course is for secondary mathematics teachers at the middle or high school level who wish to explore the nature of the mathematics that they teach from a different viewpoint. The course will look at typical secondary mathematics topics including the real number system, polynomials, number theory, trigonometry and Euclidean geometry while examining concept analysis, problem analysis and mathematical connections. The course will actively involve in-service and pre-service teachers in a productive dialogue about the mathematics that they teach, and potential developmental or extensions that could be put into practice at each level. The class will also explore a variety of levels at which it may be appropriate to address these issues with their own students.

MATH622 - 21st Century Math

Course Information

Course Title
21st Century Math

Subject code	Course Number	Academic Level
MATH	622	Graduate

Course Description
The intent of the course, Teaching Mathematics in The 21st Century, is to examine, study, and analyze teaching techniques and alternate approaches to teaching and learning mathematics in the 21st century. Students will experiment with a variety of pedagogies that are more in-line with the way in which 21st century students live rather than how they are often taught. Comparisons of multiple pedagogies (current, past and potential future) will be frequently made and discussed.

MATH642 - Linear Algebra

Course Information

Course Title
Linear Algebra

Subject code	Course Number	Academic Level
MATH	642	Graduate

Course Description
Vector spaces, linear transformations, matrices, systems of equations, determinants. Prereq: MATH 502 or equivalent. Offered infrequently.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 502 or equivalent

Complete ANY of the following Courses:

- MATH502 - Linear Algebra

MATH650 - Topics in Geometry

Course Information

Course Title
Topics in Geometry

Subject code	Course Number	Academic Level
MATH	650	Graduate

Course Description
Topics selected from the parallel postulate and models for Euclidean and non-Euclidean geometries; projective geometry; local geometry of smooth space curves; geometry of smooth surfaces in space; geometry of space-time; finite geometries; representation of a geometry as a group of transformations acting on a set. Prereq: teaching experience or permission of instructor. Offered infrequently.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Teaching Experience or Instructor Permission

Must have teaching experience or permission of instructor.

MATH670 - Operations Research

Course Information

Course Title
Operations Research

Subject code	Course Number	Academic Level
MATH	670	Graduate

Course Description
Principles of model building; examples from linear optimization, network analysis, dynamic programming, probabilistic decision theory, Markov chains, queuing theory, simulation and inventory models. Applications and theory. Prereq: MATH 642 or equivalent, and a statistics course or equivalent. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 642 or equivalent

Complete ANY of the following Courses:
- MATH642 - Linear Algebra

Statistics Course

Must complete a statistics course or equivalent.

MATH672 - Math Modeling in Secondary School

Course Information

Course Title
Math Modeling in Secondary School

Subject code	Course Number	Academic Level
MATH	672	Graduate

Course Description
Investigation of the process of mathematical modeling. Creative and empirical model construction, model analysis and model research. Problems taken from a variety of disciplines. Some problems suitable for algebra and geometry students; others require some knowledge of calculus and statistics. Prereq: MATH 502 or its equivalent. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 502 or equivalent

Complete ANY of the following Courses:
- MATH502 - Linear Algebra

MATH675 - Numerical Analysis

Course Information

Course Title
Numerical Analysis

Subject code	Course Number	Academic Level
MATH	675	Graduate

Course Description
Numerical treatment of equations, matrices and systems of equations; interpolation and approximation by polynomials; numerical integration; method of least squares. Prereq: MATH 502 and MATH 506, or equivalent. Offered in fall.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 502 and MATH 506 or equivalent

Complete ALL of the following Courses:

- MATH502 - Linear Algebra
- MATH506 - Modern Analysis for Teachers

MATH679 - Technology in Secondary School Math

Course Information

Course Title
Technology in Secondary School Math

Subject code	Course Number	Academic Level
MATH	679	Graduate

Course Description
Introduction to technologies currently available for teaching secondary mathematics. Emphasis on the use of modern graphics calculators, although computer software is also presented. Capabilities of the technologies examined in depth, but emphasis will be on the use of this technology in the classroom. Mathematical topics selected from elementary algebra, geometry, algebra II, precalculus and calculus. Prereq: secondary teaching experience. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Secondary Teaching Experience

Must have secondary teaching experience.

MATH683 - General Topology

Course Information

Course Title
General Topology

Subject code	Course Number	Academic Level
MATH	683	Graduate

Course Description
Set theory, metric and topological spaces, cluster points, closure, interior and boundary, continuity, homeomorphisms, product and quotient spaces, separation, compactness, connectedness, completeness. Prereq: MATH 502, 504 and 506.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 502 and MATH 504 and MATH 506

Complete ALL of the following Courses:
- MATH502 - Linear Algebra
- MATH504 - Modern Algebra for Teachers
- MATH506 - Modern Analysis for Teachers

MATH691 - Combinatorics

Course Information

Course Title
Combinatorics

Subject code	Course Number	Academic Level
MATH	691	Graduate

Course Description
Counting techniques including the multiplication principle, the addition principle, the pigeon-hole principle, permutations, combinations, the principle of inclusion-exclusion, recurrence relations, generating functions and Polyas Theory of Enumeration. Prereq: MATH 502 or equivalent. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 502 or equivalent

Complete ANY of the following Courses:
- MATH502 - Linear Algebra

MATH693 - Number Theory

Course Information

Course Title
Number Theory

Subject code	Course Number	Academic Level
MATH	693	Graduate

Course Description
The classic higher arithmetic of integers: mathematical induction, divisibility, congruences, prime numbers, diophantine equations. Euler-Fermat Theorem and quadratic reciprocity. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH520

Complete ALL of the following Courses:

- MATH520 - Logic and Foundations of Math

MATH695 - Topics in Mathematcs

Course Information

Course Title
Topics in Mathematcs

Subject code	Course Number	Academic Level
MATH	695	Graduate

Course Description
Investigation of one or more mathematical topics of current interest not covered in regular courses. Topics and methods of instruction may vary according to the needs and interests of students and faculty involved. Offered infrequently.

MATH696 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
MATH	696	Graduate

Course Description
Selected topics. Prereq: permission of chairperson. Offered infrequently.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Chairperson Permission

Must have permission of chairperson.

MATH697 - Topics in Math Education

Course Information

Course Title
Topics in Math Education

Subject code	Course Number	Academic Level
MATH	697	Graduate

Course Description
Investigation of one or more topics of current concern in mathematics education not covered in regular courses. Course content varies according to the needs and interests of students and faculty involved. Offered infrequently.

MATH698 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
MATH	698	Graduate

Course Description
Selected topics. Offered infrequently.

MATH699 - Thesis:

Course Information

Course Title
Thesis:

Subject code	Course Number	Academic Level
MATH	699	Graduate

Course Description
Thesis

PHYS101 - Survey of Physics

Course Information

Course Title
Survey of Physics

Subject code	Course Number	Academic Level
PHYS	101	Undergraduate

Course Description
An elementary treatment of fundamental concepts of classical and modern physics. Selected examples from classical mechanics, electromagnetism, thermodynamics, relativity and quantum mechanics. The solving of numerical problems is de-emphasized. 3 hr. lec. and discussion. No credit in block G2 for majors in the School of Science and Mathematics. Credit will be granted for only one of the courses: PHYS 101, 103 or 104. Offered in spring. Prereq: MATH placement at the 100 level or above.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH Placement at 100 or Above

MATH placement at the 100-level or above.

PHYS103 - Elements of Physics

Course Information

Course Title
Elements of Physics

Subject code	Course Number	Academic Level
PHYS	103	Undergraduate

Course Description
An elementary treatment of fundamental concepts of classical and modern physics. Selected examples from classical mechanics, electromagnetism, thermodynamics, relativity and quantum mechanics. The solving of numerical problems is de-emphasized. 3 hrs. lec., 2 hrs. lab. No credit in block G2 for majors in the following departments: Biology, Chemistry, Computer Science, Earth Science, Math or Physics. Credit will be granted for only one of the courses: PHYS 101, 103 or 104. Offered in fall, periodically in spring.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

PHYS103H - Hnrs:Elements of Physics

Course Information

Course Title
Hnrs:Elements of Physics

Subject code	Course Number	Academic Level
PHYS	103H	Undergraduate

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

PHYS104 - Applied Physics

Course Information

Course Title
Applied Physics

Subject code	Course Number	Academic Level
PHYS	104	Undergraduate

Course Description
A study of the application of mathematics to practical problems in physics, using Newtonian ideas, and emphasizing applications to devices such as machines and engines, and systems such as electrical circuits. 3 hrs. lec., 2 hrs. lab. No credit in block G2 for majors in the School of Science and Mathematics. Credit will be granted for only one of the courses: PHYS 101, 103 or 104. Offered in spring. Prereq: math placement at the 100 level or above.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH100 or MATH101

Complete ANY of the following Courses:
- MATH100 - Survey of Mathematical Ideas
- MATH101 - College Algebra

MATH Placement at 100 or Above

MATH placement at the 100-level or above.

PHYS131 - Physics 1 with Algebra

Course Information

Course Title
Physics 1 with Algebra

Subject code	Course Number	Academic Level
PHYS	131	Undergraduate

Course Description
An introductory algebra-based course. Fundamental laws and properties of matter, mechanics and heat. Problems dealing with these laws. 3 hrs. lec., 1 hr. recitation and 2 hrs. lab. Prereq: MATH 101 or MPT score sufficient for the student to enroll in MATH courses above MATH 110. Offered fall, summer.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH 101

Complete ALL of the following Courses:
- MATH101 - College Algebra

Or MPT score sufficient for the student to enroll in MATH courses above MATH 110.

PHYS132 - Physics 2 with Algebra

Course Information

Course Title
Physics 2 with Algebra

Subject code	Course Number	Academic Level
PHYS	132	Undergraduate

Course Description
Continuation of Physics 131. Fundamental laws and properties of electricity, magnetism, waves, sound, light and radiation. 3 hrs. lec., 1 hr. recitation and 2 hrs. lab. Offered spring, summer. Prereq: PHYS 131 or 231.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI)

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 131 or PHYS 231

Complete ANY of the following Courses:

- PHYS131 - Physics 1 with Algebra
- PHYS231 - Physics 1 with Calculus

PHYS179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PHYS	179	Undergraduate

Course Description
Experimental

PHYS198 - Seminar In Physics

Course Information

Course Title
Seminar In Physics

Subject code	Course Number	Academic Level
PHYS	198	Undergraduate

Course Description
An overview of the history, practice, philosophy and unity of physics and its application to other disciplines, orienting beginning physics majors to the study of physics. Mandatory for, and only open to, physics majors in their freshman year. 1 hr. discussion. Offered in fall.

PHYS230H - Hnrs:General Physics Seminar

Course Information

Course Title
Hnrs:General Physics Seminar

Subject code	Course Number	Academic Level
PHYS	230H	Undergraduate

Course Description
The ideas of introductory physics in extended depth, in the language of calculus, using problems, laboratory exercises, readings and discussion. Grades of B- or higher in both PHYS 231 and PHYS 230H will result in honors designation for the pair. The pair of courses counts as one entry in the science component of the curriculum record form and results in six hours of general education credit. Coreq: Concurrent registration in PHYS 231 required and either good standing in the Honors College or a 3.35 GPA or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS231 or PHYS232

Complete ANY of the following Courses:
- PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Honors College, 3.35 GPA or Instructor Permission

Good standing in the Honors College or a 3.35 GPA or permission of instructor required.

PHYS231 - Physics 1 with Calculus

Course Information

Course Title
Physics 1 with Calculus

Subject code	Course Number	Academic Level
PHYS	231	Undergraduate

Course Description
An introductory course in classical physics dealing with mechanics, fluids, waves and thermodynamics. 3 hrs. lec., 1 hr. recitation, one 3-hr. lab. Offered in fall, spring, summer.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI), Problem Solving (PS)

Simple Requirements

corequisite

Type
Corequisite

MATH 161

Enroll in the following Courses:
- MATH161 - Calculus 1

PHYS 231 requires students to apply introductory differential calculus concepts, which can be learned concurrently with the course. Allowing MATH 161 to be taken as a **co-requisite** will improve student access to PHYS 231, reduce scheduling bottlenecks, and better align with common practices in peer institutions. Students will still enter the course with appropriate mathematical preparation while making progress toward timely degree completion.

PHYS232 - Physics 2 with Calculus

Course Information

Course Title
Physics 2 with Calculus

Subject code	Course Number	Academic Level
PHYS	232	Undergraduate

Course Description
Continuation of PHYS 231. An introductory course in classical physics dealing with electricity, magnetism and optics. 3 hrs. lec., 1 hr. recitation, one 3-hr. lab. Offered in fall, spring, summer. Prereq: C- or higher in PHYS 231. Coreq: MATH 211.

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI), Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 231

Earn a minimum grade of C- in the following:
- PHYS231 - Physics 1 with Calculus

Course Corequisites

Type
Corequisite

MATH 211

Enroll in the following Courses:
- MATH211 - Calculus 2

PHYS232H - Hon: Physics 2 with Calculus

Course Information

Course Title
Hon: Physics 2 with Calculus

Subject code	Course Number	Academic Level
PHYS	232H	Undergraduate

Gateway Stage Labels
Investigations in Scientific Reasoning (SCI), Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 231

Earn a minimum grade of C- in the following:
- PHYS231 - Physics 1 with Calculus

Course Corequisites

Type
Corequisite

MATH 211

Enroll in the following Courses:
- MATH211 - Calculus 2

PHYS233 - Wave-Particle Theory

Course Information

Course Title
Wave-Particle Theory

Subject code	Course Number	Academic Level
PHYS	233	Undergraduate

Course Description
Selected topics from the areas of waves and optics, special relativity, an introduction to the concepts and development of modern physics and single-particle quantum mechanics. 3 hrs. lec. Offered in spring. Prereq: C- or higher in PHYS 232. Coreq: MATH 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 232

Earn a minimum grade of C- in the following:
- PHYS232 - Physics 2 with Calculus

Course Corequisites

Type
Corequisite

MATH 311

Enroll in the following Courses:
- MATH311 - Calculus 3

PHYS266 - Electronics

Course Information

Course Title
Electronics

Subject code	Course Number	Academic Level
PHYS	266	Undergraduate

Course Description
The fundamentals of analog devices and their application to electronic circuits. Operational amplifiers, power supplies, semi-conductor devices, oscillators, and an introduction to integrated circuits. One 4-hour Lecture and Lab per week. Prereq: PHYS 132 or 232. Coreq: MATH 161. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 132 or PHYS 232

Complete ANY of the following Courses:
- PHYS132 - Physics 2 with Algebra
- PHYS232 - Physics 2 with Calculus

Course Corequisites

Type
Corequisite

MATH 161

Enroll in the following Courses:
- MATH161 - Calculus 1

PHYS279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PHYS	279	Undergraduate

Course Description
Experimental

PHYS279H - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PHYS	279H	Undergraduate

Course Description
Experimental Course for Honors Credit

PHYS300 - Co-Op Ed Experience in Physics

Course Information

Course Title
Co-Op Ed Experience in Physics

Subject code	Course Number	Academic Level
PHYS	300	Undergraduate

Course Description
Co-Op Ed Experience in Physics

PHYS302 - Physics and Evolution of Western Civilization

Course Information

Course Title
Physics and Evolution of Western Civilization

Subject code	Course Number	Academic Level
PHYS	302	Undergraduate

Course Description
The history of the mechanization of the world picture. A study of physics in the evolution of Western civilization and thought relating the impact of the Newtonian revolution on technology, society and thought. 3 hrs. lec. and discussion. Offered periodically. Prereq: a physical science course, COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Physical Science Course

Must have taken a physical science course.

PHYS302H - H:Physics and Evolution of Western Civilization

Course Information

Course Title
H:Physics and Evolution of Western Civilization

Subject code	Course Number	Academic Level
PHYS	302H	Undergraduate

Course Description
H:Phys and Evol of West Civ

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Physical Science Course

Must have taken a physical science course.

PHYS311 - Mechanics 1

Course Information

Course Title
Mechanics 1

Subject code	Course Number	Academic Level
PHYS	311	Undergraduate

Course Description
Lectures, problems and demonstrations developing the fundamental principles and concepts of classical mechanics, including Newtons laws of motion in three dimensions, conservation laws, linear and nonlinear oscillating systems, gravitation and central force problems. 3 hrs. lec. Offered in fall. Prereq: C- or higher in PHYS 232. Coreq: MATH 365.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 232

Earn a minimum grade of C- in the following:
- PHYS232 - Physics 2 with Calculus

Course Corequisites

Type
Corequisite

MATH 365

Enroll in the following Courses:
- MATH365 - Ordinary Differential Equations

PHYS312 - Mechanics 2

Course Information

Course Title
Mechanics 2

Subject code	Course Number	Academic Level
PHYS	312	Undergraduate

Course Description
A continuation of PHYS 311. Includes classical analysis of rigid body motion, noninertial frames of reference, Lagrangian and Hamiltonian dynamics, systems of coupled oscillators, plus special topics. 3 hrs. lec. Offered in spring. Prereq: PHYS 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 311

Complete ALL of the following Courses:
- PHYS311 - Mechanics 1

PHYS317 - Introduction to Astronomy

Course Information

Course Title
Introduction to Astronomy

Subject code	Course Number	Academic Level
PHYS	317	Undergraduate

Course Description
An overview of astronomy and astrophysics for students majoring in the sciences or mathematics, emphasizing selected areas such as terrestrial astronomy, celestial mechanics, stellar evolution, cosmology and the solar system. 3 hrs. lec. Offered in fall of odd years. Prereq: a year of collegelevel physics and calculus.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH161 and MATH211 and PHYS131 and PHYS132 or PHYS231 and PHYS232

Complete ALL of the following Courses:
- MATH161 - Calculus 1
- MATH211 - Calculus 2
- PHYS131 - Physics 1 with Algebra
- PHYS132 - Physics 2 with Algebra
  OR PHYS231 - Physics 1 with Calculus
- PHYS232 - Physics 2 with Calculus

Year of College-Level Physics and Calculus

Must have one year of college-level Physics and Calculus

PHYS321 - Electromagnetic Fields 1

Course Information

Course Title
Electromagnetic Fields 1

Subject code	Course Number	Academic Level
PHYS	321	Undergraduate

Course Description
Electrostatic and magnetic fields in vacuum and in dielectric and magnetic materials. Maxwells equations are developed. 3 hrs. lec. Prereq: PHYS 232. Coreq: MATH 365.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 232

Complete ALL of the following Courses:
- PHYS232 - Physics 2 with Calculus

Course Corequisites

Type
Corequisite

MATH 365

Enroll in the following Courses:
- MATH365 - Ordinary Differential Equations

PHYS322 - Electromagnetic Fields 2

Course Information

Course Title
Electromagnetic Fields 2

Subject code	Course Number	Academic Level
PHYS	322	Undergraduate

Course Description
Consequences of Maxwells equations. Solutions to Laplaces equation, electromagnetic radiation and relativistic electrodynamics are discussed. 3 hrs. lec. Offered in fall. Prereq: PHYS 321. Coreq: PHYS 335.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 321

Complete ALL of the following Courses:
- PHYS321 - Electromagnetic Fields 1

Course Corequisites

Type
Corequisite

PHYS 335

Enroll in the following Courses:
- PHYS335 - Quantum Systems

PHYS331 - Fundamentals of Optics

Course Information

Course Title
Fundamentals of Optics

Subject code	Course Number	Academic Level
PHYS	331	Undergraduate

Course Description
Lab-based course in physical optics, including applications of geometrical optics such as image formation by mirrors and lenses, microscopy, reflection, refraction, and basic phenomena in wave and quantum optics such as interference, diffraction, color mixing and filtration, polarization, birefringence, absorption, dispersion, scattering, laser properties and laser application. 1 hr. lec., 3 hrs. lab. Offered in fall. Prereq: PHYS 232 or PHYS 132 and MATH 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 232 or PHYS 132 and MATH 211

Complete ALL of the following Courses:

- PHYS232 - Physics 2 with Calculus
  OR PHYS132 - Physics 2 with Algebra
- MATH211 - Calculus 2

PHYS334 - Macroscopic Physics

Course Information

Course Title
Macroscopic Physics

Subject code	Course Number	Academic Level
PHYS	334	Undergraduate

Course Description
Lectures, problems and demonstrations which develop the basic ideas of classical continuum physics and the macroscopic behavior of solids, liquids and gases, including an introduction to fluid dynamics, stress-strain relationships in solids, electric and magnetic properties of materials, phase transitions, superconductivity and the classical laws of thermodynamics. 3 hrs. lec. and discussion. Offered in spring. Prereq: C- or higher in PHYS 232. Coreq: MATH 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 232

Earn a minimum grade of C- in the following:

- PHYS232 - Physics 2 with Calculus

Course Corequisite

Type
Corequisite

MATH 311

Enroll in the following Courses:

- MATH311 - Calculus 3

PHYS335 - Quantum Systems

Course Information

Course Title
Quantum Systems

Subject code	Course Number	Academic Level
PHYS	335	Undergraduate

Course Description
Multi-electron atoms, statistical mechanics of classical and quantum systems and introduction to nuclear physics. Principles are applied to selected examples. 3 hrs. lec. Offered in fall. Prereq: PHYS 233, 334.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 233 and PHYS 334

Complete ALL of the following Courses:
- PHYS233 - Wave-Particle Theory
- PHYS334 - Macroscopic Physics

PHYS345 - Symbolic Computational Methods

Course Information

Course Title
Symbolic Computational Methods

Subject code	Course Number	Academic Level
PHYS	345	Undergraduate

Course Description
Symbolic computational methods involving procedural, functional, rule-based programming and pattern matching using the graphical and numerical capabilities of Mathematica or other integrated mathematical software systems, with applications to a broad range of computationally challenging problems in physics. Offered in fall of odd years. Prereq: PHYS 233. Coreq: PHYS 311 and MATH 365.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 233

Complete ALL of the following Courses:
- PHYS233 - Wave-Particle Theory

Course Corequisites

Type
Corequisite

PHYS 311 and MATH 365

Enroll in the following Courses:
- PHYS311 - Mechanics 1
- MATH365 - Ordinary Differential Equations

PHYS351 - Intermediate Physics Lab 1

Course Information

Course Title
Intermediate Physics Lab 1

Subject code	Course Number	Academic Level
PHYS	351	Undergraduate

Course Description
Selected Experiments in classical and modern physics introducing a variety of experimental techniques. 3 hours lab. Prereq: PHYS 232 and either PHYS 266 or CSCI 370. Offered in fall.

Simple Requirements

PHYS 351 Pre-req

Type
Prerequisite

PHYS 233

Earn a minimum grade of D- in the following:

- PHYS232 - Physics 2 with Calculus
  OR PHYS232H - Hon: Physics 2 with Calculus

PHYS 266 or CMSC 370

Complete ANY of the following Courses:

- PHYS266 - Electronics
  OR CMSC370 - Computer Architecture

PHYS351H - H:Intermediate Physics Lab 1

Course Information

Course Title
H:Intermediate Physics Lab 1

Subject code	Course Number	Academic Level
PHYS	351H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 232 and PHYS 266 or CMSC 370

Complete ALL of the following Courses:

- PHYS232 - Physics 2 with Calculus
- PHYS266 - Electronics
  OR CMSC370 - Computer Architecture

PHYS352 - Intermediate Physics Lab 2

Course Information

Course Title
Intermediate Physics Lab 2

Subject code	Course Number	Academic Level
PHYS	352	Undergraduate

Course Description
Continuation of PHYS 351. 3 hrs. lab. Offered in spring. Prereq: PHYS 351.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 351

Complete ALL of the following Courses:

- PHYS351 - Intermediate Physics Lab 1

PHYS360 - Circuit Analysis

Course Information

Course Title
Circuit Analysis

Subject code	Course Number	Academic Level
PHYS	360	Undergraduate

Course Description
Mathematical analysis of linear circuits in the complex domain. Differential equations, operators, transfer functions, Laplace transforms and computer simulation with SPICE. 4 hrs. lec. Offered infrequently. Prereq: PHYS 266 and MATH 365.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 266 and MATH 365

Complete ALL of the following Courses:
- PHYS266 - Electronics
- MATH365 - Ordinary Differential Equations

PHYS365 - Digital Electronics

Course Information

Course Title
Digital Electronics

Subject code	Course Number	Academic Level
PHYS	365	Undergraduate

Course Description
Introduction to digital electronics and microprocessors. Design and analysis of combinatorial and sequential digital circuits, microcomputer interfacing and assembly programming. Two 3-hr. labs. Offered infrequently. Prereq: CMSC 140 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

CMSC 140

Complete ALL of the following Courses:
- CMSC140 - Discrete Structures

Or must have permission of instructor.

PHYS366 - Analog Electronic Circuits

Course Information

Course Title
Analog Electronic Circuits

Subject code	Course Number	Academic Level
PHYS	366	Undergraduate

Course Description
Continuation of PHYS 266. Analysis and design of microelectronic circuits. Analytical treatment of discrete and integrated analog and digital circuits. 3 hrs. lec. Offered infrequently. Prereq: PHYS 266, 360 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 266 and PHYS 360 or permission of instructor

Complete ALL of the following Courses:

- PHYS266 - Electronics
- PHYS360 - Circuit Analysis

PHYS379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PHYS	379	Undergraduate

Course Description
Experimental

PHYS395 - Techniques of Mathematical Physics

Course Information

Course Title
Techniques of Mathematical Physics

Subject code	Course Number	Academic Level
PHYS	395	Undergraduate

Course Description
Treatment of advanced mathematical techniques such as complex analysis, matrices, Fourier series, calculus of variations, special functions and integral transforms applied to selected areas of physics. Offered in spring. Prereq: PHYS 233, MATH 365.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 233 and MATH 365

Complete ALL of the following Courses:

- PHYS233 - Wave-Particle Theory
- MATH365 - Ordinary Differential Equations

PHYS395H - Hon: Techniques of Mathematical Physics

Course Information

Course Title
Hon: Techniques of Mathematical Physics

Subject code	Course Number	Academic Level
PHYS	395H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 233 and MATH 365

Complete ALL of the following Courses:

- PHYS233 - Wave-Particle Theory
- MATH365 - Ordinary Differential Equations

PHYS400 - Co-Op Ed Experience in Physics

Course Information

Course Title
Co-Op Ed Experience in Physics

Subject code	Course Number	Academic Level
PHYS	400	Undergraduate

Course Description
Co-Op Ed Experience in Physics

PHYS431 - Solid State Physics

Course Information

Course Title
Solid State Physics

Subject code	Course Number	Academic Level
PHYS	431	Undergraduate

Course Description
Classical and quantum analyses of solid matter. Topics include crystal structure, the reciprocal lattice and X-ray diffraction; mechanical propertiesphonons; semiclassical analysis of electrical and magnetic properties of insulators and metals; electron band theory of metals, insulators and semiconductors. 3 hrs. lec. Offered in spring of odd years. Prereq: PHYS 335.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 335

Complete ALL of the following Courses:

- PHYS335 - Quantum Systems

PHYS435 - Statistical Mechanics

Course Information

Course Title
Statistical Mechanics

Subject code	Course Number	Academic Level
PHYS	435	Undergraduate

Course Description
Lectures, problems, and computer simulations developing the fundamental principles of classical and quantum statistical mechanics. Subjects include probability theory, the foundations of ensemble development, and their application to classical, Fermi, and Bose systems. Of special interest is the phenomenology of phase transitions and the modern development of the renormalization group. Prereq: PHYS 334.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 334

Complete ALL of the following Courses:
- PHYS334 - Macroscopic Physics

PHYS451 - Advanced Physics Lab 1

Course Information

Course Title
Advanced Physics Lab 1

Subject code	Course Number	Academic Level
PHYS	451	Undergraduate

Course Description
Selected experiments in classical and modern physics, with opportunities to apply sophisticated techniques to extended experimental problems. Prereq: PHYS 352.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 352

Complete ALL of the following Courses:
- PHYS352 - Intermediate Physics Lab 2

PHYS452 - Advanced Physics Lab 2

Course Information

Course Title
Advanced Physics Lab 2

Subject code	Course Number	Academic Level
PHYS	452	Undergraduate

Course Description
Continuation of PHYS 451. 3 hrs. lab. Offered in spring. Prereq: PHYS 451.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 451

Complete ALL of the following Courses:
- PHYS451 - Advanced Physics Lab 1

PHYS462 - Advanced Electronics

Course Information

Course Title
Advanced Electronics

Subject code	Course Number	Academic Level
PHYS	462	Undergraduate

Course Description
Microprocessor applications and interfacing, real-time programming. Topics are selected from computer design, control loops, phase-locked loops and communications. Two 3-hr. labs. Offered infrequently. Prereq: PHYS 266, 365 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 266 and PHYS 365 or permission of instructor

Complete ALL of the following Courses:

- PHYS266 - Electronics
- PHYS365 - Digital Electronics

PHYS471 - Quantum Mechanics

Course Information

Course Title
Quantum Mechanics

Subject code	Course Number	Academic Level
PHYS	471	Undergraduate

Course Description
An introduction to formal quantum theory in terms of operators in Hilbert space and Dirac notations which will be used in finding the solutions of eigenvalue problems of several potentials, addition of angular momenta, dynamics of spin 1/2 particle, and introduction to perturbation theory. Prereq: PHYS 233, MATH 322, and MATH 365 or permission of instructor. Offered fall of even year.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 233 and MATH 322 and MATH 365 or permission of instructor

Complete ALL of the following Courses:

- PHYS233 - Wave-Particle Theory
- MATH322 - Linear Algebra 1
- MATH365 - Ordinary Differential Equations

PHYS479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PHYS	479	Undergraduate

Course Description
Experimental

PHYS489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
PHYS	489	Undergraduate

Course Description
Honors Course

PHYS492 - Physics Research and Seminar

Course Information

Course Title
Physics Research and Seminar

Subject code	Course Number	Academic Level
PHYS	492	Undergraduate

Course Description
The first semester of an independent research experience supervised by a faculty mentor. Attendance at weekly seminars is also required. Offered in fall. Prereq: PHYS 335 and 351.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 335 and PHYS 351

Complete ALL of the following Courses:

- PHYS335 - Quantum Systems
- PHYS351 - Intermediate Physics Lab 1

PHYS495 - Topics in PHYS

Course Information

Course Title
Topics in PHYS

Subject code	Course Number	Academic Level
PHYS	495	Undergraduate

Course Description
Selected topics chosen from the areas across physics including astronomy and astrophysics, classical physics, theoretical physics, applied physics, and modern physics. Permission of instructor. Offered infrequently.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS233 and MATH365

Complete ALL of the following Courses:

- PHYS233 - Wave-Particle Theory
- MATH365 - Ordinary Differential Equations

Instructor Permission

Must have permission of instructor.

PHYS495H - H: Topics in PHYS

Course Information

Course Title
H: Topics in PHYS

Subject code	Course Number	Academic Level
PHYS	495H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS233 and MATH365

Complete ALL of the following Courses:
- PHYS233 - Wave-Particle Theory
- MATH365 - Ordinary Differential Equations

Instructor Permission

Must have permission of instructor.

PHYS498 - Independent Study/Research

Course Information

Course Title
Independent Study/Research

Subject code	Course Number	Academic Level
PHYS	498	Undergraduate

Course Description
An independent research experience supervised by a faculty mentor. Attendance at the weekly seminars associated with PHYS 492 is also required. Prereq: PHYS 492 or permission of instructor. Offered in fall, spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PHYS 492

Complete ALL of the following Courses:
- PHYS492 - Physics Research and Seminar

Or must have permission of instructor.

PHYS499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
PHYS	499	Undergraduate

Course Description
Departmental Honors

PHYS500 - Co-Op Ed Expereince in Physics

Course Information

Course Title
Co-Op Ed Expereince in Physics

Subject code	Course Number	Academic Level
PHYS	500	Graduate

Course Description
Co-Op Ed Expereince in Physics

PSU399 - Penn State 3/2 Engineering

Course Information

Course Title
Penn State 3/2 Engineering

Subject code	Course Number	Academic Level
PSU	399	Undergraduate

Course Description
Penn State 3/2 Engineering

Military Science Department

Military Sciences offers coursework from a number of departments including the Departments of Military Science, History, Government and Geography. This path allows the student to pursue a diverse program that incorporates military history, ethics, public administration and the use of the military as an instrument of educational enhancement. While the Military Science classes are taught through a military lens, the components of adaptability, teamwork, comprehensive fitness, leadership and critical thinking are interdisciplinary and applicable regardless of a student's chosen future career paths.

FACULTY LIST
Frankum, Ronald; Professor College of Arts, Humanities and Social Sciences B.A., Syracuse University, 1988, M.A., University of Kentucky, 1991; Ph.D., Syracuse University, 1997

Courses

MLSC101 - Intro to Military Science 1

Course Information

Course Title
Intro to Military Science 1

Subject code	Course Number	Academic Level
MLSC	101	Undergraduate

Course Description
An introduction to the fundamental components of service as an officer in the United States Army. Initial lessons form the building blocks of progressive lessons in values, fitness, leadership and officership. By means of both written and oral presentations regarding the history of military art, battle history, technical studies and the relationship of the armed forces with society, students will be encouraged to develop a habit of critical reflection. In addition to developing a foundation of military officership and leadership, students will receive practical instruction in the application of military art and basic soldier skills. Meets one hour per week plus a weekly 90-minute leadership lab. MLSC 101 in fall and MLSC 102 in spring.

MLSC102 - Intro to Military Science 2

Course Information

Course Title
Intro to Military Science 2

Subject code	Course Number	Academic Level
MLSC	102	Undergraduate

Course Description
An introduction to the fundamental components of service as an officer in the United States Army. Initial lessons form the building blocks of progressive lessons in values, fitness, leadership and officership. By means of both written and oral presentations regarding the history of military art, battle history, technical studies and the relationship of the armed forces with society, students will be encouraged to develop a habit of critical reflection. In addition to developing a foundation of military officership and leadership, students will receive practical instruction in the application of military art and basic soldier skills. Meets one hour per week plus a weekly 90-minute leadership lab. MLSC 101 in fall and MLSC 102 in spring.

MLSC179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MLSC	179	Undergraduate

Course Description
Experimental

MLSC210 - Self and Team Development

Course Information

Course Title
Self and Team Development

Subject code	Course Number	Academic Level
MLSC	210	Undergraduate

Course Description
A continuation of the fundamentals introduced the previous year by focusing on leadership theory and decision making. Life skills lessons during this year include problem solving, critical thinking, leadership theory, followership, group interaction, goal setting and feedback mechanisms. The use of practical exercise is significantly increased over previous semesters, as cadets are increasingly required to apply communication and leadership concepts. Meets two hours per week plus a weekly 90-minute leadership lab. MLSC 210 in fall and MLSC 211 in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MLSC101

Complete ALL of the following Courses:

- MLSC101 - Intro to Military Science 1

MLSC211 - Military Leadership

Course Information

Course Title
Military Leadership

Subject code	Course Number	Academic Level
MLSC	211	Undergraduate

Course Description
A continuation of the fundamentals introduced the previous year by focusing on leadership theory and decision making. Life skills lessons during this year include problem solving, critical thinking, leadership theory, followership, group interaction, goal setting and feedback mechanisms. The use of practical exercise is significantly increased over previous semesters, as cadets are increasingly required to apply communication and leadership concepts. Meets two hours per week plus a weekly 90-minute leadership lab. MLSC 210 in fall and MLSC 211 in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MLSC101

Complete ALL of the following Courses:

- MLSC101 - Intro to Military Science 1

MLSC279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MLSC	279	Undergraduate

Course Description
Experimental

MLSC301 - Management and Leadership

Course Information

Course Title
Management and Leadership

Subject code	Course Number	Academic Level
MLSC	301	Undergraduate

Course Description
Advanced instruction in topics introduced during the basic course. Emphasis on leadership. Situations require direct interaction with other cadets and test the students ability to achieve set goals and to get others to do the same. Students master basic tactical skills of the small unit leader. Principles and techniques of effective leadership, methods of developing and improving managerial abilities and leadership qualities, and a basic understanding of interpersonal interactions. Use is made of recent developments in the administrative and behavioral sciences to analyze the vidual, group and situational aspects of leadership and the management of resources. Participation in operations and basic tactics to demonstrate leadership problem solving and to develop leadership skills. Meets two hours per week plus a weekly 90-minute leadership lab. Prereq: Open only to advanced-course cadets. MLSC 301 in fall and MLSC 302 in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Advanced-Course Cadets

Open only to advanced-course cadets.

MLSC302 - Military Tactics

Course Information

Course Title
Military Tactics

Subject code	Course Number	Academic Level
MLSC	302	Undergraduate

Course Description
Advanced instruction in topics introduced during the basic course. Emphasis on leadership. Situations require direct interaction with other cadets and test the students ability to achieve set goals and to get others to do the same. Students master basic tactical skills of the small unit leader. Principles and techniques of effective leadership, methods of developing and improving managerial abilities and leadership qualities, and a basic understanding of interpersonal interactions. Use is made of recent developments in the administrative and behavioral sciences to analyze the vidual, group and situational aspects of leadership and the management of resources. Participation in operations and basic tactics to demonstrate leadership problem solving and to develop leadership skills. Meets two hours per week plus a weekly 90-minute leadership lab. Prereq: Open only to advanced-course cadets. MLSC 301 in fall and MLSC 302 in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MLSC301

Complete ALL of the following Courses:
- MLSC301 - Management and Leadership

Advanced-Course Cadets

Open only to advanced-course cadets.

MLSC379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MLSC	379	Undergraduate

Course Description
Experimental

MLSC401 - Contemporary Military Issues 1

Course Information

Course Title
Contemporary Military Issues 1

Subject code	Course Number	Academic Level
MLSC	401	Undergraduate

Course Description
Emphasis is placed on developing planning and decision-making capabilities in the areas of military operations, logistics and administration. Concepts of organization theory and the principles of management and management and leadership relationships are investigated as they apply to the general theory and practice of the management functions of planning, organizing, staffing, direction, coordination, control, innovation and representation. Meets two hours per week plus a weekly 90-minute leadership lab. Prereq: Open only to advanced course cadets. MLSC 401 in fall and MLSC 402 in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MLSC301 and MLSC302

Complete ALL of the following Courses:
- MLSC301 - Management and Leadership
- MLSC302 - Military Tactics

Advanced-Course Cadets

Open only to advanced-course cadets.

MLSC402 - Contemporary Military Issues 2

Course Information

Course Title
Contemporary Military Issues 2

Subject code	Course Number	Academic Level
MLSC	402	Undergraduate

Course Description
Emphasis is placed on developing planning and decision-making capabilities in the areas of military operations, logistics and administration. Concepts of organization theory and the principles of management and management and leadership relationships are investigated as they apply to the general theory and practice of the management functions of planning, organizing, staffing, direction, coordination, control, innovation and representation. Meets two hours per week plus a weekly 90-minute leadership lab. Prereq: Open only to advanced course cadets. MLSC 401 in fall and MLSC 402 in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MLSC401

Complete ALL of the following Courses:
- MLSC401 - Contemporary Military Issues 1

Advanced-Course Cadets

Open only to advanced-course cadets.

MLSC479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MLSC	479	Undergraduate

Course Description
Experimental

Multidisciplinary Studies Department

Multidisciplinary Studies (MDST) is a flexible program of study that builds on the University's existing strengths in the liberal arts and sciences.

With careful advisement, students are provided an opportunity to tailor studies to better meet their academic strengths and career goals. You will find the necessary forms, news bulletins and contact information to get started on this website.

Students in need of a signature, should submit the appropriate form using the electronic student forms, found here: https://www.millersville.edu/forms/index.php

RELATED ELECTIVES (B.A. AND B.S. OPTIONS)

The Multidisciplinary Studies major provides two degree pathways for students. Each degree option provides opportunities for interdisciplinary learning, practical experience, and industry readiness.

Students (and faculty advisors) should consult with the appropriate MDST Faculty Advisor *PRIOR* to switching majors, registering for classes, and/or drafting new MDST proposals.

For more information visit: https://www.millersville.edu/mdst/index.php

FACULTY
Anderson, Scott; Associate Professor, student-initiated programs advisor University College B.S. Operations Management, Indiana University 1992; MLS, Ibid, 1995; MBA Pennsylvania State University, 1998
Baker, Ronald; Associate Professor, Business Analytics advisor College of Arts, Humanities and Social Sciences B.S., St. Vincent College, 1998; M.A., Indiana University, 2000; Ph.D., Ibid., 2005
Baldys, Emily; Associate Professor, Applied Disability Studies advisor College of Arts, Humanities and Social Sciences B.A., Bryn Mawr College, 2005; M.A., The Pennsylvania State University, 2009; Ph.D., Ibid., 2017
Blazer, Eric; Professor, Business Analytics and Entrepreneurship advisor Lombardo College of Business B.S., Virginia Tech., 1984; M.S., Ibid., 1986; Ph.D., Ibid., 1996
DiRusso, David; Professor, Entrepreneurship advisor Lombardo College of Business B.S., Shippensburg University, 2004; M.B.A., Temple University, 2005; Ph.D., Temple University, 2009
Hughes, Jessica; Associate Professor, Applied Disability Studies advisor College of Arts, Humanities and Social Sciences B.A., Boston University, 2000; M.A., Lancaster University (United Kingdom), 2004; Ph.D., University of Colorado, 2015
Keefer, Daniel; Professor, Pre-Occupational Therapy advisor Lombardo College of Business B.S., East Stroudsburg University, 1993; M.S., University of Tennessee, 1995; Ph.D., University of North Carolina at Greensboro, 2001
Primus, Nakeiha; Associate Professor, Educational Studies advisor College of Education and Human Services B.A., Tufts University, 2005; M.A., Duke University, 2008; Ph.D., University of Delaware, 2014
Schwartz, Stephanie; Professor, Data Science advisor College of Science and Technology B.S., Shippensburg University, 1991; M.S., University of Delaware, 1993; Ph.D., Ibid., 2006
Thyrum, Elizabeth; Pre-Occupational Therapy advisor College of Education and Human Services B.A., Millersville University, 1986; M.S., Rutgers University, 1989; Ph.D., Ibid., 1992

Programs

Multidisciplinary Studies, B.A., Applied Disability Studies Option

Overview

The framework for a Concentration in Applied Disability Studies combines courses in educational foundations with courses in social sciences and prepares students to work in the rapidly expanding area of disability services, education support and advocacy organizations. Employment opportunities exist in the government, business, and non-profit sectors. Regarding services for people with disabilities, for example, current Pennsylvania labor data reveals a need for middle level professionals with competencies in leadership, management and supports for people with disabilities.

Careers Opportunities

Students are prepared to play leadership roles in the field of disability. Future careers include program director and policy positions in community service agencies, advocacy organizations, independent living centers, parent centers, planning councils, and government agencies.

- Protection and advocacy agencies
- Parent training and information centers
- State agencies for Intellectual/developmental disabilities
- Self-advocacy associations
- Community and family support agencies
- University or college offices for students with disabilities
- Independent living centers
- Inclusive Post-Secondary Education programs
- Human service organizations

Applied Disability Studies also prepare graduates to consult organizations on disability issues and pursue graduate degrees in Disability Studies, a multidisciplinary field of inquiry that draws on the experiences and perspectives of people with disabilities to address discrimination. Disability Studies scholarship explores the dynamic interplays between disability, culture, and society. Applied Disability Studies combines critical inquiry and political advocacy and enables students to apply scholarly approaches from the humanities, social sciences, and the arts to evaluate and address disability issues and support inclusion (http://en.wikipedia.org/wiki/Disability_studies).

This curriculum combines specific vocational competencies with skills and practice in critical thinking and allows highly individualized career planning.

Program Goals

These goals are conceptualized as the ultimate "ends" we hope to achieve in educating students and trainees in disability studies.

- Promote full social integration by providing knowledge, awareness, and experience of inclusion and integration of people with disabilities as a foundational ethical principle of disability studies.
- Position disability as a social justice issue by exposing students to historical and contemporary disability issues and providing learning opportunities to identify, articulate, and address inequities and injustices affecting the lives of people with disabilities.
- Position disability as diversity by providing theoretical and practical contexts for thinking about disability as a component of human diversity, and providing students with tools to critically examine social and cultural constructions of disability.
- Create circumstances for the analysis and knowledge of the human services system and it’s role in shaping the life experiences (segregated & integrated) of people with disability.
- To provide an understanding of the social, economic, historical, political, cultural, and legal forces that shape policy and practices in the field of disabilities

Program Advisors

Dr. Emily Baldys, Associate Professor (English)
Dr. Jessica Hughes, Associate Professor (Communications)

For more information visit: https://www.millersville.edu/mdst/approved-programs/applied-disability-studies.php.

Curriculum

Simple Requirements

Multidisciplinary Studies(BA)- Ed & Human Services

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

APDS - Practicing Within Social Institution

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- SPED237 - Applied Foundations of Contemporary Special Education
- SPED330 - Discrimination and Oppression of People with Disabilities
  OR SPED330H - H:Discrimination and Oppression of People with Disabilities

AND

Psyc Foundations of Teaching (3 credits)

Complete ALL of the following Courses:

- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Whose School Is it?, Women & Ed, or Urban Immers (3 credits)

Complete at least 1 of the following courses:

- EDFN376 - Whose School Is It?
  OR EDFN376H - Hnrs:Whose School Is It?
- EDFN312 - Women in Education
  OR EDFN312H - Women in Education
- EDFN398 - Urban Immersion Seminar

AND

Issues Sec Ed, Sec Prog & Trans Plan, or Living Online (3 credits)

Complete at least 1 of the following courses:

- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- SEED521 - Issues in Second Education
- SPED444 - Transition Planning and Secondary Programming for Individuals with Disabilities
- EDFN355 - Living Online

AND

APDS - Disability Rights, History and Social Policy

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- SOWK350 - Encounters in Human Diversity
  OR SOWK350H - H:Encounters in Human Diversity

AND

Social Work & Health Care or SOWK & Mental Health (3 credits)

Complete at least 1 of the following courses:

- SOWK207 - Personal & Community Wellness: A Healthcare Policy Approach
- SOWK209 - Assessment & Intervention in Behavioral & Mental Health Issues

AND

Social Work & Women or Family Violence (3 credits)

Complete at least 1 of the following courses:

- SOWK312 - SOWK & Wmn: Strgth, Need & Opp
- SOWK313 - Family Violence
  OR SOWK313H - H: Family Violence

AND

Nightmare Years, US Social History and Hitler & Nazism

Select 2 classes from HIST342 Hitler and Nazism, HIST 365 and HIST 458. However, HIST 365 and HIST 458 have been discontinued. Please work

with your advisor to select alternate courses to substitute for this requirement.

AND

History of Medicine, African American History I or II (3 credits)

Complete at least 1 of the following courses:

- HIST480 - History of Medicine
- HIST272 - Afro-American History 1
- HIST273 - Afro-American History 2

AND

APDS - Required Capstone Experience

Complete at least 1 of the following:

Course Options

Complete ANY of the following Course Sets:

- Any 3-level course(s)
- Any 4-level course(s)

OR

Additional Course Options

Complete ANY of the following Courses:

- EDFN498 - Independent Study

A 2.0 GPA must be maintained in the overall major block and in each of the two Core areas, 'Practicing within Social Institutions' and 'Disability Rights, History and Social Policy'

Req Related for Multidisciplinary Studies - Educ

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Recommended Electives for Applied Disability Studies

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics
- ECON102 - Principles of Microeconomics
- BUSN251 - Principles of Management

These courses are not required but are recommended and will fulfill the Social Sciences (G3) requirement for General Education.

Multidisciplinary Studies, B.A., Educational Studies Option

Overview

The Educational Studies (MDST ES) concentration prepares Millersville students for work in the field of education, outside of public schooling. This unique concentration recognizes the important educational opportunities provided by social service agencies, museums, private schools, for-profit organizations, government agencies, new education start-ups, and so on. Students who enroll in the MDST ES concentration will take classes that will prepare them to think about teaching and learning in diverse settings and will match them with valuable field experiences and internships according to their interests.

PROGRAM ADVISORS

Dr. Nakeiha Primus, Associate Professor & Coordinator (Educational Foundations)br>
For more information visit: https://www.millersville.edu/mdst/approved-programs/educational-studies.php

Curriculum

Simple Requirements

Multidisciplinary Studies(BA)- Ed & Human Services

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

EDST - Foundations of Education

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- SPED237 - Applied Foundations of Contemporary Special Education
- SEED321 - Issues in Secondary Education
  OR SEED321H - H: Issues in Secondary Education
- GFED370 - Teaching Gifted Learners

AND

Psyc Foundations of Teaching (3 credits)

Complete ALL of the following Courses:

- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Instructional Tech in ELED, or Inst Tech, Design & Assess (3 credits)

Complete at least 1 of the following courses:

- EDFN320 - Instructional Technology in Elementary Education
  OR EDFN320H - H:Instructional Technology in Elementary Education
- EDFN330 - Instructional Technology, Design & Assessment

AND

EDST - Sociocultural & Contemporary Approaches to Ed

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete at least 1 of the following courses:

- ANTH121 - Cultural Anthropology

AND

Anthropology Elective (3 credits)

Complete at least 1 of the following courses:

- ANTH223 - People and Cultures Of Mediter
- ANTH227 - Culture Through Film
- ANTH326 - Anthropology of Religion
- ANTH336 - Language & Communication
- ANTH327 - Urban Anthropology

AND

Contemporary Approaches Education Electives (12 credits)

Complete at least 4 of the following courses:

- ERCH290 - Children's Engineering
- EDTE290 - Children's Engineering
- ECPK315 - Family & Community: Aspects of Diversity
- ECPK316 - Creative Experiences for the Young Child
- EDFN312 - Women in Education
  OR EDFN312H - Women in Education
- EDFN355 - Living Online
- EDFN376 - Whose School Is It?
  OR EDFN376H - Hnrs:Whose School Is It?
- EDFN398 - Urban Immersion Seminar
- EDUC433 - Gender and Race Issues
  OR EDUC433H - Hnrs:Gender and Race Issues
- EDUC403 - Pluralism in Society
  OR EDUC403H - Hon: Pluralism in Society

AND

EDST - Required Capstone Experience (3 credits)

Complete at least 1 of the following courses:

- EDFN300 - Co-Op Ed Experience in EDFN
- EDFN400 - Co-Op Ed Experience in EDFN

A 2.0 GPA must be maintained in the overall major block and in each of the two Core areas, Foundations of Education and Sociocultural & Contemporary Approaches to Education.

Req Related for Multidisciplinary Studies - Educ (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Related Electives for Educational Studies (12 credits)

Choose 5 classes totaling at least 12 hours from:

- Any 2-level FREN course(s)
- Any 3-level FREN course(s)
- Any 4-level FREN course(s)
- Any 2-level GERM course(s)
- Any 3-level GERM course(s)
- Any 4-level GERM course(s)
- Any 2-level SPAN course(s)
- Any 3-level SPAN course(s)
- Any 4-level SPAN course(s)
- Any 2-level JAPN course(s)
- Any 3-level JAPN course(s)
- Any 4-level JAPN course(s)
- Any 2-level HUMN course(s)
- Any 3-level HUMN course(s)
- Any 4-level HUMN course(s)
- Any 2-level SOWK course(s)
- Any 3-level SOWK course(s)
- Any 4-level SOWK course(s)
- Any 2-level SOCI course(s)
- Any 3-level SOCI course(s)
- Any 4-level SOCI course(s)
- Any 2-level ANTH course(s)
- Any 3-level ANTH course(s)
- Any 4-level ANTH course(s)
- Any 2-level HIST course(s)
- Any 3-level HIST course(s)
- Any 4-level HIST course(s)
- Any 2-level PSYC course(s)
- Any 3-level PSYC course(s)
- Any 4-level PSYC course(s)
- Any 2-level LAAS course(s)
- Any 3-level LAAS course(s)
- Any 4-level LAAS course(s)
- Any 2-level AFAM course(s)
- Any 3-level AFAM course(s)
- Any 4-level AFAM course(s)
- Any 2-level GNDW course(s)
- Any 3-level GNDW course(s)
- Any 4-level GNDW course(s)
- Any 2-level WSSD course(s)
- Any 3-level WSSD course(s)
- Any 4-level WSSD course(s)
- Any 2-level BIOL course(s)
- Any 3-level BIOL course(s)
- Any 4-level BIOL course(s)
- Any 2-level ESSC course(s)

- Any 3-level ESSC course(s)
- Any 4-level ESSC course(s)
- Any 2-level INTL course(s)
- Any 3-level INTL course(s)
- Any 4-level INTL course(s)
- Any 2-level THEA course(s)
- Any 3-level THEA course(s)
- Any 4-level THEA course(s)
- Any 2-level ART course(s)
- Any 3-level ART course(s)
- Any 4-level ART course(s)
- Any 2-level MUSI course(s)
- Any 3-level MUSI course(s)
- Any 4-level MUSI course(s)
- Any 2-level GOVT course(s)
- Any 3-level GOVT course(s)
- Any 4-level GOVT course(s)

Students are strongly encouraged to consult with their advisor to select an academic minor to support their specific career aspirations. Suggested minors include: Language Studies, Culture Studies, Social Justice, Sociology, Anthropology, Criminology, History, Psychology, Latino Studies, African American Studies, Women's Studies, Athletic Coaching, Environmental Issues, International Studies, Theatre, Art, Music, or Government & Political Affairs.

Multidisciplinary Studies, B.A., Pre-Occupational Therapy Option

Overview

The MDST concentration in Pre-Occupational Therapy, is an applied program of study that builds on students' interest and skill in working with individuals experiencing short-term or life-long physical, mental, and emotional challenges. Coursework includes interdisciplinary study in psychology, the biological and sports sciences, as well as complementary study in the social sciences.

*Students should review all course prerequisites/ corequisites/ recommendations with an advisor. Be sure you have a thorough understanding of the concentration expectations prior to registration and/or switching majors.

Program Advisors:

Dr. Elizabeth Thyrum, Associate Professor (Psychology)
Dr. Daniel Keefer, Professor (Wellness & Sport Sciences)

For more information visit: https://www.millersville.edu/mdst/approved-programs/pre-occupational-therapy.php

Curriculum

Simple Requirements

Multidisciplinary Studies (BA)- Ed & Human Services (38-40 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

POTD - Psychological Foundations (19 credits)

Complete ALL of the following Courses:

- PSYC211 - Principles of Statistics and Experimental Design 1
- PSYC215 - Intro to Physiological Psychology
- PSYC228 - Life Span Human Development
- PSYC337 - Abnormal Psychology
  OR PSYC337H - H:Abnormal Psychology
- PSYC346 - Applied Behavior Analysis
  OR PSYC346H - H: Applied Behavior

Analysis
- PSYC356 - Health Psychology

AND

POTD - Biological and Sport Sciences (18 credits)

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:
- BIOL254 - Human Anatomy & Physiology I
  OR BIOL254H - Hon: Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II
  OR BIOL255H - Hon: Human Anatomy & Physiology II
- WSSD311 - Resp to Emergen: First Aid CPR
- WSSD375 - Prevention and Care of Athletic Injuries
- WSSD492 - Seminar in Sport Science

AND

Kinesiological and Physiological Foundation of Sport (3 credits)

Complete ALL of the following Courses:
- WSSD450 - Kinesiology and Phys Found of Sport

AND

Required Capstone Experience: (1-3 credits)

Complete at least 1 of the following courses:
- PSYC495 - Directed Projects in Psych
- PSYC300 - Co-Op Ed Experience in Psyc
- PSYC400 - Co-Op Ed Experience in Psyc

A 2.0 GPA must be maintained in the overall major block and in each of the two Core areas, Psychological Foundations and Biological & Sport Sciences.

Req Related for Multidisciplinary Studies - Educ (10 credits)

Type
Completion Requirement

Related Electives for Pre-Occupational Therapy

Fulfill ALL of the following requirements:

Required Courses (4 credits)

Complete ALL of the following Courses:
- PHYS131 - Physics 1 with Algebra

AND

Cultural Anthropology or Introduction to Sociology (3 credits)

Complete at least 1 of the following courses:
- ANTH121 - Cultural Anthropology
- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology

AND

Intro to Ethics or Moral Problems in Medicine (3 credits)

Complete at least 1 of the following courses:
- PHIL120 - Introduction to Ethics
- PHIL285 - Biomedical Ethics

Multidisciplinary Studies, B.S., Business Analytics Option

Overview

Business Analytics is an area that is interdisciplinary in nature, bringing together competencies across the social sciences and natural sciences. Data acquisition, data analysis, strategic planning, and communication are essential skills that are common to several disciplines and form the core of any business analytics program. Students who enroll in the MDST Business Analytics concentration will gain the abilities and experience to analyze information and make data-driven recommendations that can help clients, workers, companies, and society as they lead business organizations into the future.

Program Advisors

Dr. Ronald Baker, Associate Professor (Economics)
Dr. Eric Blazer, Associate Professor & Chair (Accounting and Finance)

For more information visit: https://www.millersville.edu/mdst/approved-programs/business-analytics.php

Curriculum

Simple Requirements

Multidisciplinary Studies(BS)- College of Business (60-61 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

- Credits Required for Entrepreneurship
- Minimum Residency for Entrepreneurship
- Minimum GPA for Multidisciplinary Studies Major

AND

Business Analytics – Core 1 (Business)

Fulfill ALL of the following requirements:

Required Courses (21 credits)

Complete ALL of the following Courses:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- BUSN206 - Business Research Methods
- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management
- BUSN358 - Management Science
- MGMT452 - Operations and Supply Chain Management

AND

Management Information Systems or Fundamentals of Info Tech (3-4 credits)

Complete at least 1 of the following courses:

- BUSN307 - Management Information Systems
- ITAN130 - Fundamentals of Information Technology

AND

Core 1 Electives (6 credits)

Complete at least 2 of the following courses:

- ACCT405 - Topics in Accounting
- FIN405 - Topics in Finance
- ECON335 - Forecasting and Analytics
- MKTG431 - Marketing Research **OR** MKTG431H - Hon: Marketing Research
- MGMT381 - Data & Information Management

AND

Business Analytics – Core 2 (Math and Computer Science)

Fulfill ALL of the following requirements:

Required Courses (20 credits)

Complete ALL of the following Courses:

- CMSC151 - Intro to Programming for Data Science I
- CMSC152 - Intro to Programming for Data Science II
- CMSC366 - Database Systems
- MATH120 - Logic for Information Technology
- MATH255 - Intro to Data Analytics
- ECON333 - Econometrics
  OR ECON333H - H:Econometrics

AND

Data Mining or Data Analytics (4 credits)

Complete at least 1 of the following courses:

- CMSC452 - Data Mining
  OR CMSC452H - Data Mining
- CMSC453 - Large-Scale Data Analytics and Visualization

AND

Survey of Statistics or Applied Statistics I (3 credits)

Complete at least 1 of the following courses:

- MATH235 - Survey of Statistics
- ECON231 - Applied Statistcs 1
  OR ECON231H - Hon: Applied Statistcs 1

AND

Capstone Experience - Senior Seminar of Internship/ Research (3 credits)

Earn at least 3 credits from the following:

- ACFN300 - Co-Op Ed Exp in Acct/Fin
- ECON300 - Co-Op Ed Experience in Econ
- MATH300 - Co-Op Ed Experience in Math
- MGMK300 - Co-Op Ed Exp in Mgmt/Mktg
- CMSC300 - Co-Op Ed Experience in CSCI
- ACFN489 - Honors Course
- CMSC489 - Honors Course
- CMSC499 - Departmental Honors
- ECON489 - Honors Course
- ECON499 - Departmental Honors
- MATH489 - Honors Course
- MATH499 - Departmental Honors
- MGMK489 - Honors Course
- ACCT499 - Departmental Honors
- FINA499 - Departmental Honors
- MGMT499 - Departmental Honors
- MKTG499 - Departmental Honors

Req Related for Multidisciplinary Studies - BUSN (10 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirement

Credits for Multidisciplinary Studies

AND

Related Electives for Business Analytics (10 credits)

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics
  OR ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics
  OR ECON102H - Hnrs:Principles of Microeconomics
- MATH256 - Data Visualization and Communication

Multidisciplinary Studies, B.S., Entrepreneurship Option

Overview

The Entrepreneurship program is interdisciplinary, bringing together competencies and viewpoints in ingenious ways to help individuals create their own visions, strategic and operational plans, and ultimately start their own businesses. Creativity, data acquisition and analysis, financial acumen, strategic planning, and communication are essential skills that are common to several disciplines and form the core of our entrepreneurship program. Our program integrates courses in management and marketing, accounting and finance, communications, applied engineering, and other disciplines to give our graduates the skills, abilities, experiences, and perspectives to start their own business and add value to an organization.

Another distinctive element of this program, critical for both workforce development and community relations, is the hands-on component. Students majoring in Entrepreneurship will need to complete two three-credit internships for a total of 6 credits. Students with the business, creativity, and communications skills gained in this program will be in high demand. Moreover, the second internship will take place during a student's senior year, and will directly link them with a small business, startup, or non-profit organization in or around the City of Lancaster. This allows our students to use their skills and perspectives to directly help local businesses grow and thrive, while giving them hands-on experiences that will aid them as they begin their own careers.

Program Advisors

Dr. Eric Blazer, Associate Professor & Chair (Accounting and Finance)
Dr. David DiRusso, Professor & Chair (Management and Marketing)

Curriculum

Simple Requirements

Multidisciplinary Studies(BS)- College of Business

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

- Credits Required for Entrepreneurship
- Minimum Residency for Entrepreneurship
- Minimum GPA for Multidisciplinary Studies Major

AND

Entrepreneurship – Core 1 (Management/Marketing)

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management
  OR BUSN251H - Hnrs:Principles of Management
- MGMT356 - Entrepreneurial Management

AND

Creativity (3 credits)

Complete ALL of the following Courses:

- MGMT405 - Topics in Management

AND

Internship 1

Choose one 300 course

AND

Core 1 Electives (9 credits)

Complete at least 3 of the following courses:

- BUSN352 - Human Resource Management
  OR BUSN352H - H:Human Resource Management
- MGMT372 - Organizational Behavior
- MGMT375 - Business Web Development
- MGMT405 - Topics in Management

- MGMT454 - Talent Acquisition
- MKTG332 - Consumer Behavior
  OR MKTG332H - Hon: Consumer Behavior
- MKTG333 - Personal Selling
- MKTG335 - Advertising
- MKTG336 - Retail Marketing
- MKTG431 - Marketing Research
  OR MKTG431H - Hon: Marketing Research

AND

Entrepreneurship – Core 2 (Other Departments)

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- BUSN161 - Intro to Financial Accounting
- BUSN202 - Legal Environment of Business
  OR BUSN202H - Hon: Legal Environment of Business
- FINA203 - Personal Finance
  OR FINA203H - Hon: Personal Finance

AND

Internship 2

Choose one 400 course

AND

Core 2 Electives

Complete at least 2 of the following courses:

- AENG492 - Technical Entrepreneurship
- COMM305 - Business and Professional Communication
- COMM380 - Digital Media Writing
- COMM390 - Social Media Campaigns
- COMM403 - Persuasion & Social Media Infl
- MATH256 - Data Visualization and Communication

AND

Capstone Experience - Business Plan Development or Honors Thesis (3 credits)

Earn at least 3 credits from the following:

- ACFN489 - Honors Course
- MGMK489 - Honors Course
- ACCT499 - Departmental Honors
- FINA499 - Departmental Honors
- MGMT499 - Departmental Honors
- MKTG499 - Departmental Honors

Req Related for Multidisciplinary Studies - BUSN

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirement

Credits for Multidisciplinary Studies

AND

Related Electives for Entrepreneurship

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ECON101 - Principles of Macroeconomics
  OR ECON101H - Hnrs:Principles of Macroeconomics
- ECON102 - Principles of Microeconomics
  OR ECON102H - Hnrs:Principles of Microeconomics

AND

Statistics (3 credits)

Complete at least 1 of the following courses:

- MATH130 - Elements of Statistics 1
- MATH235 - Survey of Statistics
- ECON231 - Applied Statistcs 1

OR ECON231H - Hon: Applied Statistcs 1

Multidisciplinary Studies, B.S., Data Science Option

Overview

Millersville University's new MDST concentration, Data Science, is a program of study that provides students with a solid foundation of skills in data science by combining knowledge and methodology from computer science, mathematics, and design. In addition, students are required to complete a minor of their choosing to acquire an area of domain knowledge to which they can apply their data science skills. Data Scientists finds success in a wide variety of industries due to their astute problem-solving skills. From engineering, aeronautics, and finance to criminal justice and information technology, the demand for data scientists continues to grow.

PROGRAM ADVISORS
Dr. Stephanie Schwartz, Computer Science

For more information visit: https://www.millersville.edu/mdst/approved-programs/data-science.php

Curriculum

Simple Requirements

Multidisciplinary Studies (BS) - SCTE Science & Tech (57-59 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Data Science - Core 1 (Computer Science) (28 credits)

Complete ALL of the following Courses:

- CMSC161 - Introduction to Programming 1
- CMSC162 - Introduction to Programming 2
- CMSC362 - Data Structures
- CMSC366 - Database Systems
- CMSC450 - Artificial Intelligence
- CMSC452 - Data Mining
  OR CMSC452H - Data Mining
- CMSC453 - Large-Scale Data Analytics and Visualization

AND

Data Science - Core 2 (Mathematics and Design) (28 credits)

Complete ALL of the following Courses:

- CMSC140 - Discrete Structures
- MATH161 - Calculus 1
- MATH211 - Calculus 2
- MATH235 - Survey of Statistics
- MATH236 - Elements of Statistics 2
- MATH304 - Matrix Algebra & Applications
- DESN144 - Digital Theory and Skills
  OR DESN144H - H: Digital Theory and Skills
- DESN349 - Information Design

AND

Required Capstone: Co-op/Research/Thesis (1-3 credits)

Complete at least 1 of the following courses:

- CMSC300 - Co-Op Ed Experience in CSCI
- CMSC400 - Co-Op Ed Experience in CSCI
- CMSC498 - Independent Study
- CMSC499 - Departmental Honors
- MATH300 - Co-Op Ed Experience in Math
- MATH400 - Co-Op Ed Experience in Math
- MATH498 - Independent Study
- MATH499 - Departmental Honors

Additional Comments:
A 2.0 GPA must be maintained in the overall major block and in each of the two Core areas

Req Related for Multidisciplinary Studies - SCTE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

A Minor Is Required

A minor in a field other than Mathematics or Computer Science is required. Discuss options with your academic advisor.

Music Department

The Tell School of Music offers three degree programs leading to the baccalaureate degree with a major in music.

The department is cognizant of the desires of many students from all segments of the University to participate in music. Accordingly, both beginning and advanced courses are available to students enrolled in any curriculum. The Tell School of Music also provides the opportunity for student performance and participation in a variety of vocal and instrumental organizations ensembles. Some of these large ensembles include University Choir, Orchestra, Concert Band, Wind Ensemble, Marching Band, Chorale, Glee Club, Women's Choir, Chamber Orchestra, West African Drum and Dance Ensemble, Jazz Ensembles, Commercial Ensemble, and Gospel Choir. Students can also participate in a variety of small ensembles. and various other ensembles. A description of these organizations is included in the student handbook.

The Tell School of Music music department also offers a music minor and a dual B.A. degree in music and music education, as well as a dual B.A. degree in music and music industry.

Millersville University is accredited by the National Association of Schools of Music.

FACULTY LIST
Atticks, Barry; Professor College of Arts, Humanities and Social Sciences B.A., Elizabethtown College, 1990; M.M., California State University 1996; Ph.D., The Pennsylvania State University, 2001
Banks, Christy; Professor College of Arts, Humanities and Social Sciences B.M., University of Nebraska-Lincoln, 1996; M.M., Florida State University, 1998; D.M.A., University of Nebraska-Lincoln, 2005
Cernuto, Joseph; Assistant Professor College of Arts, Humanities and Social Sciences B.M., University of Florida, 2003; M.M., Ibid., 2005; D.M.A., University of Iowa, 2018
Darmiento, Madeleine; Assistant Professor College of Arts, Humanities and Social Sciences B.A., Yale University, 1980; M.M., New England Conservatory of Music, 1983; D.M.A., SUNY at Stony Brook, 1987
Estes, Dain; Associate Professor College of Arts, Humanities and Social Sciences B.G.S., University of Kansas, 2008; J.D., University of Missouri-Kansas City, 2011
Gemmell, Jeffrey; Associate Professor College of Arts, Humanities and Social Sciences B.S., Towson University, 1984; M.M., Northwestern University, 1989; D.M.A., University of Colorado Boulder, 1997
Houlahan, Micheal; Department Chairperson, Professor College of Arts, Humanities and Social Sciences B.Ed. Degree St. Patrick’s College, National University of Ireland, Fellowship and Licentiate Diplomas in Piano Performance, Trinity College of London. M.M., the Catholic University of America; Ph.D., Ibid., 1989
Jester, Jennifer; Associate Professor College of Arts, Humanities and Social Sciences B.S., Arizona State University, 2001; M.F.A., California Institute for the Arts, 2004; D.M.A., UCLA, 2008
Martinez, Brandon; Assistant Professor College of Arts, Humanities and Social Sciences B.M., Texas Christian University, 2005: M.M., New England Conservatory of Music, 2008; M.M. New England Conservatory, 2009
Pan, Xun; Associate Professor College of Arts, Humanities and Social Sciences B.A., Central Conservatory of Music (China), 1988; M.M., Syracuse University, 1992; D.M.A., Rutgers University, 1996
Volchansky, Vera; Associate Professor College of Arts, Humanities and Social Sciences B.M., Mercyhurst University, 2000; M.M., Eastman School, 2004; D.M.A., University of Kansas, 2008

Programs

Music Education Post-Baccalaureate Certification

Overview

The Music unit offers a professional baccalaureate degree – the Bachelor of Science in Education, Music Education – which leads to licensure in Pennsylvania for teaching K-12 instrumental and vocal music.

This degree program offers one of the nation's most comprehensive and integrated Music Education programs of study. With the field of music education changing so rapidly, our world-class faculty, creative environment, future-forward curriculum, and state-of-the-art facilities allow for a truly unique education. Students are given the opportunity to gain real-world experience through professional venues, field experiences, and internship opportunities, including Music for Everyone and Lancaster International Piano Festival. With two Visual & Performing Arts Centers, three performance halls, a professional recording studio, and a one-of-a-kind Yamaha Digital Piano Lab that hosts the latest music technology software, including ProTools and Logic, the options are truly endless. Graduates receive a Bachelor of Science in Music Education.

Students in the Music Education program are expected to complete a range of courses, including musical analysis, class piano, music history, conducting, and a range of strings, voice, woodwinds, percussion, and brass music classes. These project-based classes blend standard learning with hands-on experiences in and out of the classroom and focus on commercial music and arts administration studies. Students are given the opportunity to pass out of classes coinciding with their vocal/instrumental major, decreasing the required number of program credits. In addition, individuals are also expected to complete seven semesters of ensembles of their choice.

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

AND

Foundations Courses

Complete at least 1 of the following:

Option 1. Foundations Graduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

Major in Music Education, Post-Bacc Certification

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Basic Musicianship: Required Courses (28 credits)

Complete ALL of the following Courses:

- MUSI112 - Kodaly Solfege, Harmony and Analysis 1
- MUSI131 - Class Piano 1
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2
- MUSI231 - Class Piano 2

- MUSI312 - Kodaly Solfege, Harmony and Analysis 3
- MUSI331 - Class Piano 3
- MUSI362 - Music History and Literature 1
  OR MUSI362H - H:Music History and Literature 1
- MUSI363 - Music History/Literature 2
  OR MUSI363H - H:Music History/Literature 2
- MUSI381 - Conducting 1
- MUSI412 - Kodaly Solfege, Harmony and Analysis 4
  OR MUSI412H - H: Kodaly Solfege, Harmony and Analysis 4
- MUSI481 - Conducting 2

AND

Music Education Courses

Fulfill ALL of the following requirements:

Class Voice I (1 credit)

Complete ALL of the following Courses:

- MUSI141 - Vocal Techniques

AND

Required Courses (19 credits)

Complete ALL of the following Courses:

- MUSI151 - Strings Techniques
- MUSI152 - Woodwind Techniques
- MUSI153 - Percussion Techniques
- MUSI156 - Brass Techniques
- MUSI350 - The Art of Teaching Modern Band
- MUSI280 - Technology in the Music Classroom
- MUSI317 - The Art of Teaching Elementary Music Kodaly
- MUSI347 - The Art of Teaching Choral Techniques
  OR MUSI347H - Hon: The Art of Teaching Choral Techniques
- MUSI373 - The Art of Teaching Instrumental Music Techniques

AND

The Art of Teaching Middle Level Music Kodaly (3 credits)

Complete ALL of the following Courses:

- MUSI372 - The Art of Teaching Secondary Methods

AND

Music Education Major Performance (7 credits)

Earn at least 7 credits from the following:

- MUSI154 - Major Performance 1:
- MUSI155 - Major Performance 2:
- MUSI254 - Major Performance 3:
- MUSI255 - Major Performance 4:
- MUSI354 - Major Performance 5:
- MUSI355 - Major Performance 6:
- MUSI454 - Major Performance 7:
  OR MUSI454H - H: Major Performance 7:
- MUSI455 - Major Performance 8:

AND

Applied Musicianship

Applied Musicianship, Band/Orchestra/Choir

AND

Music Electives

Fulfill ALL of the following requirements:

Recommended Electives

MUSI294 Live Audio 1, MUSI369 W African Music and Dance Recommended Electives

AND

Electives

MUSI140 Singing Voice in Musicl Theatr, MUSI202 American Broadway Musicals, MUSI207 Love Songs Through the Ages, MUSI263 Popular Music, MUSI 303, MUSI313 Sem in Jazz Thry & Improv, MUSI371 Foreign Language Diction,

MUSI388 Guided Study Abroad in Music, MUSI398 Songwriting Electives

0 hours

Req Related for Music, Post-Bacc Certification (3 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- PHYS205 - Musical Acoustics

Professional Education - Certification (36 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/EDFN241 Psyc Foundation of Teaching and please register for both courses in the same block.

AND

APS - Professional Bloc (18 credits)

Fulfill ALL of the following requirements:

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Elementary Methods I (3 credits)

Complete ALL of the following Courses:

- MUSI317 - The Art of Teaching Elementary Music Kodaly

AND

Middle/Secondary Methods (3 credits)

Complete ALL of the following Courses:

- MUSI372 - The Art of Teaching Secondary Methods

AND

Instrumental Methods (3 credits)

Complete ALL of the following Courses:

- MUSI373 - The Art of Teaching Instrumental Music Techniques

AND

Technology in the Music Profession (3 credits)

Complete ALL of the following Courses:

- MUSI280 - Technology in the Music Classroom

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc and but prior to Student Teaching.

AND

Student Teaching Seminar (3 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Access the Student teaching Website

AND

Student Teaching Semester (9 credits)

Complete ALL of the following Courses:

- MEPK461 - Musi Stu Teaching
- MEPK462 - Musi Stu Teaching

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

Music Minor

Overview

The music unit offers a minor in music to students with a major outside of music. The music minor is designed for non-music major students interested in further developing performance skills on an instrument or voice. Courses, in addition to private lessons and performing in an ensemble, are designed to reinforce the broad musical background of the student. Admission to the program is by audition for students who elect major performance and ensemble participation. Students who do not select major performance and only wish for concentrated liberal art minor in music may apply to the program through the music unit chair and secretary.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Music

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- MUSI100 - Music and Culture

AND

Language of Music I or II (3 credits)

Complete at least 1 of the following courses:

- MUSI103 - Language of Music
  OR MUSI103H - Hnrs:Language of Music
- MUSI104 - Language of Music 2

AND

100 and 200 level electives (6 credits)

Complete at least 2 courses in the following course sets:

- Any 1-level MUSI course(s)
- Any 2-level MUSI course(s)

AND

300 and 400 level electives (6 credits)

Complete at least 3 courses in the following course sets:

- Any 3-level MUSI course(s)
- Any 4-level MUSI course(s)

AND

Music Performance

OPTIONAL: 3 credits Major Performance (audition required) with requirement to take 3 semesters of ensemble concurrently.

Music, B.A.

Overview

The B.A. in music consists of a liberal arts curriculum designed to provide students with a broad coverage of courses in music. The B.A. degree with a concentration in performance develops a student's ability to perform repertoire with technical and artistic understanding.

The Bachelor of Arts degree in music provides a strong education in the liberal arts. The major in music offers a broad knowledge of music theory and the history and development of music. Students can audition to select a performance concentration. This degree serves individuals who seek a broad overview of music combined with general education. Students who complete the B.A. and/or the B.A. concentration in performance pursue graduate work in music performance, music education, music business, and music therapy. Students also pursue careers in private teaching, working with Arts and Educational organizations, or become involved with rather than intense specialization in the undergraduate years.

Curriculum

Simple Requirements

Major in Music, BA

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Basic Musicianship (18 credits)

Complete ALL of the following Courses:

- MUSI104 - Language of Music 2
- MUSI112 - Kodaly Solfege, Harmony and Analysis 1
- MUSI131 - Class Piano 1
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2
- MUSI231 - Class Piano 2
- MUSI362 - Music History and Literature 1 **OR** MUSI362H - H:Music History and Literature 1
- MUSI381 - Conducting 1

AND

Performance

Fulfill ALL of the following requirements:

BA Music Performance Requirement (6 credits)

Earn at least 6 credits from the following:

- MUSI154 - Major Performance 1:
- MUSI155 - Major Performance 2:
- MUSI254 - Major Performance 3:
- MUSI255 - Major Performance 4:
- MUSI354 - Major Performance 5:
- MUSI355 - Major Performance 6:
- MUSI454 - Major Performance 7: **OR** MUSI454H - H: Major Performance 7:
- MUSI455 - Major Performance 8:

AND

Applied Musicianship, Ensembles (2 credits)

Earn at least 2 credits from the following:

- Any 12-level MUSI course(s)
- Any 22-level MUSI course(s)
- Any 32-level MUSI course(s)
- Any 42-level MUSI course(s)

Note: This requirement may not be satisfied with MUSI 128, MUSI 228, MUSI 328, or MUSI 428.

AND

Applied Musicianship, Ensembles

Complete at least 8 courses in the following course sets:

- Any 12-level MUSI course(s)
- Any 22-level MUSI course(s)
- Any 32-level MUSI course(s)
- Any 42-level MUSI course(s)

Note: This requirement may not be satisfied with MUSI 128, MUSI 228, MUSI 328, or MUSI 428.

Students interested in Kodaly Certification must complete 3 semesters of Chorale, in addition to their degree ensemble requirements.

AND

Senior Project and Studio Performance Evaluations

Fulfill ALL of the following requirements:

Senior Project Required

All students must pass their Senior Project for the BA in Music.

AND

Studio Performance Evaluation Needed

BA Music Performance Students must pass Studio Performance Evaluations with a Level 4 in Studio Performance. BA Music Students must pass Studio Performance Evaluations with a Level 2 in Studio Performance.

AND

Required Music Electives (3 credits)

Earn at least 3 credits from the following:

- MUSI312 - Kodaly Solfege, Harmony and Analysis 3
- MUSI313 - Sem in Jazz Thry & Improv
- MUSI331 - Class Piano 3
- MUSI412 - Kodaly Solfege, Harmony and Analysis 4
  OR MUSI412H - H: Kodaly Solfege, Harmony and Analysis 4
- MUSI481 - Conducting 2

AND

Music Electives (9 credits)

Earn at least 9 credits from the following:

- MUSI140 - Singing Voice in Musicl Theatr
- MUSI202 - American Broadway Musicals
- MUSI207 - Love Songs Through the Ages
- MUSI263 - Popular Music
- MUSI280 - Technology in the Music Classroom
- MUSI312 - Kodaly Solfege, Harmony and Analysis 3
- MUSI313 - Sem in Jazz Thry & Improv
- MUSI331 - Class Piano 3
- MUSI347 - The Art of Teaching Choral Techniques
  OR MUSI347H - Hon: The Art of Teaching Choral Techniques
- MUSI369 - Intro to West African Music and Dance
- MUSI371 - Foreign Language Diction
- MUSI371H - Hnrs: Foreign Language Diction
- MUSI373 - The Art of Teaching Instrumental Music Techniques
- MUSI388 - Guided Study Abroad in Music
- MUSI412 - Kodaly Solfege, Harmony and Analysis 4
  OR MUSI412H - H: Kodaly Solfege, Harmony and Analysis 4
- MUSI481 - Conducting 2

BA MUSI (no Performance option) - A combination of electives should be taken from the Required and Additional elective options to total 12 credits, for 38 total credits in the MUSI major

Music, B.A. – Performance

Overview

The Bachelor of Arts with a concentration in Performance is a music degree that prepares students for future careers as performers, accompanists, private teachers, or work collaboratively with other musicians. Concentrations are available in instrumental and vocal music.

Curriculum

Simple Requirements

Major in Music, BA

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Basic Musicianship (23 credits)

Complete ALL of the following Courses:

- MUSI112 - Kodaly Solfege, Harmony and Analysis 1
- MUSI131 - Class Piano 1
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2
- MUSI231 - Class Piano 2
- MUSI312 - Kodaly Solfege, Harmony and Analysis 3
- MUSI331 - Class Piano 3
- MUSI362 - Music History and Literature 1 **OR** MUSI362H - H:Music History and Literature 1
- MUSI363 - Music History/Literature 2 **OR** MUSI363H - H:Music History/Literature 2
- MUSI381 - Conducting 1

AND

Performance

Fulfill ALL of the following requirements:

BA Music Performance Concentration Performance Requirement (16 credits)

Complete ALL of the following Courses:

- MUSI154 - Major Performance 1:
- MUSI155 - Major Performance 2:
- MUSI254 - Major Performance 3:
- MUSI255 - Major Performance 4:
- MUSI354 - Major Performance 5:
- MUSI355 - Major Performance 6:
- MUSI454 - Major Performance 7: **OR** MUSI454H - H: Major Performance 7:
- MUSI455 - Major Performance 8:

BA Music Performance Students must pass Studio Performance Evaluations with a Level 4 in Studio Performance. BA Music Students must pass Studio Performance Evaluations with a Level 2 in Studio Performance.

AND

Applied Musicianship, Ensembles (2 credits)

Earn at least 2 credits from the following:

- Any 12-level MUSI course(s)
- Any 22-level MUSI course(s)
- Any 32-level MUSI course(s)
- Any 42-level MUSI course(s)

Note: This requirement may not be satisfied with MUSI 128, MUSI 228, MUSI 328, or MUSI 428.

AND

Applied Musicianship, Ensembles

Complete at least 8 courses in the following course sets:

- Any 12-level MUSI course(s)
- Any 22-level MUSI course(s)
- Any 32-level MUSI course(s)
- Any 42-level MUSI course(s)

Note: This requirement may not be satisfied with MUSI 128, MUSI 228, MUSI 328, or MUSI 428.

Students interested in Kodaly Certification must complete 3 semesters of Chorale and in addition to their degree ensemble requirements.

AND

Senior Project and Studio Performance Evaluations

Fulfill ALL of the following requirements:

Senior Project Required

All students must pass their Senior Project for the BA in Music.

AND

Studio Performance Evaluation Needed

BA Music Performance Students must pass Studio Performance Evaluations with a Level 4 in Studio Performance. BA Music Students must pass Studio Performance Evaluations with a Level 2 in Studio Performance.

AND

Required Music Elective (3 credits)

Earn at least 3 credits from the following:

- MUSI347 - The Art of Teaching Choral Techniques
  OR MUSI347H - Hon: The Art of Teaching Choral Techniques
- MUSI373 - The Art of Teaching Instrumental Music Techniques

AND

Music Electives (6 credits)

Earn at least 6 credits from the following:

- MUSI104 - Language of Music 2
- MUSI140 - Singing Voice in Musicl Theatr
- MUSI141 - Vocal Techniques
- MUSI190 - Music Industry 1
- MUSI193 - Computer Applications in Music Production 1
- MUSI202 - American Broadway Musicals
- MUSI207 - Love Songs Through the Ages
- MUSI263 - Popular Music
- MUSI280 - Technology in the Music Classroom
- MUSI290 - Music Industry 2
- MUSI293 - Computer Applications in Music Production 2
- MUSI294 - Live Audio 1
  OR MUSI294H - Hon: Live Audio 1
- MUSI295 - Studio Recording I
- MUSI301 - Music in Early Childhood
  OR MUSI301H - Hon: Music in Early Childhood
- MUSI304 - Artist Management
- MUSI313 - Sem in Jazz Thry & Improv
- MUSI330 - Live Audio 2
- MUSI347 - The Art of Teaching Choral Techniques
  OR MUSI347H - Hon: The Art of Teaching Choral Techniques
- MUSI369 - Intro to West African Music and Dance
- MUSI371 - Foreign Language Diction
- MUSI371H - Hnrs: Foreign Language Diction
- MUSI372 - The Art of Teaching Secondary Methods
- MUSI373 - The Art of Teaching Instrumental Music Techniques
- MUSI380 - History of the Recording Industry
  OR MUSI380H - Hon:History of the Recording Industry
- MUSI388 - Guided Study Abroad in Music
- MUSI390 - Marketing and Promotion in the Music Industry
  OR MUSI390H - Hon: Marketing and Promotion in the Music Industry
- MUSI395 - Studio Recording II
- MUSI396 - Synthesis and Sampling
- MUSI397 - International Music Business
  OR MUSI397H - Hon: International Music Business
- MUSI398 - Songwriting
- MUSI412 - Kodaly Solfege, Harmony and Analysis 4
  OR MUSI412H - H: Kodaly Solfege, Harmony and Analysis 4
- MUSI481 - Conducting 2
- MUSI495 - Audio & Music for Video
- MUSI497 - Live Audio 3
- MUSI587 - Topics in Music

BA MUSI (no Performance option) - A combination of electives should be taken from the Required and Additional elective options to total 12 credits, for 38

total credits in the MUSI major

Req Related for Music, BA

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ENTR201 - The Art of Entrepreneurship

AND

Recommended Related Courses

Fulfill ALL of the following requirements:

Recommended Courses (3 credits)

Complete ALL of the following Courses:

- PHYS205 - Musical Acoustics

These courses are not required for completion of a BA in MUSI, but are recommended.

AND

Additional Recommended Courses

Foreign Languages

The department recommends the addition of an Entrepreneurship Minor for Music Majors.

Music, B.S.Ed.

Overview

Millersville University's division of Music Education offers one of the nation's most comprehensive and integrated programs of study. With the field of music education changing so rapidly, our world-class faculty, creative environment and state-of-the-art facilities allow for a truly unique education.

Curriculum

Simple Requirements

Major in Music, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Basic Musicianship (28 credits)

Complete ALL of the following Courses:

- MUSI112 - Kodaly Solfege, Harmony and Analysis 1
- MUSI131 - Class Piano 1
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2
- MUSI231 - Class Piano 2
- MUSI312 - Kodaly Solfege, Harmony and Analysis 3
- MUSI331 - Class Piano 3
- MUSI362 - Music History and Literature 1
  OR MUSI362H - H:Music History and Literature 1
- MUSI363 - Music History/Literature 2
  OR MUSI363H - H:Music History/Literature 2
- MUSI381 - Conducting 1
- MUSI412 - Kodaly Solfege, Harmony and Analysis 4
  OR MUSI412H - H: Kodaly Solfege, Harmony and Analysis 4
- MUSI481 - Conducting 2

AND

Music Education Courses

Fulfill ALL of the following requirements:

Class Voice I (1 credit)

Complete ALL of the following Courses:

- MUSI141 - Vocal Techniques

AND

Required Courses (19 credits)

Complete ALL of the following Courses:

- MUSI151 - Strings Techniques
- MUSI152 - Woodwind Techniques
- MUSI153 - Percussion Techniques
- MUSI156 - Brass Techniques
- MUSI350 - The Art of Teaching Modern Band
- MUSI280 - Technology in the Music Classroom
- MUSI317 - The Art of Teaching Elementary Music Kodaly
- MUSI347 - The Art of Teaching Choral Techniques
  OR MUSI347H - Hon: The Art of Teaching Choral Techniques
- MUSI373 - The Art of Teaching Instrumental Music Techniques

AND

Major Performance (7 credits)

Earn at least 7 credits from the following:

- MUSI154 - Major Performance 1:
- MUSI155 - Major Performance 2:
- MUSI254 - Major Performance 3:
- MUSI255 - Major Performance 4:
- MUSI354 - Major Performance 5:
- MUSI355 - Major Performance 6:
- MUSI454 - Major Performance 7:
  OR MUSI454H - H: Major Performance 7:
- MUSI455 - Major Performance 8:

AND

Junior Review and Student Performance Exams

Fulfill ALL of the following requirements:

Junior Level Review Required

All students must complete their Junior Review during Junior Year (between 60 and 89 earned credits)

AND

Studio Performance Exam Needed

Music Education Students must pass Studio Performance Exams with a Level 3 in Studio Performance.

AND

Applied Musicianship

Fulfill ALL of the following requirements:

Bands/Orchestra/Choirs Classes

Complete at least 7 courses in the following course sets:

- Any 12-level MUSI course(s)
- Any 22-level MUSI course(s)
- Any 32-level MUSI course(s)
- Any 42-level MUSI course(s)

Note: This requirement may not be satisfied with MUSI 128, MUSI 129, MUSI 228, or MUSI 229.

AND

Bands/Orchestra/Choirs Credits

Earn at least 2 credits from the following:

- Any 12-level MUSI course(s)
- Any 22-level MUSI course(s)
- Any 32-level MUSI course(s)
- Any 42-level MUSI course(s)

Note: This requirement may not be satisfied with MUSI 128, MUSI 129, MUSI 228, or MUSI 229.

AND

Marching Band

Marching Band/MB Camp: Strings/Voice/Piano take 1 semester of Marching Band/MB Camp.

Brass/Woodwinds/Perc take 2 semesters of Marching Band/MB Camp.
Marching Band and Camp (2 semesters): Marching Band and Marching Band Camp are taken simultaneously.

AND

Music Electives

Recommended Electives: MUSI294 Live Audio 1, MUSI369 W African Music and Dance
Electives: MUSI140 Singing Voice in Musicl Theatr, MUSI202 American Broadway Musicals, MUSI207 Love Songs Through the Ages, MUSI263 Popular Music, MUSI313 Sem in Jazz Thry & Improv, MUSI371 Foreign Language Diction, MUSI388 Guided Study Abroad in Music, MUSI398 Songwriting

Professional Education (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Educational Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

Accommodations and Adaptations (6 credits)

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

AND

Student Teaching (12 credits)

Complete ALL of the following Courses:

- SEED471 - Student Teaching Seminar
- MEPK461 - Musi Stu Teaching

Req Related for Music, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ENTR201 - The Art of Entrepreneurship

AND

Musical Acoustics

PHYS205 Musical Acoustics is not required and but is recommended and will count in G2.

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1

- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Music Industry, B.S. – Live Audio

Overview

The primary goal of the Live Audio concentration is to provide students with a solid foundation in live audio technology, music business, and music performance. This concentration will allow them to increase their specificity in live audio technology, thus resulting in students who will be more prepared for the job market and more competitive with graduates from private institutions. In addition, this concentration will explore the technology and techniques necessary to produce concerts in various venues, including those on and off campus. Students will participate in all facets of music-related concert production, including equipment options, signal flow, signal processing, mixing live shows, and live recording techniques.

Curriculum

Simple Requirements

Major in Music Industry

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Basic Musicianship (13 credits)

Complete ALL of the following Courses:

- MUSI104 - Language of Music 2
- MUSI112 - Kodaly Solfege, Harmony and Analysis 1
- MUSI131 - Class Piano 1
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2
- MUSI231 - Class Piano 2

AND

Performance

Fulfill ALL of the following requirements:

Music Industry Major Performance (6 credits)

Earn at least 6 credits from the following:

- MUSI154 - Major Performance 1:
- MUSI155 - Major Performance 2:
- MUSI254 - Major Performance 3:
- MUSI255 - Major Performance 4:
- MUSI354 - Major Performance 5:
- MUSI355 - Major Performance 6:
- MUSI454 - Major Performance 7:
  OR MUSI454H - H: Major Performance 7:
- MUSI455 - Major Performance 8:

AND

Major Ensemble Commercial Music or Other Ensemble

You must complete 6 CLASSES of Ensemble (Applied Music).

AND

Music Industry Core

Fulfill ALL of the following requirements:

Required Courses (24 credits)

Complete ALL of the following Courses:

- MUSI190 - Music Industry 1
- MUSI193 - Computer Applications in Music Production 1
- MUSI290 - Music Industry 2
- MUSI294 - Live Audio 1
  OR MUSI294H - Hon: Live Audio 1
- MUSI295 - Studio Recording I
- MUSI380 - History of the Recording Industry
  OR MUSI380H - Hon:History of the Recording Industry
- MUSI390 - Marketing and Promotion in the Music Industry
  OR MUSI390H - Hon: Marketing and Promotion in the Music Industry
- MUSI397 - International Music Business
  OR MUSI397H - Hon: International Music Business

Music Industry Students must pass Studio Performance Evaluations with a Level 2 in Studio Performance.

AND

Co-op in Music (5 credits)

A 5 credit internship/co-op must be completed. See your faculty advisor and the Office of Experiential Learning and Career Management for registration details.

AND

Studio Performance Evaluation

Fulfill ALL of the following requirements:

Studio Performance Evaluation Needed

Music Industry Students must pass Studio Performance Evaluations with a Level 2 in Studio Performance.

AND

Live Audio Production Option

See separate block

Additional Comments:
Minors suggested to Music Industry majors are 'General Business,' 'Entrepreneurship,' or 'Marketing.' Minors can be declared by completing an Academic Minor Form through the registrar's office. View webpage for the form.

Concentration in Live Audio Production (18-21 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- MUSI330 - Live Audio 2

AND

Live Audio Electives (15-18 credits)

Complete at least 6 of the following courses:

- THEA120 - Stagecraft
- ENTC220 - Theatrical Lighting & Sound
- OSEH120 - Fundamentals of Safety, Health, Environmental Issues
- PHYS205 - Musical Acoustics
- MUSI497 - Live Audio 3
- AENG130 - Production Materials & Processes
- AENG261 - Electronic Systems **OR** AENG261H - H:Electronic Systems
- AENG262 - Semiconductor Electronics
- AENG325 - Power Conversion and Control

Req Related for Music Industry, BS (3 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ECON100 - Introductory Economics

Music Industry, B.S. – Music Production

Overview

The primary goal of this music industry degree track's curriculum is to provide students with a solid foundation in music production and music industry studies. In addition, students will increase their specificity in music production, thus resulting in students who will be more prepared for the job market and more competitive with graduates from private institutions.

Curriculum

Simple Requirements

Major in Music Industry

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Basic Musicianship (13 credits)

Complete ALL of the following Courses:

- MUSI104 - Language of Music 2
- MUSI112 - Kodaly Solfege, Harmony and Analysis 1
- MUSI131 - Class Piano 1
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2
- MUSI231 - Class Piano 2

AND

Performance

Fulfill ALL of the following requirements:

Music Industry Major Performance (6 credits)

Earn at least 6 credits from the following:

- MUSI154 - Major Performance 1:
- MUSI155 - Major Performance 2:
- MUSI254 - Major Performance 3:
- MUSI255 - Major Performance 4:
- MUSI354 - Major Performance 5:
- MUSI355 - Major Performance 6:
- MUSI454 - Major Performance 7:
  OR MUSI454H - H: Major Performance 7:
- MUSI455 - Major Performance 8:

AND

Major Ensemble Commercial Music or Other Ensemble

Fulfill ALL of the following requirements:

Major Ensemble 6 courses minimum

You must complete 6 CLASSES and a minimum of 2 CREDITS of Ensemble (Applied Music).

AND

Major Ensemble 2 credits minimum (2 credits)

You must complete a minimum of 2 CREDITS of Ensemble (Applied Music).

AND

Music Industry Core

Fulfill ALL of the following requirements:

Required Courses (24 credits)

Complete ALL of the following Courses:

- MUSI190 - Music Industry 1
- MUSI193 - Computer Applications in Music Production 1
- MUSI290 - Music Industry 2
- MUSI294 - Live Audio 1
  OR MUSI294H - Hon: Live Audio 1
- MUSI295 - Studio Recording I
- MUSI380 - History of the Recording Industry
  OR MUSI380H - Hon:History of the Recording Industry
- MUSI390 - Marketing and Promotion in the Music Industry
  OR MUSI390H - Hon: Marketing and Promotion in the Music Industry
- MUSI397 - International Music Business
  OR MUSI397H - Hon: International Music Business

AND

Co-op in Music (5 credits)

A 5 credit internship/co-op must be completed. See your faculty advisor and the Office of Experiential Learning and Career Management for registration details.

AND

Music Industry Elective (6 credits)

Complete at least 2 of the following courses:

- MUSI304 - Artist Management
- MUSI330 - Live Audio 2
- MUSI490 - Music Management
- MUSI497 - Live Audio 3

AND

Studio Performance Evaluation

Fulfill ALL of the following requirements:

Studio Performance Evaluation Needed

Music Industry Students must pass Studio Performance Evaluations with a Level 2 in Studio Performance.

AND

Music Production Option

See separate block

Concentration in Music Production (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- MUSI293 - Computer Applications in Music Production 2
- MUSI395 - Studio Recording II
- MUSI396 - Synthesis and Sampling
- MUSI495 - Audio & Music for Video

AND

Songwriting and Composition (3 credits)

Complete ALL of the following Courses:

- MUSI398 - Songwriting

Req Related for Music Industry, BS (3 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- ECON100 - Introductory Economics

Music Industry, B.S. - Music Management

Overview

The primary goal of this new liberal arts degree's curriculum is to provide students with a solid foundation in music technology, music business, and music performance while increasing their level of specificity through track options. Thus, students will be more prepared for the job market and more competitive with graduates from private institutions from other programs.

Curriculum

Simple Requirements

Major in Music Industry

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Basic Musicianship (13 credits)

Complete ALL of the following Courses:

- MUSI104 - Language of Music 2
- MUSI112 - Kodaly Solfege, Harmony and Analysis 1
- MUSI131 - Class Piano 1
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2
- MUSI231 - Class Piano 2

AND

Performance

Fulfill ALL of the following requirements:

Music Industry Major Performance (6 credits)

Earn at least 6 credits from the following:

- MUSI154 - Major Performance 1:
- MUSI155 - Major Performance 2:
- MUSI254 - Major Performance 3:
- MUSI255 - Major Performance 4:
- MUSI354 - Major Performance 5:
- MUSI355 - Major Performance 6:
- MUSI454 - Major Performance 7:
  OR MUSI454H - H: Major Performance 7:
- MUSI455 - Major Performance 8:

AND

Major Ensemble Commercial Music or Other Ensemble

Fulfill ALL of the following requirements:

Major Ensemble 6 courses minimum

You must complete 6 CLASSES and a minimum of 2 CREDITS of Ensemble (Applied Music).

AND

Major Ensemble 2 credits minimum (2 credits)

You must complete a minimum of 2 CREDITS of Ensemble (Applied Music).

AND

Music Industry Core

Fulfill ALL of the following requirements:

Required Courses (24 credits)

Complete ALL of the following Courses:

- MUSI190 - Music Industry 1
- MUSI193 - Computer Applications in Music Production 1
- MUSI290 - Music Industry 2
- MUSI294 - Live Audio 1
  OR MUSI294H - Hon: Live Audio 1
- MUSI295 - Studio Recording I
- MUSI380 - History of the Recording Industry
  OR MUSI380H - Hon:History of the Recording Industry
- MUSI390 - Marketing and Promotion in the Music Industry
  OR MUSI390H - Hon: Marketing and Promotion in the Music Industry
- MUSI397 - International Music Business
  OR MUSI397H - Hon: International Music Business

AND

Co-op in Music (5 credits)

A 5 credit internship/co-op must be completed. See your faculty advisor and the Office of Experiential Learning and Career Management for registration details.

AND

Senior Project and Studio Performance Evaluation

Fulfill ALL of the following requirements:

Senior Project Required

All students must pass their Senior Project for Music Industry.

AND

Studio Performance Evaluation Needed

Music Industry Students must pass Studio Performance Evaluations with a Level 2 in Studio Performance.

AND

Music Management Option

See separate block

Concentration in Music Management (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing
- MUSI304 - Artist Management

AND

Senior Capstone (Fall and Spring) (6 credits)

Earn at least 6 credits from the following:

- MUSI490 - Music Management

AND

Elective (3 credits)

Earn at least 3 credits from the following:

- Any ACCT course(s)
- Any BUSN course(s)
- Any ECON course(s)
- Any ENTR course(s)
- Any MGMT course(s)

Req Related for Music Industry, BS (3 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- ECON100 - Introductory Economics

Certificate in Music Management

Overview

The primary goal of this certificate program's curriculum is to provide students with a solid foundation in the music industry that can be used alongside their major field of study to pursue a career in the music industry.

Curriculum

Simple Requirements

Music Management- Certificate

Type
Completion Requirement

Required

Required courses:

MUSI 190 Music Industry 1

MUSI 290 Music Industry 2

MUSI 304 Artist Management

Complete ALL of the following Courses:

- MUSI190 - Music Industry 1
- MUSI290 - Music Industry 2
- MUSI304 - Artist Management

Music Management-Certificate

Type
Completion Requirement

Elective Credit

Take three (3) credits of one of the following:

MUSI 490 Music Management (with permission of instructor)

ENTR 201 Art of Entrepreneurship

BUSN 231 Principles of Marketing

Complete ANY of the following Courses:

- ENTR201 - The Art of Entrepreneurship
- MUSI490 - Music Management
- BUSN231 - Principles of Marketing

Certificate in Modern Band Applications

Overview

The Modern Band Applications Certificate Program is unique to the Tell School of Music, and is an incredible way to add this skillset to one of our existing music degrees or as a stand alone certificate. Students in the program will strengthen both their teaching and performance skills in the realm of popular music making and will offer our graduates with an employment advantage in public schools, and in the music education workforce. The Certificate is an additional credential to the a students' transcript showing additional, specialized study in Modern Band Applications.

Curriculum

Simple Requirements

Certificate in Modern Band Applications (10 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Earn a minimum grade of C- in the following:

- MUSI350 - The Art of Teaching Modern Band

AND

Live Audio Production (3 credits)

Earn a minimum grade of C- in the following:

- MUSI294 - Live Audio 1
  OR MUSI294H - Hon: Live Audio 1

AND

Songwriting and Composition (3 credits)

Earn a minimum grade of C- in the following:

- MUSI398 - Songwriting

AND

Commercial Lab Ensemble or Commercial Ensemble

(1 credit)

Earn a minimum grade of C- in the following:

- MUSI124 - Commercial Music Lab Band **OR** MUSI324 - Commercial Music Ensemble

Certificate in Music Technology in Music Education

Overview

Tell School of Music students are the only undergraduate students in Pennsylvania to have the unique opportunity to integrate a study of technology with music education. Starting in the Fall 2020 semester, Music Education students now have the option of obtaining a new Certificate in Technology in Music Education at the Tell School. The Certificate is an additional credential to the Music Education students' transcript showing additional, specialized study in technology. In the 21st century, this is an especially attractive course of study for music educators. Students who elect Technology studies will not only be prepared to help in live sound productions in their schools but also will be prepared to teach 21st century classes in Recording, Live Audio, Modern Band, or other technology-based classes.

Curriculum

Simple Requirements

Certificate in Music Technology in Music Education (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Earn a minimum grade of B- in the following:

- MUSI280 - Technology in the Music Classroom
- MUSI193 - Computer Applications in Music Production 1
- MUSI295 - Studio Recording I

AND

Live Audio Production (3 credits)

Earn a minimum grade of B- in the following:

- MUSI294 - Live Audio 1

OR MUSI294H - Hon: Live Audio 1

Certificate in Kodaly

Overview

Tell School of Music students to have the unique opportunity to study with two internationally renowned scholars in the Kodály Concept of music education - Dr. Philip Tacka and Dr. Micheal Houlahan and obtain a **Certificate in Kodály Teaching** at the Tell School. The Kodály Concept of teaching allows students to have the opportunity to enhance further their pedagogical skills that promote musicianship skills through experiential learning in singing, playing instruments, conducting, learning global repertoires, and understanding how to teach music from a sound to symbol perspective. In addition, students can observe and work with Kodály teachers in public school settings. The Certificate is an additional credential to the Music Education students' transcript showing additional, specialized study in the Kodály Concept of teaching - an attractive credential for music teachers!

Curriculum

Simple Requirements

Certificate in Kodaly (12 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Earn a minimum grade of B- in the following:

- MUSI312 - Kodaly Solfege, Harmony and Analysis 3
- MUSI412 - Kodaly Solfege, Harmony and Analysis 4
  OR MUSI412H - H: Kodaly Solfege, Harmony and Analysis 4
- MUSI317 - The Art of Teaching Elementary Music Kodaly

AND

The Art of Teaching Middle Level Music Kodaly (3 credits)

Earn a minimum grade of B- in the following:

- MUSI372 - The Art of Teaching Secondary

Methods

Courses

FYEX100U - First Year Experience: Women Who Rock!

Course Information

Course Title
First Year Experience: Women Who Rock!

Subject code	Course Number	Academic Level
FYEX	100U	Undergraduate

Course Description
Women Who Rock! This course explores the stories of trailblazing women in music from the Middle Ages to today. Have you heard of Mozart, the musical genius? If so, did you know that he had a sister with similar talents and abilities? Did you know that Elvis Presley's big hit, "Hound Dog" was first recorded by a woman? In addition to covering the content presented in all FYEX courses, we will look at music as it developed over the past millennium through the lens of the often overlooked – the Women who Rock! Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100V - First Year Experience: Set the Stage for a Career in Music Education or Performance

Course Information

Course Title
First Year Experience: Set the Stage for a Career in Music Education or Performance

Subject code	Course Number	Academic Level
FYEX	100V	Undergraduate

Course Description
Set the Stage for a Career in Music Education or Performance! This FYEX seminar is designed specifically for first-year music majors enrolled in music education or music performance. In addition to covering the content presented in all FYEX courses, we discuss career paths in music education and performance as well as the hard and soft skills necessary to embark on those paths. Topics include: navigating the music education and performance curricula at MU, developing efficient practice techniques and time management skills, cultivating creativity, and preparing for meaningful internships. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

Simple Requirements

Required For First Year Music Education, Music Performance, or BA Music Students

Type
Prerequisite

FYEX100W - Set the Stage for a Career in the Music Industry

Course Information

Course Title
Set the Stage for a Career in the Music Industry

Subject code	Course Number	Academic Level
FYEX	100W	Undergraduate

Course Description
Set the Stage for a Career in the Music Industry! This FYEX seminar is designed for any student who aspires to enter the music industry, regardless of their major. In addition to covering the content presented in all FYEX courses, we discuss career paths in the music industry, as well as the hard and soft skills necessary to embark on those paths. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

MEPK461 - Musi Stu Teaching

Course Information

Course Title
Musi Stu Teaching

Subject code	Course Number	Academic Level
MEPK	461	Undergraduate

Course Description
Student teachers are assigned full-time to cooperating teachers to gain experience in the total activities of the school. One and one-half hours per week are scheduled for seminar with University supervisor. Offered in fall, spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDSE340 or EDSE540 and SPED346 or SPED546

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
  OR SEED540 - Cntnt Area Litrcy Divers Class
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings
  OR SPED546 - Sec Stdnts w Disab Inclu Sttgs

MEPK462 - Musi Stu Teaching

Course Information

Course Title
Musi Stu Teaching

Subject code	Course Number	Academic Level
MEPK	462	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDSE340 or EDSE540 and SPED346 or SPED546

Complete ALL of the following Courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
  OR SEED540 - Cntnt Area Litrcy Divers Class
- SPED346 - Secondary Students w/Disabilities in Inclusive Settings
  OR SPED546 - Sec Stdnts w Disab Inclu Sttgs

MUSI001 - MUSI Lesson Placeholder

Course Information

Subject code	Course Number	Academic Level
MUSI	001	Undergraduate

MUSI100 - Music and Culture

Course Information

Course Title
Music and Culture

Subject code	Course Number	Academic Level
MUSI	100	Undergraduate

Course Description
A general study of art music, with emphasis on listening to the compositions of Western composers. The development of music, its relationship to the other arts and its cultural influences will be examined. Designed for students with a limited musical background. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

MUSI103 - Language of Music

Course Information

Course Title
Language of Music

Subject code	Course Number	Academic Level
MUSI	103	Undergraduate

Course Description
A course designed to develop a keen sensitivity to the language of musical sounds through creating, performing, conducting music and listening with sensitive awareness. The use of a broad range of musical materials, active exploration and personal discovery will lead the student to grasp the nature of the interactions and relationships that bring meaning to music. Language of music is structured to provide the student with a means to developing greater awareness and accuracy in musical reading and hearing. Designed for students with little or no academic musical background. Offered in fall, spring.

MUSI103H - Hnrs:Language of Music

Course Information

Course Title
Hnrs:Language of Music

Subject code	Course Number	Academic Level
MUSI	103H	Undergraduate

Course Description
Hnrs:Language of Music

MUSI104 - Language of Music 2

Course Information

Course Title
Language of Music 2

Subject code	Course Number	Academic Level
MUSI	104	Undergraduate

Course Description
Provides in-depth coverage of the fundamentals of music. Music materials include Western and non-Western music. This is a performance-based class structured to provide the student with a means to develop greater awareness and accuracy in musical reading, writing and hearing. MUSI 104 fulfills MUSI 103 requirements. Offered in fall.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI103 or MUSI103H

Complete ANY of the following Courses:

- MUSI103 - Language of Music
- MUSI103H - Hnrs:Language of Music

MUSI112 - Kodaly Solfege, Harmony and Analysis 1

Course Information

Course Title
Kodaly Solfege, Harmony and Analysis 1

Subject code	Course Number	Academic Level
MUSI	112	Undergraduate

Course Description
Provides an introduction to the structures and aesthetics of common-practice harmony for music majors and minors. Review of elements of pitch and rhythm and progresses to the introduction of triadic harmony, as well as figured bass realization. This course will investigate the harmonization of melodies and harmonic progressions through a wide range of activities. Musical materials to be studied will include selected multicultural folk music and art music examples. The study of music will be done through singing, ear training, improvisation, composition, analyses and keyboard performances. Offered in spring.

MUSI124 - Commercial Music Lab Band

Course Information

Course Title
Commercial Music Lab Band

Subject code	Course Number	Academic Level
MUSI	124	Undergraduate

Course Description
The goal of the commercial music lab band is to enable students to improve their ability to rehearse, arrange, perform and record commercial popular music repertoire in a group setting. Song selection, arrangement duties, individual rehearsal schedules and recording goals will be arranged at the beginning of each semester. At least one performance will be required each semester.

MUSI126 - Marauder Men's Glee Club

Course Information

Course Title
Marauder Men's Glee Club

Subject code	Course Number	Academic Level
MUSI	126	Undergraduate

Course Description
A traditional collegiate men's choral ensemble. Focuses on choral repertoire, ensemble vocal technique, performance practice, and artistry through singing in a men's chorus setting.

MUSI128 - Marching Band Camp

Course Information

Course Title
Marching Band Camp

Subject code	Course Number	Academic Level
MUSI	128	Undergraduate

Course Description
The study of music literature, ensemble technique and performance practice through musical performance in marching band. Offered in fall.

MUSI129 - Marching Band Camp

Course Information

Course Title
Marching Band Camp

Subject code	Course Number	Academic Level
MUSI	128	Undergraduate

Course Description
The study of music literature, ensemble technique and performance practice through musical performance in marching band. Offered in fall.

Gateway Stage Labels
Creative Exploration (CE)

MUSI131 - Class Piano 1

Course Information

Course Title
Class Piano 1

Subject code	Course Number	Academic Level
MUSI	131	Undergraduate

Course Description
Practical keyboard facility through technique, sight reading, improvisation, harmonization and composition. Multicultural folk music, art songs and original piano compositions are included. Solo, duet and ensemble literature are studied and performed. This course is designed to be taken concurrently with MUSI 112. Music majors and minors only. Offered in spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI134 - Maj Perf 1:

Course Information

Course Title
Maj Perf 1:

Subject code	Course Number	Academic Level
MUSI	134	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI135 - Maj Perf 2:

Course Information

Course Title
Maj Perf 2:

Subject code	Course Number	Academic Level
MUSI	135	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI140 - Singing Voice in Musicl Theatr

Course Information

Course Title
Singing Voice in Musicl Theatr

Subject code	Course Number	Academic Level
MUSI	140	Undergraduate

Course Description
Trains students in good vocal technique in order to handle the many vocal challenges of musical theatre. Ranging from singing in different musical styles, singing while performing demanding dance routines, dealing with amplification, the switch from spoken to sung characterization, the health care of the voice, development of stamina to perform eight shows a week for a year or more and basic theory in order to read and learn music. Offered in the summer.

MUSI141 - Vocal Techniques

Course Information

Course Title
Vocal Techniques

Subject code	Course Number	Academic Level
MUSI	141	Undergraduate

Course Description
A basic study of the technique of singing to adequately train the voice for practical and aesthetic reasons. Development of range quality, projection, control and the fundamentals of correct breathing is pursued through the use of suitable solo and choral literature. 2 hrs. lab. Enrollment limited to music education majors or permission of instructor. Offered in fall.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Education Majors

Restricted to music education majors.
Or must have permission of instructor.

MUSI151 - Strings Techniques

Course Information

Course Title
Strings Techniques

Subject code	Course Number	Academic Level
MUSI	151	Undergraduate

Course Description
Strings I, Violin, Viola. Open to music majors only or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI104

Complete ALL of the following Courses:
- MUSI104 - Language of Music 2

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI152 - Woodwind Techniques

Course Information

Course Title
Woodwind Techniques

Subject code	Course Number	Academic Level
MUSI	152	Undergraduate

Course Description
Woodwinds I. Open to music majors only or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI212

Complete ALL of the following Courses:
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI153 - Percussion Techniques

Course Information

Course Title
Percussion Techniques

Subject code	Course Number	Academic Level
MUSI	153	Undergraduate

Course Description
Percussion I. Open to music majors only or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI104

Complete ALL of the following Courses:

- MUSI104 - Language of Music 2

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI154 - Major Performance 1:

Course Information

Course Title
Major Performance 1:

Subject code	Course Number	Academic Level
MUSI	154	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI155 - Major Performance 2:

Course Information

Course Title
Major Performance 2:

Subject code	Course Number	Academic Level
MUSI	155	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI156 - Brass Techniques

Course Information

Course Title
Brass Techniques

Subject code	Course Number	Academic Level
MUSI	156	Undergraduate

Course Description
Brass I. Open to music majors only or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI112

Complete ALL of the following Courses:

- MUSI112 - Kodaly Solfege, Harmony and Analysis 1

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors Only or Instructor Permission

Restricted to music majors or must have permission of instructor.

MUSI190 - Music Industry 1

Course Information

Course Title
Music Industry 1

Subject code	Course Number	Academic Level
MUSI	190	Undergraduate

Course Description
Music Industry 1 is the introductory music business course for all music industry majors. Students learn basic terminology used in the field and are introduced to fundamentals of the music industry, copyright, royalties, contracts and networking as well as guest lecturers.

MUSI193 - Computer Applications in Music Production 1

Course Information

Course Title
Computer Applications in Music Production 1

Subject code	Course Number	Academic Level
MUSI	193	Undergraduate

Course Description
This introductory course is designed to develop an understanding of MIDI, sequencing, and digital audio through the integration of in-class demonstrations, lectures, and hands-on projects and activities. This course covers topics such as creating, recording, and editing MIDI sequences and digital audio data. The course will also address topics such as programming, arranging, composing, and mixing in the MIDI environment.

MUSI202 - American Broadway Musicals

Course Information

Course Title
American Broadway Musicals

Subject code	Course Number	Academic Level
MUSI	202	Undergraduate

Course Description
Examines the history, philosophy, music-theatre, and significance of the American Broadway musical. Will give students several opportunities to observe, discuss and report on American Broadway musical productions.

Gateway Stage Labels
Creative Exploration (CE)

MUSI207 - Love Songs Through the Ages

Course Information

Course Title
Love Songs Through the Ages

Subject code	Course Number	Academic Level
MUSI	207	Undergraduate

Course Description
Exploration of sex positive themes in vocal music. This course addresses diversity through a discussion of sex positivity and how this idea relates to feminism and topics within the Lesbian, Gay, Bisexual, Transgender, and Questioning (LGBTQ) community; and with other related topics such as marriage, monogamy, courtship rituals, and the like. While this is a music course and thus provides specific information about how music achieves its expressive ends, it also provides a broad perspective on relevant human issues and how music not only reflects but also helps to transmit and to shape human values. The course will examine the historical and environmental factors that underlie differences in sexual mores; examine the potential global, regional, and/or local factors that underlie these differences; engage students in articulating their personal worldview through oral and written communication; foster information literacy as it relates to diversity; and provide an academic structure for students to engage with peoples of diverse sexual practices and beliefs. The culture of embracing (or at least accepting) alternative sexual mores is a worldview that reflects beliefs, customs, values, politics, and experiences as shaped by age, economics, education, gender, geography, language, nationality, occupation, physical ability, race and ethnicity, religious affiliation, and/or sexual orientation among other factors.

MUSI212 - Kodaly Solfege, Harmony and Analysis 2

Course Information

Course Title
Kodaly Solfege, Harmony and Analysis 2

Subject code	Course Number	Academic Level
MUSI	212	Undergraduate

Course Description
Provides an in-depth coverage of the structures and aesthetics of medieval and renaissance music. Reviews basic triadic progressions in keyboard style, introduces principles of voice leading, nonchord tones, using diatonic common chords. Investigates the harmonization of melodies and harmonic progressions through a wide range of activities. Musical materials will include selected multicultural folk music and art music examples. The study of medieval and renaissance music will be done through singing, ear training, improvisation, composition, analysis and keyboard. Offered in fall. Prereq: C or higher in MUSI 112.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 112

Earn a minimum grade of C in the following:

- MUSI112 - Kodaly Solfege, Harmony and Analysis 1

MUSI220 - Concert Band

Course Information

Course Title
Concert Band

Subject code	Course Number	Academic Level
MUSI	220	Undergraduate

Course Description
Music literature, ensemble technique and performance practice through musical performance in concert band. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

MUSI224 - Jazz Lab Band

Course Information

Course Title
Jazz Lab Band

Subject code	Course Number	Academic Level
MUSI	224	Undergraduate

Course Description
Music literature, ensemble technique and performance practice through musical performance in jazz lab band. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

MUSI226 - University Choir

Course Information

Course Title
University Choir

Subject code	Course Number	Academic Level
MUSI	226	Undergraduate

Course Description
Music literature, ensemble technique and performance practice through musical performance in choir. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

MUSI227 - Women's Choir

Course Information

Course Title
Women's Choir

Subject code	Course Number	Academic Level
MUSI	227	Undergraduate

Course Description
Music literature, ensemble technique and performance practice through musical performance in womens choir. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

MUSI231 - Class Piano 2

Course Information

Course Title
Class Piano 2

Subject code	Course Number	Academic Level
MUSI	231	Undergraduate

Course Description
Intermediate course in practical keyboard facility accomplished through technique, sight reading, improvisation, harmonization, composition and analysis. Primary and secondary harmonies are explored in selected multicultural folk songs, art songs and original piano compositions. MUSI 231 is designed to be taken concurrently with MUSI 212. Offered in fall. Prereq: C or higher in MUSI 131. Note: Music students majoring in piano take MUSI 377 instead of this course.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 131

Earn a minimum grade of C in the following:

- MUSI131 - Class Piano 1

MUSI234 - Maj Perf 3:

Course Information

Course Title
Maj Perf 3:

Subject code	Course Number	Academic Level
MUSI	234	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

MUSI235 - Maj Perf 4:

Course Information

Course Title
Maj Perf 4:

Subject code	Course Number	Academic Level
MUSI	235	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

MUSI254 - Major Performance 3:

Course Information

Course Title
Major Performance 3:

Subject code	Course Number	Academic Level
MUSI	254	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

MUSI255 - Major Performance 4:

Course Information

Course Title
Major Performance 4:

Subject code	Course Number	Academic Level
MUSI	255	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

MUSI263 - Popular Music

Course Information

Course Title
Popular Music

Subject code	Course Number	Academic Level
MUSI	263	Undergraduate

Course Description
Musical derivatives and development of pop, jazz and rock styles. Lecture, live and recorded musical demonstration, discussion and analysis. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

MUSI265 - Symphonic Music

Course Information

Course Title
Symphonic Music

Subject code	Course Number	Academic Level
MUSI	265	Undergraduate

Course Description
Development of symphonic music from the mid-18th century through the present. Relationships between the symphony and other musical genres. Emphasis on listening and analytical observation. Offered in fall, spring. Prereq: MUSI 100 or 162.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 100

Complete ALL of the following Courses:
- MUSI100 - Music and Culture

MUSI267 - Survey Americn Music

Course Information

Course Title
Survey Americn Music

Subject code	Course Number	Academic Level
MUSI	267	Undergraduate

Course Description
American music from the colonization period to the present. Composers, their works, musical organizations and folk music in relation to historical developments which have shaped Americas cultural heritage. Analysis of recorded musical examples is an integral part of this course. Offered in fall, spring. Prereq: MUSI 100 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 100

Complete ALL of the following Courses:
- MUSI100 - Music and Culture

Or must have permission of instructor.

MUSI280 - Technology in the Music Classroom

Course Information

Course Title
Technology in the Music Classroom

Subject code	Course Number	Academic Level
MUSI	280	Undergraduate

Course Description
Students explore the uses of technology and its application As instructional resources and content delivery devices in the modern K-12 music classroom. Topics include applications software, cloud-based software, music hardware and software evaluation, music notation software, sequencing software, MIDI interface devices and technology, recording techniques, and multimedia presentation systems. Students are provided hands-on experiences with hardware and software to develop the skills and competencies required of the professional music educator.

MUSI290 - Music Industry 2

Course Information

Course Title
Music Industry 2

Subject code	Course Number	Academic Level
MUSI	290	Undergraduate

Course Description
Music Industry 2 provides a comprehensive overview of the mainstream music industry and the for-profit world in of the music business. Students learn advanced copyright issues, the economics of the music industry, digital distribution, music publishing, entrepreneurship, and current business trends in the music industry. Offered every spring. Prereq: MUSI 190.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 190

Complete ALL of the following Courses:

- MUSI190 - Music Industry 1

MUSI293 - Computer Applications in Music Production 2

Course Information

Course Title
Computer Applications in Music Production 2

Subject code	Course Number	Academic Level
MUSI	293	Undergraduate

Course Description
This course covers recording, editing, mixing and producing music using professional digital audio software and hardware such as ProTools. Students will be utilizing tracks from real recording sessions to gain skills in those areas focusing on vocal, bass, guitar and drum edits and mixing parameters. Students will be required to complete numerous technical and creative projects, applying their skills learned in the digital audio environment.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI193

Complete ALL of the following Courses:
- MUSI193 - Computer Applications in Music Production 1

MUSI294 - Live Audio 1

Course Information

Course Title
Live Audio 1

Subject code	Course Number	Academic Level
MUSI	294	Undergraduate

Course Description
This course will explore the technology and techniques necessary to produce concerts in a variety of venues including those on and off campus. Students will take part in all facets of concert production as it relates to music including equipment options, signal flow, signal processing, mixing live shows, and live recording techniques.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI295

Earn a minimum grade of C- in the following:
- MUSI295 - Studio Recording I

Degree/Major/Field of Study Restrictions

B.S. In Music Industry, Entertainment Technology, B.S. In Music Education and MUSI280 Technol in the Music Classroom Technology in Music Education as a prerequisite, or the Modern Band Certificate as prerequisite degree area or prerequisite course options, or permission of instructor.

MUSI294H - Hon: Live Audio 1

Course Information

Course Title
Hon: Live Audio 1

Subject code	Course Number	Academic Level
MUSI	294H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI295

Earn a minimum grade of C- in the following:

- MUSI295 - Studio Recording I

Degree/Major/Field of Study Restrictions

B.S. In Music Industry, Entertainment Technology, B.S. In Music Education and MUSI280 Technol in the Music Classroom Technology in Music Education as a prerequisite, or the Modern Band Certificate as prerequisite degree area or prerequisite course options, or permission of instructor.

MUSI295 - Studio Recording I

Course Information

Course Title
Studio Recording I

Subject code	Course Number	Academic Level
MUSI	295	Undergraduate

Course Description
This is an intermediate level course in modern studio recording techniques. Subjects addressed include signal routing, microphone selection & placement, signal processing, session setup, mixing consoles, and live recording issues. Students will learn how to record and mix electric and acoustic guitars, bass, amps and vocals. Students will be required to complete numerous technical and creative projects, applying their skills learned in the modern recording studio.

MUSI300 - Co-Op Ed Experience in Music

Course Information

Course Title
Co-Op Ed Experience in Music

Subject code	Course Number	Academic Level
MUSI	300	Undergraduate

Course Description
Co-Op Ed Experience in Music

MUSI300H - Hon: Co-Op Ed Experience in Music

Course Information

Course Title
Hon: Co-Op Ed Experience in Music

Subject code	Course Number	Academic Level
MUSI	300H	Undergraduate

MUSI301 - Music in Early Childhood

Course Information

Course Title
Music in Early Childhood

Subject code	Course Number	Academic Level
MUSI	301	Undergraduate

Course Description
Music in Early Childhood (Pre Kindergarten and Kindergarten) examines music through the lens of the culture(s) of young children, which (though they intersect with adult cultures) are unique, different from adult experiences, and particular to them. The course highlights the musical content of children's songs as well as the music they hear, and the kinds of musical engagements that are particular to young children. The uses, functions, and meanings of music for young children are emphasized. Musical materials to be studied will include selected multicultural folk music, as well as art and commercial music examples. The culture of childhood and the music in the culture of young children is one of the primary focuses of this course.

MUSI301H - Hon: Music in Early Childhood

Course Information

Course Title
Hon: Music in Early Childhood

Subject code	Course Number	Academic Level
MUSI	301H	Undergraduate

MUSI304 - Artist Management

Course Information

Course Title
Artist Management

Subject code	Course Number	Academic Level
MUSI	304	Undergraduate

Course Description
Artist Management is a focused examination, observation and participation class drawing on all of the facets of creating and operating an artist business model. The class will analyze the many facets of the modern music business and how it can be incorporated into practice. Students will be witness to the day to day operations of artists who record, tour, negotiate, survive and thrive. Students will participate In the discussions and decisions of the day to day operations of artists who are making recordings, marketing them either independently or in conjunction with a record label, touring, licensing music to film/TV, and all the functions of a recording and performance artist's career. Music Industry is a pre-req for this course as students need to have a basic understanding of the business to get the most of this advanced course.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI290

Complete ALL of the following Courses:
- MUSI290 - Music Industry 2

MUSI312 - Kodaly Solfege, Harmony and Analysis 3

Course Information

Course Title
Kodaly Solfege, Harmony and Analysis 3

Subject code	Course Number	Academic Level
MUSI	312	Undergraduate

Course Description
This course provides in-depth coverage of the structures of seventh chords, secondary dominants and modulations and aesthetics of common practice harmony, with particular emphasis on the Classical and Baroque periods. Reviews diatonic progressions. This course investigates the harmonization of melodies and selected harmonic progressions through a wide range of activities. Musical materials will include selected multicultural folk music and art music examples. The study of Baroque and Classical examples of music will be done through ear training, improvisation, composition, analysis and keyboard performance. Offered in spring. Prereq: C or higher in MUSI 212.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 212

Earn a minimum grade of C in the following:
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2

MUSI313 - Sem in Jazz Thry & Improv

Course Information

Course Title
Sem in Jazz Thry & Improv

Subject code	Course Number	Academic Level
MUSI	313	Undergraduate

Course Description
Basic to intermediate/advanced level jazz theory concepts and improvisation with practical application. Information provided in this course is supplementary for students who wish to teach instrumental music and those pursuing graduate studies or professional careers in instrumental music.

MUSI315 - Music Composition

Course Information

Course Title
Music Composition

Subject code	Course Number	Academic Level
MUSI	315	Undergraduate

Course Description
The art of music composition through examination of the creative process, rhythmic manipulation, melodic development, counterpoint and harmonic motivation. Creative composition is an integral part of the course. May be repeated for credit. Offered periodically. Prereq: MUSI 212 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 212

Complete ALL of the following Courses:
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2

Or must have permission of instructor.

MUSI317 - The Art of Teaching Elementary Music Kodaly

Course Information

Course Title
The Art of Teaching Elementary Music Kodaly

Subject code	Course Number	Academic Level
MUSI	317	Undergraduate

Course Description
This course is designed to prepare students for teaching general music through the integration of multicultural content and practices related to the learner in an elementary school environment. Emphasis is on leading the young learner to understand musical concepts through a variety of behaviors (singing, playing instruments, moving, reading and writing, creating and listening). Also included are issues related to musical literacy development for young students. The course includes a field experience component (observation and teaching) that is intended to allow participants to apply theoretical principles in a practical setting. Offered in spring. Prereq: MUSI 212 or permission of instructor. Additionally, updated clearances (Act 34/Act 151/ FBI Clearance and TB test results) must be valid for the entire semester. Admission to APS is required. Follow the submission procedure and deadlines outlined by Field Services or you will be dropped from the class. (https://www.millersville.edu/fieldservices/clearances.php)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 212

Complete ALL of the following Courses:
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2

Instructor Permission

Must have permission of instructor.

Complete ALL of the following :
Updated clearances (Act 34/Act 151/ FBI Clearance and TB test results) must be valid for the entire semester. Admission to APS is required. Follow the

submission procedure and deadlines outlined by Field Services or you will be dropped from the class. (https://www.millersville.edu/fieldservices/clearances.php)

MUSI323 - Chamber Orchestra

Course Information

Course Title
Chamber Orchestra

Subject code	Course Number	Academic Level
MUSI	323	Undergraduate

Course Description
Music literature, ensemble technique and performance practice through musical performance in chamber ensemble. Offered in fall, spring.

MUSI324 - Commercial Music Ensemble

Course Information

Course Title
Commercial Music Ensemble

Subject code	Course Number	Academic Level
MUSI	324	Undergraduate

Course Description
The goal of the commercial music ensemble is to enable students to improve their ability to rehearse, arrange, perform and record commercial popular music repertoire. Song selection, arrangement duties, individual rehearsal schedules and recording goals will arranged at the beginning of each semester. At least one performance will be required each semester. The Commercial Music Ensemble class roster will be determined by individual audition.

MUSI330 - Live Audio 2

Course Information

Course Title
Live Audio 2

Subject code	Course Number	Academic Level
MUSI	330	Undergraduate

Course Description
Live Audio 2 will explore advanced concepts in the technology utilized for live sound production. Topics will include electronics, block diagrams, spec sheets, loud speaker design, mixer technologies, amplifiers, situational acoustical design, and more. Students will also take part in all facets of concert production as it relates to live audio.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI294 or MUSI294H and MUSI112

Complete ALL of the following Courses:

- MUSI294 - Live Audio 1
  OR MUSI294H - Hon: Live Audio 1
- MUSI112 - Kodaly Solfege, Harmony and Analysis 1

MUSI331 - Class Piano 3

Course Information

Course Title
Class Piano 3

Subject code	Course Number	Academic Level
MUSI	331	Undergraduate

Course Description
This course provides in-depth experience in sight-reading technique, keyboard analysis, harmonization, improvisation, transposition, composition and score reading. 1 hr. lec., 2 hrs. lab. MUSI 331 is designed to be taken concurrently with MUSI 312. Offered in spring. Prereq: C or higher in MUSI 231.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 231

Earn a minimum grade of C in the following:

- MUSI231 - Class Piano 2

MUSI334 - Maj Perf 5:

Course Information

Course Title
Maj Perf 5:

Subject code	Course Number	Academic Level
MUSI	334	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI335 - Maj Perf 6:

Course Information

Course Title
Maj Perf 6:

Subject code	Course Number	Academic Level
MUSI	335	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI336 - Maj Perf 5:

Course Information

Course Title
Maj Perf 5:

Subject code	Course Number	Academic Level
MUSI	336	Undergraduate

Course Description
Includes private study and participation in ensembles. Music majors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors Only

Restricted to music majors.

MUSI337 - Maj Perf 6:

Course Information

Course Title
Maj Perf 6:

Subject code	Course Number	Academic Level
MUSI	337	Undergraduate

Course Description
Includes private study and participation in ensembles. Music majors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors Only

Restricted to music majors.

MUSI347 - The Art of Teaching Choral Techniques

Course Information

Course Title
The Art of Teaching Choral Techniques

Subject code	Course Number	Academic Level
MUSI	347	Undergraduate

Course Description
This course provides study and application of materials and techniques for teaching vocal/choral music on the elementary, middle and high school levels. Through the discussion and practical application of strategies and techniques pertaining to vocal instruction, ensemble leadership, and the nature of working with singers of varying ages, genders and abilities, students taking this course will be able to successfully instruct and manage any kind of school choral program.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI141

Complete ALL of the following Courses:

- MUSI141 - Vocal Techniques

MUSI347H - Hon: The Art of Teaching Choral Techniques

Course Information

Course Title
Hon: The Art of Teaching Choral Techniques

Subject code	Course Number	Academic Level
MUSI	347H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI141

Complete ALL of the following Courses:

- MUSI141 - Vocal Techniques

MUSI350 - The Art of Teaching Modern Band

Course Information

Course Title
The Art of Teaching Modern Band

Subject code	Course Number	Academic Level
MUSI	350	Undergraduate

Course Description
Students explore in-depth applications of Modern Band pedagogy and curriculum in the music classroom. Key topics include Modern band instrument practical education, teaching application, composition, improvisation, approximation, scaffolding, and safe space. This series of experiences will be demonstrated through interactive lecture, performance, and group interaction on guitar, bass, drums, keyboards, technology, and vocals. Materials from this course will cover the Little Kids Rock teacher manual and songbooks. In addition, the class will cover basics of different rock instruments, with guitars, keyboards, a bass, and a drum set being provided for class study.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI193 or MUSI290

Complete ANY of the following Courses:

- MUSI193 - Computer Applications in Music Production 1
- MUSI290 - Music Industry 2

MUSI354 - Major Performance 5:

Course Information

Course Title
Major Performance 5:

Subject code	Course Number	Academic Level
MUSI	354	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI355 - Major Performance 6:

Course Information

Course Title
Major Performance 6:

Subject code	Course Number	Academic Level
MUSI	355	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI362 - Music History and Literature 1

Course Information

Course Title
Music History and Literature 1

Subject code	Course Number	Academic Level
MUSI	362	Undergraduate

Course Description
Study of Western music in its cultural, historical and philosophical contexts from 500 B.C. to 1750 A.D., including its relationship to other art forms. Introduction to research in music history. Writing projects about music. Offered in fall. Prereq: ENGL 110, MUSI 100 or 162 and 312.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and MUSI 100 and MUSI 312

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- MUSI100 - Music and Culture
- MUSI312 - Kodaly Solfege, Harmony and Analysis 3

MUSI362H - H:Music History and Literature 1

Course Information

Course Title
H:Music History and Literature 1

Subject code	Course Number	Academic Level
MUSI	362H	Undergraduate

Course Description
H:Music History/Literature 1

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and MUSI 100 and MUSI 312

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- MUSI100 - Music and Culture
- MUSI312 - Kodaly Solfege, Harmony and Analysis 3

MUSI363 - Music History/Literature 2

Course Information

Course Title
Music History/Literature 2

Subject code	Course Number	Academic Level
MUSI	363	Undergraduate

Course Description
The history, literature and aesthetics of Western art music from 1750 through the present. Knowledge of stylistic trends and representative literature will be emphasized. A research project is associated with the course. Offered in spring. Prereq: COMM 100, ENGL 110 and junior status. Music majors should consult with the department for course requirements.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

MUSI363H - H:Music History/Literature 2

Course Information

Course Title
H:Music History/Literature 2

Subject code	Course Number	Academic Level
MUSI	363H	Undergraduate

Course Description
H:Music History/Literature 2

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

MUSI368 - International Music and Arts

Course Information

Course Title
International Music and Arts

Subject code	Course Number	Academic Level
MUSI	368	Undergraduate

Course Description
Introduction to terminology and cultural areas of the world. General introduction to the study of world music, the ethnomusicological approach and classification and symbolism of musical instruments. The process of musical innovation and acculturation in the world, and the impact of technology and the communications media on contemporary musical styles of non-European cultures. Topics include the music of South and West Africa, Ethiopia and folk music of the Arabic. Near East, the classical music of Iran and Asia, and the musical cultures of North and South India. Offered in spring. Prereq: COMM 100, ENGL 110 and junior status. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

MUSI369 - Intro to West African Music and Dance

Course Information

Course Title
Intro to West African Music and Dance

Subject code	Course Number	Academic Level
MUSI	369	Undergraduate

Course Description
Survey course designed to provide an in-depth analysis of West African culture and history focusing on the musical traditions found in this region of the world. General introduction to the study of West African music and dance, the ethnomusicological approach and classification and symbolism of musical instruments will be presented. Moreover, the process of musical innovation and acculturation in West Africa and the impact of technology and the communications media on traditional and contemporary musical styles will be examined. Offered fall, spring. Prereq: COMM 110, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

MUSI371 - Foreign Language Diction

Course Information

Course Title
Foreign Language Diction

Subject code	Course Number	Academic Level
MUSI	371	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI103 or MUSI103H or MUSI104

Complete ANY of the following Courses:
- MUSI103 - Language of Music
- MUSI103H - Hnrs:Language of Music
- MUSI104 - Language of Music 2

MUSI371H - Hnrs: Foreign Language Diction

Course Information

Course Title
Hnrs: Foreign Language Diction

Subject code	Course Number	Academic Level
MUSI	371H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI103 or MUSI103H or MUSI104

Complete ANY of the following Courses:
- MUSI103 - Language of Music
- MUSI103H - Hnrs:Language of Music
- MUSI104 - Language of Music 2

MUSI372 - The Art of Teaching Secondary Methods

Course Information

Course Title
The Art of Teaching Secondary Methods

Subject code	Course Number	Academic Level
MUSI	372	Undergraduate

Course Description
Study of the organization, pedagogy and practice of the middle and secondary school general classroom, including focus on multicultural and popular music, folk song study and analysis. 2 hrs. lec., 2 hrs. lab. Prereq: admission to Advanced Professional Studies; C or higher in MUSI 271 or permission of instructor. This course is taught concurrently while teacher candidates are co-teaching in the field on a weekly basis as a requirement of the Professional Bloc courses in the College of Education

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Complete ALL of the following :
Prereq. MUSI 317 Updated clearances (Act 34/Act 151/ FBI Clearance and TB test results) must be valid for the entire semester. Admission to APS is required. Follow the submission procedure and deadlines outlined by Field Services or you will be dropped from the class. (https://www.millersville.edu/fieldservices/clearances.php)

MUSI373 - The Art of Teaching Instrumental Music Techniques

Course Information

Course Title
The Art of Teaching Instrumental Music Techniques

Subject code	Course Number	Academic Level
MUSI	373	Undergraduate

Course Description
Provides the prospective instrumental music instructor with the information, materials and techniques for effective teaching and efficient administration of a successful instrumental music program via seminar and field experiences. 2 hrs. lec., 2 hrs. lab. Offered in spring. Prereq: admission to Advanced Professional Studies; MUSI 152, 153, 156, 171, 381 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 152 and MUSI 153 and MUSI 156 and MUSI 381 or permission of instructor

Complete ALL of the following Courses:
- MUSI152 - Woodwind Techniques
- MUSI153 - Percussion Techniques
- MUSI156 - Brass Techniques
- MUSI381 - Conducting 1

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Clearances

Type
Prerequisite

Complete ALL of the following Courses:
- MUSI373 - The Art of Teaching Instrumental Music Techniques

Updated clearances (Act 34/Act 151/ FBI Clearance and TB test results) must be valid for the entire semester. Admission to APS is required. Follow the

submission procedure and deadlines outlined by Field Services or you will be dropped from the class. (https://www.millersville.edu/fieldservices/clearances.php)

MUSI380 - History of the Recording Industry

Course Information

Course Title
History of the Recording Industry

Subject code	Course Number	Academic Level
MUSI	380	Undergraduate

Course Description
History of the Recording Industry analyzes the process from which the invention and implementation of various recording devices and formats have impacted the artists and its audience, the development of various styles of music, culture and the companies who built the foundation of the music industry.

MUSI380H - Hon:History of the Recording Industry

Course Information

Course Title
Hon:History of the Recording Industry

Subject code	Course Number	Academic Level
MUSI	380H	Undergraduate

MUSI381 - Conducting 1

Course Information

Course Title
Conducting 1

Subject code	Course Number	Academic Level
MUSI	381	Undergraduate

Course Description
Includes fundamentals of conducting, with emphasis on gesture and developing score study technique. Choral music is used throughout this course. 1 hr. lec., 2 hrs. lab. Offered in spring. Prereq: MUSI 212 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 212

Complete ALL of the following Courses:

- MUSI212 - Kodaly Solfege, Harmony and Analysis 2

Or must have permission of instructor.

MUSI388 - Guided Study Abroad in Music

Course Information

Course Title
Guided Study Abroad in Music

Subject code	Course Number	Academic Level
MUSI	388	Undergraduate

Course Description
Provides students the opportunity to learn about and study international culture and music through immersion in various countries. In addition, students will learn about the historical context to all music that is studied and relevancy to the culture. Although geared toward music majors and education majors, anyone who has an interest in learning about music and culture of foreign lands can participate. This special topics course will be offered periodically and will focus on music of certain cultures and populations depending on the countries visited during this course offering.

MUSI390 - Marketing and Promotion in the Music Industry

Course Information

Course Title
Marketing and Promotion in the Music Industry

Subject code	Course Number	Academic Level
MUSI	390	Undergraduate

Course Description
Designed to give students a comprehensive understanding of marketing & promotion in the music industry. It will give insight into the marketing tactics employed by labels, concert promoters, distributors, independent agents and artists in the marketplace. This course will provide the basis for developing an integrated marketing campaign that can be implemented and adapted into the current music marketplace. Prereq: MUSI 190 and MUSI 290 (or MUSI 391)

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 190 and MUSI 290 or MUSI 391H

Complete ALL of the following Courses:

- MUSI190 - Music Industry 1
- MUSI290 - Music Industry 2
  OR MUSI391H - H:Music Industry

MUSI390H - Hon: Marketing and Promotion in the Music Industry

Course Information

Course Title
Hon: Marketing and Promotion in the Music Industry

Subject code	Course Number	Academic Level
MUSI	390H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 190 and MUSI 290 or MUSI 391H

Complete ALL of the following Courses:

- MUSI190 - Music Industry 1
- MUSI290 - Music Industry 2
  OR MUSI391H - H:Music Industry

MUSI391H - H:Music Industry

Course Information

Course Title
H:Music Industry

Subject code	Course Number	Academic Level
MUSI	391H	Undergraduate

MUSI395 - Studio Recording II

Course Information

Course Title
Studio Recording II

Subject code	Course Number	Academic Level
MUSI	395	Undergraduate

Course Description
This is an advanced course in modern studio recording techniques. Students will learn how to record and mix synthesizers, piano, drum set, percussion, and other acoustic instruments. Students will be required to complete numerous technical and creative projects, including recording Millersville University music ensembles and taking part in every facet of the recording process from booking the studio through mastering the final product.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI295

Complete ALL of the following Courses:
- MUSI295 - Studio Recording I

MUSI396 - Synthesis and Sampling

Course Information

Course Title
Synthesis and Sampling

Subject code	Course Number	Academic Level
MUSI	396	Undergraduate

Course Description
This is an advanced course focusing on the theory and operation of hardware & virtual synthesizers and digital audio samplers. Students learn how to identify and manipulate the various parameters of synthesis and sampling devices for compositions and live performances. In addition, advanced topics in sequencing and digital editing will be addressed.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI395

Complete ALL of the following Courses:
- MUSI395 - Studio Recording II

MUSI397 - International Music Business

Course Information

Course Title
International Music Business

Subject code	Course Number	Academic Level
MUSI	397	Undergraduate

Course Description
Will delve into the cultural, technological and financial components of the international music industry. We will explore and analyze global trends, revenue streams, ethics and legal policy, marketing strategies, music consumption and distribution patterns, analytics/metrics, popular musical genres and the future of the music business in the United States, Canada, Europe, United Kingdom, Asia, Australia and Latin America.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI390 or MUSI390H

Complete ANY of the following Courses:
- MUSI390 - Marketing and Promotion in the Music Industry
- MUSI390H - Hon: Marketing and Promotion in the Music Industry

MUSI397H - Hon: International Music Business

Course Information

Course Title
Hon: International Music Business

Subject code	Course Number	Academic Level
MUSI	397H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI390 or MUSI390H

Complete ANY of the following Courses:
- MUSI390 - Marketing and Promotion in the Music Industry
- MUSI390H - Hon: Marketing and Promotion in the Music Industry

MUSI398 - Songwriting

Course Information

Course Title
Songwriting

Subject code	Course Number	Academic Level
MUSI	398	Undergraduate

Course Description
This course will explore the techniques necessary to write and produce commercial pop songs and scores for radio, film, commercials, and video games. Topics include melodic and harmonic development, song forms, lyric structures, orchestration, instrumentation, arranging, and demo production. Prereq: MUSI 295 and MUSI 212

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 295 and MUSI 212

Complete ALL of the following Courses:

- MUSI295 - Studio Recording I
- MUSI212 - Kodaly Solfege, Harmony and Analysis 2

MUSI400 - Co-Op Ed Experience in Music

Course Information

Course Title
Co-Op Ed Experience in Music

Subject code	Course Number	Academic Level
MUSI	400	Undergraduate

Course Description
Co-Op Ed Experience in Music

MUSI400H - Hon: Co-Op Ed Experience in Music

Course Information

Course Title
Hon: Co-Op Ed Experience in Music

Subject code	Course Number	Academic Level
MUSI	400H	Undergraduate

MUSI411 - Orchestration

Course Information

Course Title
Orchestration

Subject code	Course Number	Academic Level
MUSI	411	Undergraduate

Course Description
Instruments of the orchestra and band, with particular emphasis upon their ranges, timbre, balance of tone and mixed tone color. Scoring of instruments in small and large ensembles. Offered in spring. Prereq: MUSI 212 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 212

Complete ALL of the following Courses:

- MUSI212 - Kodaly Solfege, Harmony and Analysis 2

Or must have permission of instructor.

MUSI412 - Kodaly Solfege, Harmony and Analysis 4

Course Information

Course Title
Kodaly Solfege, Harmony and Analysis 4

Subject code	Course Number	Academic Level
MUSI	412	Undergraduate

Course Description
This course provides coverage of the structures and aesthetics of the Romantic Period and an introduction to 20th-century practices. Reviews chromatic harmony, introduces mode mixture, enharmonic spellings and modulations found in the late 19th century. Includes an introduction to melodic and metric reduction and modulus-twelve analysis. The study of Romantic and selected 20th-century examples of music will be done through singing, ear training, improvisation, composition, analysis and keyboard performance. Offered in fall. Prereq: C or higher in MUSI 312.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 312

Earn a minimum grade of C in the following:
- MUSI312 - Kodaly Solfege, Harmony and Analysis 3

MUSI412H - H: Kodaly Solfege, Harmony and Analysis 4

Course Information

Course Title
H: Kodaly Solfege, Harmony and Analysis 4

Subject code	Course Number	Academic Level
MUSI	412H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 312

Earn a minimum grade of C in the following:
- MUSI312 - Kodaly Solfege, Harmony and Analysis 3

MUSI420 - Wind Ensemble

Course Information

Course Title
Wind Ensemble

Subject code	Course Number	Academic Level
MUSI	420	Undergraduate

Course Description
Music literature, ensemble technique and performance practice through musical performance in wind ensemble. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

MUSI423 - Orchestra

Course Information

Course Title
Orchestra

Subject code	Course Number	Academic Level
MUSI	423	Undergraduate

Course Description
Music literature, ensemble technique and performance practice through musical performance in orchestra. Offered in fall, spring.

MUSI424 - Jazz Ensemble

Course Information

Course Title
Jazz Ensemble

Subject code	Course Number	Academic Level
MUSI	424	Undergraduate

Course Description
Music literature, ensemble technique and performance practice through musical performance in jazz ensemble. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

MUSI427 - Chorale

Course Information

Course Title
Chorale

Subject code	Course Number	Academic Level
MUSI	427	Undergraduate

Course Description
Music literature, ensemble technique and performance practice through musical performance in chorale. Offered in fall, spring.

Gateway Stage Labels
Creative Exploration (CE)

MUSI434 - Maj Perf 7:

Course Information

Course Title
Maj Perf 7:

Subject code	Course Number	Academic Level
MUSI	434	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI435 - Maj Perf 8:

Course Information

Course Title
Maj Perf 8:

Subject code	Course Number	Academic Level
MUSI	435	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI436 - Maj Perf 7:

Course Information

Course Title
Maj Perf 7:

Subject code	Course Number	Academic Level
MUSI	436	Undergraduate

Course Description
Includes private study and participation in ensembles. Music majors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors Only

Restricted to music majors.

MUSI437 - Maj Perf 8:

Course Information

Course Title
Maj Perf 8:

Subject code	Course Number	Academic Level
MUSI	437	Undergraduate

Course Description
Includes private study and participation in ensembles. Music majors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors Only

Restricted to music majors.

MUSI454 - Major Performance 7:

Course Information

Course Title
Major Performance 7:

Subject code	Course Number	Academic Level
MUSI	454	Undergraduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI454H - H: Major Performance 7:

Course Information

Course Title
H: Major Performance 7:

Subject code	Course Number	Academic Level
MUSI	454H	Undergraduate

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI455 - Major Performance 8:

Course Information

Course Title
Major Performance 8:

Subject code	Course Number	Academic Level
MUSI	455	Graduate

Course Description
Includes private study and participation in master classes. Music majors and minors only. Offered in fall, spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Music Majors and Minors Only

Restricted to music majors and minors.

MUSI481 - Conducting 2

Course Information

Course Title
Conducting 2

Subject code	Course Number	Academic Level
MUSI	481	Undergraduate

Course Description
An advanced course with emphasis on gesture and score study and analysis. Instrumental music is used throughout the class. 1 hr. lec., two 75- min. workshop/labs per week. Offered in fall. Prereq: C or higher in MUSI 381 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI 381

Earn a minimum grade of C in the following:

- MUSI381 - Conducting 1

Or must have permission of instructor.

MUSI489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
MUSI	489	Undergraduate

Course Description
Honors Course

MUSI490 - Music Management

Course Information

Course Title
Music Management

Subject code	Course Number	Academic Level
MUSI	490	Undergraduate

Course Description
The capstone course spans the course of two-terms and is designed to apply core concepts in the music industry through an entrepreneurial approach by developing a business plan and launching a project into the real-world. The initial term begins with the study of the processes and procedures involved in launching entrepreneurial enterprises that monetize music industry-related intellectual property, products and services. The development of opportunity recognition, commercialization of intellectual property, use of distribution models and other resources to pursue entrepreneurial opportunities will be explored during this course. Also, capitalization structures for new ventures within the music industry will be pursued through the development of a business plan. During the second term, students will select a project to launch into the real world. Students will work in teams and collaborate to execute the successful launch of a project and analyze the successes and failures experienced during the term.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI397 or MUSI397H

Complete ANY of the following Courses:
- MUSI397 - International Music Business
- MUSI397H - Hon: International Music Business

MUSI495 - Audio & Music for Video

Course Information

Course Title
Audio & Music for Video

Subject code	Course Number	Academic Level
MUSI	495	Undergraduate

Course Description
This course addresses the world of audio and music for video, including film, television and gaming. The couse will cover topics such as the science and psychology of sound, editing sound, creating sound effects, recording voice-overs, and synchronizing music to picture.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI290 and MUSI395

Complete ALL of the following Courses:
- MUSI290 - Music Industry 2
- MUSI395 - Studio Recording II

MUSI497 - Live Audio 3

Course Information

Course Title
Live Audio 3

Subject code	Course Number	Academic Level
MUSI	497	Undergraduate

Course Description
The objective of this course is for the students to be able to configure, assemble and optimize medium and large concert audio systems and peripheral equipment. This will include knowledge of signal flow, stage patching, protocols and cabling used for the interconnection of equipment and trouble shooting. They will apply basic principles of audio wave propagation for the purpose of optimization of a sound system. They will have basic knowledge to configure a digital mixing console for FOH and monitors as well as operating knowledge of each. They will understand the terms and definitions used in the live audio industry.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI330

Complete ALL of the following Courses:
- MUSI330 - Live Audio 2

MUSI498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
MUSI	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section of the University Catalog. Offered fall, spring.

MUSI499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
MUSI	499	Undergraduate

Course Description
Departmental Honors

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI489

Complete ALL of the following Courses:
- MUSI489 - Honors Course

MUSI500 - Co-Op Ed Experience in Music

Course Information

Course Title
Co-Op Ed Experience in Music

Subject code	Course Number	Academic Level
MUSI	500	Graduate

Course Description
Co-Op Ed Experience in Music

MUSI512 - Solfege, Harmony and Analysis III According to the Kodaly Concept

Course Information

Course Title
Solfege, Harmony and Analysis III According to the Kodaly Concept

Subject code	Course Number	Academic Level
MUSI	512	Graduate

Course Description
Provides an in-depth coverage of the structures and aesthetics of common-practice harmony with particular emphasis on the Baroque and Classical period. This course also provides students with the skills to organize workshops and presentations as well as the development of a music theory curriculum focusing on Year 1 and Year 2 of teaching music theory incorporating some of the concepts and skills acquired in this course. Throughout the course, graduate students will meet with the professor to discuss how to create a portfolio that will include how to observe music lessons, how to create a music theory curriculum as well as how to organize a music theory workshop.

MUSI513 - Solfege, Harmony and Analysis IV According to the Kodaly Concept

Course Information

Course Title
Solfege, Harmony and Analysis IV According to the Kodaly Concept

Subject code	Course Number	Academic Level
MUSI	513	Graduate

Course Description
Provides coverage of the structures, and aesthetics of the Romantic period and an introduction to Twentieth-Century compositional practices. This course also provides students with the skills to organize workshops and presentations as well as the development of a music theory curriculum focusing on Year 3 and Year 4 of teaching music theory incorporating some of the concepts and skills acquired in this course.

MUSI517 - The Art of Teaching Elementary Music According to the Kodaly Concept

Course Information

Course Title
The Art of Teaching Elementary Music According to the Kodaly Concept

Subject code	Course Number	Academic Level
MUSI	517	Graduate

Course Description
Designed as the study of music and the learning process at the elementary level, this course helps prepare students for a career in music education with a focus on the young learner. The class has both a practical and philosophical basis. We will continue to examine the major paradigms and processes of music education and learn different methods and approaches to teaching music literacy as well as suitable music materials for the young learner. We will discuss current methodologies associated with teaching and the psychology of music; we will practice teaching techniques associated with Kodaly and Orff. Students will learn how to play and teach the soprano recorder and will complete an entrepreneurship plan to advance music education. Our focus will be on educating for the multiple dimensions of musicianship: Students as Performers, Students as Stewards of their Cultural Heritage, Students as Critical Thinkers, Students as Creative Human Beings and Students as Active Listeners. The course requires field observation and some teaching experiences in elementary schools.

MUSI550 - AoT Modern Band

Course Information

Course Title
AoT Modern Band

Subject code	Course Number	Academic Level
MUSI	550	Graduate

Course Description
Students explore in-depth applications of Modern Band pedagogy and curriculum in the music classroom. Key topics include Modern band instrument practical education, teaching application, composition, improvisation, approximation, scaffolding, and safe space. This series of experiences will be demonstrated through interactive lecture, performance, and group interaction on guitar, bass, drums, keyboards, technology, and vocals. Materials from this course will cover the Little Kids Rock teacher manual and songbooks. In addition, the class will cover basics of different rock instruments, with guitars, keyboards, a bass, and a drum set being provided for class study.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MUSI193 or MUSI280

Complete ANY of the following Courses:

- MUSI193 - Computer Applications in Music Production 1
- MUSI280 - Technology in the Music Classroom

MUSI554 - Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 1

Course Information

Course Title
Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 1

Subject code	Course Number	Academic Level
MUSI	554	Graduate

Course Description
As a performance study designed for the Post Baccalaureate or M.Ed. Music Leadership major to support piano, voice, and instrumental majors, this course covers a broader spectrum of performance including advanced knowledge of the Baroque performance practices, composers, techniques, and styles. Students also learn approaches for developing a vision for creating a school community that supports music performance and programming as a necessary condition of a learning community be it local, regional, national, or international. Students gain skills in designing curriculum for musical study at the beginning, intermediate, and advanced level. “Leadership” is the major component of this degree. Beyond teaching piano, graduate piano majors must develop proper curriculum, establish programs, engage in fund raising activities and become entrepreneurial in their thinking and actions. Along with the pedagogical elements included in this course, weekly assignments also include technical studies (scales, arpeggios, etc.) and the development of repertoire, as well as functional playing, which includes sightreading, improvisation, accompanying, and ensemble playing. Students are REQUIRED to attend and perform in master classes, student recitals, and juries. Some lessons, master classes and practice sessions will be recorded. Students are expected to review the recordings and evaluate their performances regarding specific criteria. This piano performance course is designed for the Post Baccalaureate or M.Ed. Music Leadership major to enhance the skills of high level performing, teaching, conducting research, writing critical papers, and giving oral presentations. Topics will vary each semester.

MUSI555 - Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 2

Course Information

Course Title
Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 2

Subject code	Course Number	Academic Level
MUSI	555	Graduate

Course Description
As a performance study designed for the Post Baccalaureate or M.Ed. Music Leadership major to support piano, voice, and instrumental majors, this course covers a broader spectrum of performance including advanced knowledge of the Classic style performance practices, composers, techniques, and styles. Students also learn approaches for developing a vision for creating a school community that supports music performance and programming as a necessary condition of a learning community be it local, regional, national, or international. Students gain skills in designing curriculum for musical study at the beginning, intermediate, and advanced level. “Leadership” is the major component of this degree. Beyond teaching piano, graduate piano majors must develop proper curriculum, establish programs, engage in fund raising activities and become entrepreneurial in their thinking and actions. Along with the pedagogical elements included in this course, weekly assignments also include technical studies (scales, arpeggios, etc.) and the development of repertoire, as well as functional playing, which includes sightreading, improvisation, accompanying, and ensemble playing. Students are REQUIRED to attend and perform in master classes, student recitals, and juries. Some lessons, master classes and practice sessions will be recorded. Students are expected to review the recordings and evaluate their performances regarding specific criteria. This piano performance course is designed for the Post Baccalaureate or M.Ed. Music Leadership major to enhance the skills of high level performing, teaching, conducting research, writing critical papers, and giving oral presentations. Topics will vary each semester.

MUSI572 - The Art of Teaching Middle Level According to the Kodaly Concept

Course Information

Course Title
The Art of Teaching Middle Level According to the Kodaly Concept

Subject code	Course Number	Academic Level
MUSI	572	Graduate

Course Description
Designed as the study of music and the learning process at the middle level (Grades 4-8), this graduate course helps prepare students for a career in music education with a focus on middle level learners. Emphasis will be placed on basic teaching and performing skills related to classroom teaching using the Kodály Methodology, related instrumental techniques, designing professional development, observing teaching in a supervisory role, and designing curriculum which integrates the choral and instrumental classroom. The class has both a practical and philosophical basis. We will examine the major paradigms and processes of music education and learn the Kodály approach to teaching music literacy as well as discover suitable music materials for middle level learners. We will discuss current methodologies associated with teaching and the psychology of music; we will practice teaching techniques associated with Kodály for the middle level classroom and choir. Students will be enhancing their skills on guitar and in addition to identifying websites or apps which can enhance instruction at the middle school level. Our focus will be on educating for the multiple dimensions of musicianship: Students as Performers, Students as Stewards of their Cultural Heritage, Students as Critical Thinkers, Students as Creative Human Beings and Students as Active Listeners. The course requires field observation and teaching experiences in upper elementary and middle school.

MUSI579 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
MUSI	579	Graduate

Course Description
Experimental

MUSI587 - Topics in Music

Course Information

Course Title
Topics in Music

Subject code	Course Number	Academic Level
MUSI	587	Graduate

Course Description
This course is designed to prepare students for teaching preK-kindergarten children. Emphasis is on leading the young learner to understand music concepts through a variety of behaviors, such as singing, moving, creating and listening. Offered periodically in summer.

MUSI654 - Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 3

Course Information

Course Title
Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 3

Subject code	Course Number	Academic Level
MUSI	654	Graduate

Course Description
As a performance study designed for the Post Baccalaureate or M.Ed. Music Leadership major to support piano, voice, and instrumental majors, these courses cover a broader spectrum of performance including advanced knowledge of the Romantic period performance practices, composers, techniques, and styles. Students also learn approaches for developing a vision for creating a school community that supports music performance and programming as a necessary condition of a learning community be it local, regional, national, or international. Students gain skills in designing curriculum for musical study at the beginning, intermediate, and advanced level. “Leadership” is the major component of this degree. Beyond teaching piano, graduate piano majors must develop proper curriculum, establish programs, engage in fund raising activities and become entrepreneurial in their thinking and actions. Along with the pedagogical elements included in this course, weekly assignments also include technical studies (scales, arpeggios, etc.) and the development of repertoire, as well as functional playing, which includes sightreading, improvisation, accompanying, and ensemble playing. Students are REQUIRED to attend and perform in master classes, student recitals, and juries. Some lessons, master classes and practice sessions will be recorded. Students are expected to review the recordings and evaluate their performances regarding specific criteria. This piano performance course is designed for the Post Baccalaureate or M.Ed. Music Leadership major to enhance the skills of high level performing, teaching, conducting research, writing critical papers, and giving oral presentations. Topics will vary each semester.

MUSI655 - Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 4

Course Information

Course Title

Major Performance Piano Instruction with Emphasis in Curriculum Supervision, Assessment, & Design 4

Subject code	Course Number	Academic Level
MUSI	655	Graduate

Course Description

As a performance study designed for the Post Baccalaureate or M.Ed. Music Leadership major to support piano, voice, and instrumental majors, this course covers a broader spectrum of performance including advanced knowledge of the Contemporary performance practices, composers, techniques, and styles. Students also learn approaches for developing a vision for creating a school community that supports music performance and programming as a necessary condition of a learning community be it local, regional, national, or international. Students gain skills in designing curriculum for musical study at the beginning, intermediate, and advanced level. “Leadership” is the major component of this degree. Beyond teaching piano, graduate piano majors must develop proper curriculum, establish programs, engage in fund raising activities and become entrepreneurial in their thinking and actions. Along with the pedagogical elements included in this course, weekly assignments also include technical studies (scales, arpeggios, etc.) and the development of repertoire, as well as functional playing, which includes sightreading, improvisation, accompanying, and ensemble playing. Students are REQUIRED to attend and perform in master classes, student recitals, and juries. Some lessons, master classes and practice sessions will be recorded. Students are expected to review the recordings and evaluate their performances regarding specific criteria. This piano performance course is designed for the Post Baccalaureate or M.Ed. Music Leadership major to enhance the skills of high level performing, teaching, conducting research, writing critical papers, and giving oral presentations. Topics will vary each semester.

Nursing Department

The Wehrheim School of Nursing offers an accredited upper-division program in nursing leading to a Bachelor of Science in Nursing (B.S.N.) degree. This program is designed for registered nurses who are graduates of accredited diploma or associate-degree nursing programs with a GPA of 2.0.

The goals of the nursing program are to provide an atmosphere and opportunities that develop intellectual curiosity, critical thinking, and sound reasoning and judgment; provide knowledge from the humanities and the physical, biological, psychological and social sciences to complement nursing theory and practice; provide a theoretical and clinical foundation in nursing to prepare a professional nurse who provides rational evidence-based and humanistic healthcare within institutional and community settings; and provide a basis for graduate education in nursing.

Online courses are offered on a rotating basis to accommodate student scheduling.

The Millersville University RN-BSN, MSN, post-MSN FNP certificate, and DNP programs are accredited by the National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA) located at 2600 Virginia Avenue, NW, Washington, DC 20037. 202-909-2487.

FACULTY LIST
Chronister, Michele; Assistant Professor College of Science and Technology B.S.N., University of Pittsburgh, 1993; M.S.N., Millersville University, 2014; D.N.P., Millersville University, 2020
Kuhns, Kelly; Department Chairperson, Professor College of Science and Technology B.S.N., Lycoming College, 1994; M.S.N., Villanova University, 2000; Ph.D., Ibid., 2011
Lambert, Dawn; Associate Professor College of Science and Technology B.S.N., Millersville University, 1994; M.S.N., West Chester University, 2008; Ph.D., Capella University, 2015
Matincheck, Tracee; Instructor College of Science and Technology A.A., Harrisburg Area Community College, 2002; B.S.N., Pennsylvania State University, 2007; M.S.N., Millersville University, 2016
Minter, Cayleigh; Assistant Professor College of Science and Technology B.S.N., York College of Pennsylvania, 2008; M.S.N., Millersville University, 2014; D.N.P., Millersville University, 2020
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Rotondo, Kelly; Assistant Professor College of Science and Technology B.S.N., LaRoche College, 2002; M.S.N., Waynesburg College, 2004; D.N.P., Waynesburg University, 2009
Weinberg-Wonsidler, Bryan; Assistant Professor College of Science and Technology A.A.S., SUNY Excelsior College, 2005; B.S.N., SUNY Excelsior College, 2013; M.S.N., Wilkes University, 2017; D.N.P., Millersville University, 2021

Programs

Nursing, D.N.P.

Overview

The purpose of the Doctor of Nursing Practice program is to further educate clinical experts with the knowledge and skills in systems analysis and evidence-based integration and evaluation. It prepares individuals to design improved methodologies to promote safe, timely, effective, equitable and patient-centered care.

The DNP program is tailored to the needs of certified, advanced practice nurses, including nurse practitioners, clinical nurse specialists, certified nurse midwives and certified registered nurse anesthetists. The 36-credit program provides the advanced practice registered nurse with tools to engage in evidence-based, scholarly clinical practice. The two-year program uses a blended format to offer courses, with each course meeting on campus once per semester, with the remaining work conducted online. A minimum of 330 clinical hours are required and must be approved and academically supervised by a faculty member and/or preceptor. A scholarly project is required and will focus on utilizing evidence-based practice research to improve healthcare safety, quality and/or outcomes for individuals, groups or populations. The finished product will be a publishable manuscript.

The admission criteria requires a bachelor's degree in nursing and a master's degree in nursing or closely related field (i.e., MPH) with a minimum GPA of 3.5 in the master's degree. Applicants must have a valid RN nursing license. This is in addition to recommendations, curriculum vitae and a written statement outlining the goal of the DNP project.

The program is designed as a cohort model, beginning during the summer session each year. Courses are offered year-round, allowing for completion in a two-year time frame. Each student is assigned a faculty advisor based on his/her clinical interests.

Learning Outcomes and Assessment

The Doctor of Nursing Practice program outcomes integrate nursing science with advanced levels of system thinking and professional accountability to design, deliver and evaluate evidence-based practice to improve healthcare quality, safety and outcomes. These learning outcomes are:

- Initiate and participate in collaborative efforts with other disciplines to influence healthcare outcomes.
- Advocate for and provide leadership to develop policy that helps to share healthcare financing, regulation, access and delivery.
- Employ effective communication and collaborative skills in the development and implementation of practice models, peer review, practice guide-lines, health policy, standards of care and/or other scholarly products.
- Use information technology and research methods to design, direct and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable and patient-centered care.

Curriculum

Simple Requirements

Major in Nursing (DNP) (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (24 credits)

Complete ALL of the following Courses:

- NURS700 - Transformational Leadership for DNPs
- NURS702 - Applied Research
- NURS704 - Complex Health Care Systems
- NURS705 - Evidence-Based Practice Process
- NURS706 - Statistical Methods
- NURS708 - Informatics and Data Management
- NURS709 - Scholarly Project Design and Implementation
- NURS711 - Scholarly Evidence-Based Practice Evaluation and Dissemination

AND

Health Policy & Healthcare Economics (3 credits)

Complete ALL of the following Courses:

- NURS701 - Health Policy & Healthcare Economics

AND

Epidemiology and Health Promotion (3 credits)

Complete ALL of the following Courses:

- NURS703 - Epidemiology and Health Promotion

School Nursing, Post-Baccalaureate Certification

Overview

Admission Requirements

Applicants for the Master of Science in Nursing in School Nursing program are referred to the *Admission Requirements* section for general criteria and guidelines for admission to the University.

Specific criteria required by the Wehrheim School of Nursing include:

1. Baccalaureate degree in nursing from an accredited (ACEN, CNEA, or CCNE) school of nursing.
2. Undergraduate grade-point average of at least 3.0 on a 4.0 scale. When GPA is below this, probational acceptance may be considered if the candidate demonstrates graduate study potential by other means.
3. Satisfactory completion of an undergraduate statistics course (equivalent to MATH 130 Elements of Statistics 1), physical assessment course, and a research course in nursing.
4. Computer literacy and access to a computer and internet service.
5. Three current academic and/or professional references.
6. Licensure as a registered nurse in Pennsylvania or in the state where clinical practice or internship is to be arranged.
7. Successful completion of a personal interview with the Nursing Admissions Committee.
8. Current résumé and statement of intent.
9. Verified academic transcripts.

Clearances are required for practicum courses NURS 610 and NURS 611 only:

- ACT 34 - PA State Police Criminal Background Check
- ACT 114 - FBI Fingerprint Clearance (Federal Criminal History Background Check)
- ACT 151 - PA Child Abuse History Certification
- Negative TB Test or Chest X-Ray

Curriculum

Simple Requirements

Major in School Nursing, Post-Bacc Certification

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirement

A baccalaureate degree is required in order to be eligible for school nurse certification. In addition to the course requirements below, you must have a PA Registered Nurse License.

AND

Required Coursework for School Nurse

Fulfill ALL of the following requirements:

School Nursing: Elementary Grades Practicum

Complete ALL of the following Courses:

- NURS610 - School Nursing: Grades PK-4 Practicum

AND

School Nursing: Middle and High School Grades Practicum

Complete ALL of the following Courses:

- NURS611 - School Nursing: Grades 5-12 Practicum

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- NURS612 - School Nursing: Health Promotion and Disease Prevention
- NURS613 - School Nursing: Considerations for the Needs of Diverse Learners and English Language Learners

AND

Required Clearances

Fulfill ALL of the following requirements:

ACT 114 - FBI Fingerprint Needed

You must submit your FBI Fingerprint Clearance

AND

ACT 34 - Criminal Record Check Needed

You must submit your Criminal Record Check

AND

ACT 151 - Child Abuse Clearance Needed

You must submit your Child Abuse Clearance

AND

Negative TB Test or Chest X-ray Needed

You must submit your Negative TB Test or Chest X-ray

Nursing, M.S.N. - Family/Individual Across the Lifespan Nurse Practitioner

Overview

Millersville University offers a Master of Science in Nursing (MSN) degree Family/individual across the lifespan nurse practitioner (FNP).

All class sessions are offered during weekday evenings in three-hour blocks of time face to face and/or in a distance learning format. Clinical courses for the FNP student require a minimum of 750 total clinical hours to successfully complete the program.

Individuals completing the MSN with family/individual across the lifespan nurse practitioner option are prepared to function as family nurse practitioners in a variety of settings, including clinics and primary-care settings.

The program (MSN) is accredited by the National League for Nursing (NLN) Commission of Nursing Education Accreditation (CNEA).

Admission Requirements

Applicants for the Master of Science in Nursing Family/individual across the lifespan family nurse practitioner program are referred to the *Admission Requirements* section for general criteria and guidelines for admission to the University.

Specific criteria required by the Wehrheim School of Nursing include:

1. Baccalaureate degree in nursing from an accredited (ACEN, CNEA or CCNE) school of nursing.
2. Undergraduate grade-point average of at least 3.0 on a 4.0 scale. When GPA is below this, probational acceptance may be considered if the candidate demonstrates graduate study potential by other means.
3. Satisfactory completion of an undergraduate statistics course (equivalent to MATH 130, Elements of Statistics 1), physical assessment course, and a research course in nursing.
4. Computer literacy and access to a computer and internet service.
5. Two current academic and/or professional references.
6. Licensure as a registered nurse in Pennsylvania or in the state where clinical practice or internship is to be arranged.
7. Minimum of two years of clinical experience in nursing, three to five years is preferred.
8. Successful completion of a personal interview with the Nursing Admissions Committee.
9. Current résumé and statement of intent.
10. Verification of completion of statistics, research and physical courses.

Graduates are eligible to submit an application to the Pennsylvania State Board of Nursing (SBN) for designation as a Certified Registered Nurse Practitioner (CRNP) upon satisfactory completion of requirements and passing a national certification examination administered by either the American Nurses Credentialing Center (ANCC) or the American Academy of Nurse Practitioners (AANP).

A graduate of a nurse practitioner program may not practice as a CRNP unless authorized to do so by the Board. Board authorization is equivalent to receipt of a CRNP number. While the CRNP application is pending, the applicant may not be employed as a CRNP. (Refer to Pennsylvania CRNP Rules and Regulations Section 21:261 (b).)

Curriculum

Simple Requirements

Major in Nursing (MSN) (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Graduate Nursing Core (12 credits)

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS502 - Research and Evidence-Based Practice Methodology
- NURS503 - Issues and Roles in Advanced Nursing Practice

- NURS504 - Technology, Informatics & Professional Nursing Practice

AND

Advanced Nursing Practice Core (9 credits)

Complete ALL of the following Courses:

- NURS511 - Pathophysiology for Advanced Practice
- NURS512 - Health Assessment and Diagnostics Evaluation for Advanced Practice
- NURS513 - Pharmacology & Alternative Therapeutics in Nursing Practice

AND

Nursing Capstone (3 credits)

Complete ALL of the following Courses:

- NURS698 - Capstone Project

AND

Family Nurse Practitioner Requirements

See separate block

Concentration in Family Nurse Practitioner (19 credits)

Type
Completion Requirement

Required Courses (19 credits)

Complete ALL of the following Courses:

- NURS531 - Clinical Management of the Pediatric Population
- NURS532 - Clinical Management of the Female Patient
- NURS533 - Clinical Management of the Adult Population
- NURS534 - Clinical Management of the Geriatric Population
- NURS535 - Clinical Management of Vulnerable Populations

Nursing, M.S.N. - Nursing Education

Overview

Millersville University offers a Master of Science in Nursing (MSN) degree focus in Nursing Education (NUED). All classes are offered in an asynchronous online format. There are two practicum courses, each requiring 112 hours of in person/precepted experiences. Graduates are prepared to function in various nurse educator roles, including academic educator, clinical instructor, and nurse professional development specialist.

The program (MSN) is accredited by the National League for Nursing (NLN) Commission for Nursing Education Accrediation (CNEA).

Admission Requirements
Applicants for the Master of Science in Nursing in Nursing Education program are referred to the *Admission Requirements* section for general criteria and guidelines for admission to the University.

Specific criteria required by the Wehrheim School of Nursing include:

1. Baccalaureate degree in nursing from an accredited (ACEN, CNEA or CCNE) school of nursing.
2. Undergraduate grade-point average of at least 3.0 on a 4.0 scale. When GPA is below this, probational acceptance may be considered if the candidate demonstrates graduate study potential by other means.
3. Satisfactory completion of an undergraduate statistics course (equivalent to MATH 130 Elements of Statistics 1), physical assessment course, and a research course in nursing.
4. Computer literacy and access to a computer and internet service.
5. Three current academic and/or professional references.
6. Licensure as a registered nurse in Pennsylvania or in the state where clinical practice or internship is to be arranged.
7. Successful completion of a personal interview with the Nursing Admissions Committee.
8. Current résumé and statement of intent.
9. Verified academic transcripts.

Curriculum

Simple Requirements

Major in Nursing (MSN) (21 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Graduate Nursing Core (12 credits)

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS502 - Research and Evidence-Based Practice Methodology
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS504 - Technology, Informatics & Professional Nursing Practice

AND

Advanced Nursing Practice Core (7 credits)

Complete ALL of the following Courses:

- NURS506 - Sustainable Health
- NURS508 - Advanced Clinical Knowledge

AND

Nursing Capstone (3 credits)

Complete ALL of the following Courses:

- NURS698 - Capstone Project

AND

Nursing Education Requirements

See separate block

Concentration in Nursing Education (19 credits)

Type
Completion Requirement

Required Courses (19 credits)

Complete ALL of the following Courses:

- NURS531 - Clinical Management of the Pediatric Population
- NURS532 - Clinical Management of the Female Patient
- NURS533 - Clinical Management of the Adult Population
- NURS534 - Clinical Management of the Geriatric Population
- NURS535 - Clinical Management of Vulnerable Populations
- NURS536 - Transition to APRN Practice

Nursing, M.S.N. - Nursing Leadership

Overview

The MSN in Nursing Leadership program is designed for nurses with a passion for innovation and administration in nursing! Our fully online program allows students to learn about quality, safety multidisciplinary collaboration, financing, and management in health care. Clinical experiences are designed to meet your learning goals.

The Nursing Leadership program at MU allows you the flexibility you need with the faculty attention you deserve!

Admission Requirements

Applicants for the Master of Science in Nursing in Nursing Education program are referred to the *Admission Requirements* section for general criteria and guidelines for admission to the University.

Specific criteria required by the Wehrheim School of Nursing include:

1. Baccalaureate degree in nursing from an accredited (ACEN, CNEA, or CCNE) school of nursing.
2. Undergraduate grade-point average of at least 3.0 on a 4.0 scale. When GPA is below this, probational acceptance may be considered if the candidate demonstrates graduate study potential by other means.
3. Satisfactory completion of an undergraduate statistics course (equivalent to MATH 130 Elements of Statistics 1), physical assessment course, and a research course in nursing.
4. Computer literacy and access to a computer and internet service.
5. Three current academic and/or professional references.
6. Licensure as a registered nurse in Pennsylvania or in the state where clinical practice or internship is to be arranged.
7. Successful completion of a personal interview with the Nursing Admissions Committee.
8. Current résumé and statement of intent.
9. Verified academic transcripts.

Curriculum

Simple Requirements

Major in Nursing (MSN)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Graduate Nursing Core (12 credits)

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS502 - Research and Evidence-Based Practice Methodology
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS504 - Technology, Informatics & Professional Nursing Practice

AND

Advanced Nursing Practice Core (7 credits)

Complete ALL of the following Courses:

- NURS506 - Sustainable Health
- NURS508 - Advanced Clinical Knowledge

AND

Nursing Capstone (3 credits)

Complete ALL of the following Courses:

- NURS698 - Capstone Project

AND

Nursing Leadership Requirements

See separate block.

Concentration in Nursing Leadership

Type
Completion Requirement

Required Courses (15 credits)

Complete ALL of the following Courses:

- NURS650 - Nursing Leadership and Administration
- NURS651 - Leading Quality and Safety
- NURS652 - Healthcare Financing and Value-Based Care
- NURS653 - Leading Others and Organizations
- NURS654 - Nursing Leadership Practicum

Post-MSN certificate Nursing Leadership

Overview

The purpose of this program is to prepare MSN prepared nurses for the varied roles of nursing management and leadership. The program includes 5 course leadership courses, all of which have been designed following feedback from and in cooperation with nursing leaders, managers, and executives from area healthcare organizations. The program uses the American Nurses Association Nursing Leadership Competency Model as the guiding framework.

Curriculum

Simple Requirements

Concentration in Nursing Leadership (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- NURS650 - Nursing Leadership and Administration
- NURS651 - Leading Quality and Safety
- NURS652 - Healthcare Financing and Value-Based Care
- NURS653 - Leading Others and Organizations
- NURS654 - Nursing Leadership Practicum

Nursing, M.S.N. - School Nursing

Overview

The School Nurse Program is designed for the student who desires a PA Department of Education K4-12 School Nurse Certification. This program is offered as a stand-alone post-baccalaureate School Nurse Certification or as part of the MSN-School Nurse curriculum. In order to achieve certification, students progress through courses that incorporate online instruction and experiential learning activities in a public school setting. All course content and time offerings are designed to meet the needs of the student as well as Pennsylvania standards for School Nurse Certification. For students who do not reside in Pennsylvania, it is possible to complete the MSN in school nursing degree, but only students completing the 100 practicum hours in a Pennsylvania K-12 school district will be eligible for the PDE PK-12 certification.

Admission Requirements

Applicants for the Master of Science in Nursing in School Nursing program are referred to the *Admission Requirements* section for general criteria and guidelines for admission to the University.

Specific criteria required by the Wehrheim School of Nursing include:

1. Baccalaureate degree in nursing from an accredited (ACEN, CNEA, or CCNE) school of nursing.
2. Undergraduate grade-point average of at least 3.0 on a 4.0 scale. When GPA is below this, probational acceptance may be considered if the candidate demonstrates graduate study potential by other means.
3. Satisfactory completion of an undergraduate statistics course (equivalent to MATH 130 Elements of Statistics 1), physical assessment course, and a research course in nursing.
4. Computer literacy and access to a computer and internet service.
5. Three current academic and/or professional references.
6. Licensure as a registered nurse in Pennsylvania or in the state where clinical practice or internship is to be arranged.
7. Successful completion of a personal interview with the Nursing Admissions Committee.
8. Current résumé and statement of intent.
9. Verified academic transcripts.

Clearances are required for practicum courses NURS 610 and NURS 611 only:

- ACT 34 - PA State Police Criminal Background Check
- ACT 114 - FBI Fingerprint Clearance (Federal Criminal History Background Check)
- ACT 151 - PA Child Abuse History Certification
- Negative TB Test or Chest X-Ray

Curriculum

Simple Requirements

Major in Nursing (MSN) (21 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Graduate Nursing Core (12 credits)

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS502 - Research and Evidence-Based Practice Methodology
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS504 - Technology, Informatics & Professional Nursing Practice

AND

Advanced Nursing Practice Core (7 credits)

Complete ALL of the following Courses:

- NURS506 - Sustainable Health
- NURS508 - Advanced Clinical Knowledge

AND

Nursing Capstone (3 credits)

Complete ALL of the following Courses:

- NURS698 - Capstone Project

AND

School Nursing Requirements

See separate block

Concentration in School Nursing (15 credits)

Type
Completion Requirement

School Nursing Core Courses

Fulfill ALL of the following requirements:

School Nursing: Elementary Grades Practicum (3 credits)

Complete ALL of the following Courses:

- NURS610 - School Nursing: Grades PK-4 Practicum

AND

School Nursing: Middle and High School Grades Practicum (3 credits)

Complete ALL of the following Courses:

- NURS611 - School Nursing: Grades 5-12 Practicum

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- NURS612 - School Nursing: Health Promotion and Disease Prevention
- NURS613 - School Nursing: Considerations for the Needs of Diverse Learners and English Language Learners

Effective Teaching: Theories and Methods in Nursing Education (3 credits)

Complete ALL of the following Courses:

- NURS630 - Effective Teaching: Theories and Methods in Nurse Ed

Nursing, Post-Master's Certificate, Family Nurse Practitioner

Overview

A post-master’s certificate is available in the Family/Indivdial Across the Lifespan Nurse Practitioner option for individuals who already hold an MSN degree. Course requirements are contingent upon previous master’s degree. An individualized gap analysis is provided to each post-MSN student candidate.

Curriculum

Simple Requirements

Post-Master Certificate in Nursing (9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Advanced Nursing Practice Core (9 credits)

Complete ALL of the following Courses:

- NURS511 - Pathophysiology for Advanced Practice
- NURS512 - Health Assessment and Diagnostics Evaluation for Advanced Practice
- NURS513 - Pharmacology & Alternative Therapeutics in Nursing Practice

AND

Family Nurse Practitioner Requirements

See separate block

Concentration in Family Nurse Practitioner (19 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (19 credits)

Complete ALL of the following Courses:

- NURS531 - Clinical Management of the Pediatric Population
- NURS532 - Clinical Management of the Female Patient
- NURS533 - Clinical Management of the Adult Population
- NURS534 - Clinical Management of the Geriatric Population
- NURS535 - Clinical Management of Vulnerable Populations
- NURS536 - Transition to APRN Practice

Nursing, Post-Master's Certificate, Nursing Education

Overview

Play a vital role in preparing the next generation of nurses with the curriculum and evaluation strategies gained through the online Graduate Certificate in Nursing Education. Featuring 100% online coursework taken directly from our CNEA-accredited MSN – Nursing Education program, this post-master's certificate furthers your knowledge of education theories and methods.

Learn to design and develop effective educational programs for both traditional and tech-based learning environments. The small cohort sizes at Millersville ensure personalized attention from faculty, and all practicum experiences are tailored to meet your unique learning goals. Upon completion of this career-advancing Grad Cert – Nursing Education program, you will be prepared to sit for multiple NLN exams, including the Certified Nurse Educator (CNE®) and the Academic Clinical Nurse Educator Certification (CNE®cl) exams.

Curriculum

Simple Requirements

Post-Master Certificate in Nursing

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Nursing Education Requirements

See separate block

Concentration in Nursing Education (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- NURS630 - Effective Teaching: Theories and Methods in Nurse Ed
- NURS631 - Measurement and Evaluation in Nurse Education
- NURS632 - Nursing Curriculum and Program Design
- NURS633 - Nursing Education Practicum I
- NURS634 - Nursing Education Practicum II

Nursing, B.S.N.

Overview

The RN to BSN program at Millersville University is designed for those who have obtained their associate degree in nursing or diploma and RN license. This program is offered in a completely online format. The online program allows registered nurses to work toward a Bachelor of Science in Nursing degree at their own pace and while continuing to work as an RN. Faculty advisers provide individualized analysis of your previous credits to ensure the most efficient path to your degree.

Graduates receive a Bachelor of Science in Nursing (BSN) degree.

Designed for the busy, working RN, the RN to BSN program is a fully asynchronous online program. There are 31 credits of required nursing courses focused on the core program outcomes of exploration, professionalism, advocacy and action, embracing diversity, and leadership.

Curriculum

Simple Requirements

Major in Nursing (BSN) (61 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Lower Division Nursing Credits (30 credits)

Upon confirmation of your Associates Degree, 30.0 credits will be awarded.

AND

Required Nursing Courses (31 credits)

Earn a minimum grade of C in the following:

- NURS320 - Basis of Professional Practice
- NURS330 - Ethics and Person-Centered Care
- NURS340 - Environmental Factors Affecting Health
- NURS360 - Assessment and Diversity in Nursing Practice
- NURS421 - Population-based Nursing
- NURS428 - Nursing Research & Evidence-Based Practice
- NURS438 - Health Policy and Nursing Issues
- NURS478 - Transforming Health Care
- NURS504 - Technology, Informatics & Professional Nursing Practice

Students in the Accelerated BSN to MSN program may elect the 300/400 or 500 level equivalent course. Only the 500-level course will be applicable to the MSN program.

Req Related for Nursing (3-4 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirement

Required Related Credits

AND

Statistics Requirement (3-4 credits)

Complete at least 1 of the following courses:

- MATH234 - Statistics for Health Sciences
- MATH130 - Elements of Statistics 1

Certificate in Population Health

Overview

The certificate in population health is for anyone working in or with an interest in working the healthcare system. This certificate includes two required courses (NURS 310 Health Issues from a Population Health Perspective and NURS 312 Value-Based Care) and another 12 credits of multidisciplinary courses individually designed to meet the student's unique learning needs.

Curriculum

Simple Requirements

Major in Population Health (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Nursing Courses (6 credits)

Complete ALL of the following Courses:

- NURS310 - Health Issues from a Population Health Perspective
- NURS312 - Value-Based Care

AND

Population Health Electives (12 credits)

Earn at least 12 credits from the following:

- NURS315 - Scientific Advances in Healthcare
  OR NURS315H - Hon: Scientific Advances in Healthcare
- NURS330 - Ethics and Person-Centered Care
- NURS340 - Environmental Factors Affecting Health
- NURS428 - Nursing Research & Evidence-Based Practice
- SOCI317 - Medical Sociology
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology
- SOWK102 - Modern Social Welfare Dilemmas
- SOWK207 - Personal & Community Wellness: A Healthcare Policy Approach
- MATH234 - Statistics for Health Sciences
- ITAN255 - Intro to Data Analytics

Certificate in Telehealth

Overview

Wehrheim School of Nursing Telehealth certificate is 100% online and open to all majors and guest students!
There is a growing demand for telehealth as a modality to improve patient outcomes in professions such as social work, nursing, counseling, providers, pharmacy, physical therapy, occupational therapy, and respiratory therapy, and more!

Remote healthcare has exploded since the start of the pandemic in 2020. The expansion of telehealth and other remote healthcare options is only expected to increase in the future years and become a “normal” part of healthcare delivery, enabling specialists and providers to reach patients in remote areas and eliminating barriers to receive safe, efficient healthcare.

Program Benefits

- 100% Online
- 3 Courses (10 credits)
- Learn to facilitate healthcare via telehealth/ telephonic/telemedicine/virtual and remote care

Curriculum

Simple Requirements

Major in Telehealth (10 credits)

Type
Completion Requirement

Requirements (10 credits)

Fulfill ALL of the following requirements:

Required Courses (10 credits)

Complete ALL of the following Courses:

- NURS370 - Telehealth Foundations
- NURS460 - Telehealth Policy, Advocacy, and Clinical Application
- NURS461 - Advanced Telehealth

Certificate in Population Health (Online Program)

Overview

The certificate in population health is for anyone working in or with an interest in working the healthcare system. This certificate includes two required courses (NURS 310 Health Issues from a Population Health Perspective and NURS 312 Value-Based Care) and another 12 credits of multidisciplinary courses individually designed to meet the student’s unique learning needs.

Curriculum

Simple Requirements

Major in Population Health (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Nursing Courses (6 credits)

Complete ALL of the following Courses:

- NURS310 - Health Issues from a Population Health Perspective
- NURS312 - Value-Based Care

AND

Population Health Electives (12 credits)

Earn at least 12 credits from the following:

- NURS315 - Scientific Advances in Healthcare
  OR NURS315H - Hon: Scientific Advances in Healthcare
- NURS330 - Ethics and Person-Centered Care
- NURS340 - Environmental Factors Affecting Health
- NURS428 - Nursing Research & Evidence-Based Practice
- SOCI317 - Medical Sociology
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology
- SOWK102 - Modern Social Welfare

Dilemmas
- SOWK207 - Personal & Community Wellness: A Healthcare Policy Approach
- MATH234 - Statistics for Health Sciences
- ITAN255 - Intro to Data Analytics

Courses

NURS140 - Introduction to Nursing Practice Concepts

Course Information

Course Title
Introduction to Nursing Practice Concepts

Subject code	Course Number	Academic Level
NURS	140	Undergraduate

Course Description
Focus is on the clinical skills necessary to practice safe nursing care at the fundamental level. Emphasizes the concepts of caring and caring interventions. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS141 - Introduction to Nursing Practice Concepts II

Course Information

Course Title
Introduction to Nursing Practice Concepts II

Subject code	Course Number	Academic Level
NURS	141	Undergraduate

Course Description
Focus is on continuing to build the clinical skills necessary to practice safe nursing care at the fundamental level. Emphasizes the concepts of caring and caring interventions. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS142 - Health Assessment Concepts

Course Information

Course Title
Health Assessment Concepts

Subject code	Course Number	Academic Level
NURS	142	Undergraduate

Course Description
Introduction to health and physical assessment and detection of normal and abnormal findings. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS143 - Concepts of Informatics in Nursing Practice

Course Information

Course Title
Concepts of Informatics in Nursing Practice

Subject code	Course Number	Academic Level
NURS	143	Undergraduate

Course Description
Introduction to beginning concepts and skills related to informatics in nursing practice. Focus on culture of safety and role of data to impact. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS144 - Fundamental Concepts for Nursing Practice

Course Information

Course Title
Fundamental Concepts for Nursing Practice

Subject code	Course Number	Academic Level
NURS	144	Undergraduate

Course Description
Introduces students to the foundational concpets for the practice of nursing. Incorporation of cultural values and patient right to choose. Transfer equivalency course only; available only for students currently enrolled in the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program

Must be in the HACC/MU Concurrent Education Program.

NURS150 - Holistic Health Concepts for Nursing Practice I

Course Information

Course Title
Holistic Health Concepts for Nursing Practice I

Subject code	Course Number	Academic Level
NURS	150	Undergraduate

Course Description
Addresses safe nursing care for the adult patient. Provides theorectical knowledge and clinical skills needed to organize and provide safe nursing care for diverse individuals. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS151 - Holistic Health Concepts for Nursing Practice II

Course Information

Course Title
Holistic Health Concepts for Nursing Practice II

Subject code	Course Number	Academic Level
NURS	151	Undergraduate

Course Description
Addresses safe nursing care for the adult patient and their families. Special consideration is placed upon events that are common in the normal life cylce. Focus on meeting basic human needs for diverse individuals and families. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
NURS	179	Undergraduate

Course Description
Experimental

NURS240 - Adult Health Concepts for Nursing Practice I

Course Information

Course Title
Adult Health Concepts for Nursing Practice I

Subject code	Course Number	Academic Level
NURS	240	Undergraduate

Course Description
Addresses safe nursing care and the needs of patients with cancer and other celluar alterations. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS241 - Adult Health Concepts for Nursing Practice II

Course Information

Course Title
Adult Health Concepts for Nursing Practice II

Subject code	Course Number	Academic Level
NURS	241	Undergraduate

Course Description
Addresses safe nursing care for patients with complex physiological needs. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS242 - Family Health Concepts for Nursing Practice I

Course Information

Course Title
Family Health Concepts for Nursing Practice I

Subject code	Course Number	Academic Level
NURS	242	Undergraduate

Course Description
Covers the safe nursing care of women, newborns, and childbearing families. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS243 - Family Health Concepts for Nursing Practice II

Course Information

Course Title
Family Health Concepts for Nursing Practice II

Subject code	Course Number	Academic Level
NURS	243	Undergraduate

Course Description
Addresses safe family-centered nursing care to children. Focuses on ability to adapt care to a child's development level. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS244 - Advanced Behavioral Health Concepts for Nursing Practice

Course Information

Course Title
Advanced Behavioral Health Concepts for Nursing Practice

Subject code	Course Number	Academic Level
NURS	244	Undergraduate

Course Description
Addresses safe nursing care of patients, families, and groups with complex behavioral health needs. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS250 - Complex Health Concepts for Nursing Practice

Course Information

Course Title
Complex Health Concepts for Nursing Practice

Subject code	Course Number	Academic Level
NURS	250	Undergraduate

Course Description
Covers safe nursing care for adult patients from socially, economically and culturally diverse backgrounds. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS251 - Leadership and Management Concepts for Nursing Practice

Course Information

Course Title
Leadership and Management Concepts for Nursing Practice

Subject code	Course Number	Academic Level
NURS	251	Undergraduate

Course Description
Enhances the professional role of the student as the focus on safe nursing care for adult patients continues. In addition, this course focuses on transitioning the student to the graduate nursing role as they further develop a clinician's role. Transfer equivalency course only; available only for students currently enrolled in or have completed the HACC RN ADN program.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

HACC/MU Concurrent Education Program or HACC ADN Program

Must be in the HACC/MU Concurrent Education Program or have completed the HACC ADN program.

NURS279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
NURS	279	Undergraduate

Course Description
Experimental

NURS300 - Co-Op Ed Experience in Nursing

Course Information

Course Title
Co-Op Ed Experience in Nursing

Subject code	Course Number	Academic Level
NURS	300	Undergraduate

Course Description
Co-op Experience in Nursing

NURS310 - Health Issues from a Population Health Perspective

Course Information

Course Title
Health Issues from a Population Health Perspective

Subject code	Course Number	Academic Level
NURS	310	Undergraduate

Course Description
The essentials of population health practices will be discussed along with how they are used by different groups to assess health outcomes and make recommendations to improve access to care and quality of care while reducing the cost of care.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

NURS312 - Value-Based Care

Course Information

Course Title
Value-Based Care

Subject code	Course Number	Academic Level
NURS	312	Undergraduate

Course Description
The healthcare industry is shifting to value-based and risk-based reimbursement and it is a monumental change that is impacting every component of healthcare. Healthcare is focused on high-value, cost-effective, and evidence-based measures that incorporate innovation, resource stewardship, and systems thinking. Under new payment models, reimbursement is tied directly to clinical, organizational, and consumer outcomes. It is, therefore, critical that all involved in healthcare are aware and can apply the principles associated with value-based care to their respective roles.

NURS315 - Scientific Advances in Healthcare

Course Information

Course Title
Scientific Advances in Healthcare

Subject code	Course Number	Academic Level
NURS	315	Undergraduate

Course Description
Major contemporary health trends and issues will be presented. Discussion will identify the integration of certain biological, psychosocial, educational and healthcare components as they impact on the individual/family unit. Open to all majors. Prereq: ENGL 110, COMM 100 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

NURS315H - Hon: Scientific Advances in Healthcare

Course Information

Course Title
Hon: Scientific Advances in Healthcare

Subject code	Course Number	Academic Level
NURS	315H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

NURS316 - Women, Health, and Health Care

Course Information

Course Title
Women, Health, and Health Care

Subject code	Course Number	Academic Level
NURS	316	Undergraduate

Course Description
Examines the physical, psychosocial, economic, cultural, ethnic, racial and political factors that impact womens health. Case studies of current health dilemmas that affect women in todays society will be analyzed. Prereq: ENGL 110, COMM 100 and junior status. Does not satisfy nursing electives for B.S.N. majors.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

NURS316H - H: Women, Health, and Health Care

Course Information

Course Title
H: Women, Health, and Health Care

Subject code	Course Number	Academic Level
NURS	316H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

NURS320 - Basis of Professional Practice

Course Information

Course Title
Basis of Professional Practice

Subject code	Course Number	Academic Level
NURS	320	Undergraduate

Course Description
Historical and theoretical aspects of nursing are discussed in addition to concepts and issues related to professional nursing practice. Emphasis on communication, standards, collaboration, and advocacy. 3 hrs. lec. Nursing majors only. Offered annually.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Nursing Majors Only

Restricted to nursing majors.

NURS322 - Health Assessment of Adult

Course Information

Course Title
Health Assessment of Adult

Subject code	Course Number	Academic Level
NURS	322	Undergraduate

Course Description
The holistic assessment process of the adult client utilizing physical assessment skills such as the techniques of inspection, palpation, percussion and auscultation are presented and practiced. Each system includes the normal finding and the pathophysiological mechanisms that alter hemodynamics. 3 hrs. lec., 2 hrs. lab. Nursing majors only.

NURS330 - Ethics and Person-Centered Care

Course Information

Course Title
Ethics and Person-Centered Care

Subject code	Course Number	Academic Level
NURS	330	Undergraduate

Course Description
Focuses on the interplay of ethical practice and diverse populations in healthcare. Emphasis on the use of ethical theories, principles, and frameworks to strengthen moral reasoning and improve the provision of socially responsible, person-centered healthcare to diverse populations. Models of ethical decision-making are explored and applied. Role of the ANA Code of Ethics within the profession is examined. Encourages a greater awareness of cultural differences and health disparities and the importance of social justice and mutual respect in care delivery.

NURS340 - Environmental Factors Affecting Health

Course Information

Course Title
Environmental Factors Affecting Health

Subject code	Course Number	Academic Level
NURS	340	Undergraduate

Course Description
Discussion of environmental health and factors that influence the holistic persons health. Emphasis on the importance of environmental health assessment and the health effects of air, water and soil pollution; environmental safety hazards and nursing responsibilities for intervention in a personal, community and political realm. Effects of pollution and safety hazards discussed from a nursing perspective.

NURS360 - Assessment and Diversity in Nursing Practice

Course Information

Course Title
Assessment and Diversity in Nursing Practice

Subject code	Course Number	Academic Level
NURS	360	Undergraduate

Course Description
Integration of physical assessment has a positive effect on patient care delivery. An important component of health assessment of the diverse client is a contextual (cultural) review. Cultural assessment is crucial to providing cultural care, which enables providers to deliver services that are respectful of and responsive to the health beliefs, practices and cultural and linguistic needs of diverse patients. Cultural competency is critical to reducing health disparities and is responsive to the needs of diverse patients resulting in improved patient outcomes.

NURS370 - Telehealth Foundations

Course Information

Course Title
Telehealth Foundations

Subject code	Course Number	Academic Level
NURS	370	Undergraduate

Course Description
An introduction to telehealth theory, clinical usage, historical perspectives, and future strategies that provide clinicians, healthcare team members, administrators, and community members a broad-based overview of the use of technology in healthcare.

NURS379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
NURS	379	Undergraduate

Course Description
Experimental

NURS421 - Population-based Nursing

Course Information

Course Title
Population-based Nursing

Subject code	Course Number	Academic Level
NURS	421	Undergraduate

Course Description
The nurse's role in promotion of health of aggregates in the community is explored, with an emphasis on vulnerable populations. Public health concepts, using a population-based focus are directed toward health promotion and levels of prevention with evidence-based care to create healthier communities and populations.

NURS428 - Nursing Research & Evidence-Based Practice

Course Information

Course Title
Nursing Research & Evidence-Based Practice

Subject code	Course Number	Academic Level
NURS	428	Undergraduate

Course Description
Explores the research process used to generate evidence and the process of evidenced-based practice (EBP), which incorporates the available evidence to implement strategies that improve nursing practice. Students will follow the steps of the EBP process to synthesize the best available evidence related to a nursing problem within an area of professional practice. Prerequisite: MATH 130 or MATH 234, ENGL 110, and Senior Level.

Simple Requirements

Course Prerequisites

Type
Prerequisite

MATH130 or MATH234 and ENGL 110H or ENGL 110

Complete ALL of the following Courses:

- MATH130 - Elements of Statistics 1
  OR MATH234 - Statistics for Health Sciences
- ENGL110H - Hnrs:Introduction to College Writing
  OR ENGL110 - Introduction to College Writing

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits

NURS435 - Topics in Nursing

Course Information

Course Title
Topics in Nursing

Subject code	Course Number	Academic Level
NURS	435	Undergraduate

Course Description
In-depth investigation of topics of current interest in the nursing field. Topics to be announced when course is offered. Offered periodically.

NURS438 - Health Policy and Nursing Issues

Course Information

Course Title
Health Policy and Nursing Issues

Subject code	Course Number	Academic Level
NURS	438	Undergraduate

Course Description
Discussion of the political, economic, legal, ethical and related societal issues which influence nursing practice and education. Professional nursing roles and responsibilities are emphasized. 3 hrs. lec. Nursing majors only.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Nursing Majors Only

Restricted to nursing majors.

NURS460 - Telehealth Policy, Advocacy, and Clinical Application

Course Information

Course Title
Telehealth Policy, Advocacy, and Clinical Application

Subject code	Course Number	Academic Level
NURS	460	Undergraduate

Course Description
This course will review the roles of policy, advocacy, and clinical application of telehealth. Using spirit of inquiry principles, the impact of virtual care, artificial intelligence, and remote patient monitoring on patient care, quality and safety and process improvement will be investigated. Prereq: NURS 370

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 370

Complete ALL of the following Courses:
- NURS370 - Telehealth Foundations

NURS461 - Advanced Telehealth

Course Information

Course Title
Advanced Telehealth

Subject code	Course Number	Academic Level
NURS	461	Undergraduate

Course Description
This advanced telehealth course will develop telehealth project management skills and clinical presence using technology as a methodology of providing healthcare in a variety of settings across the continuum. Prereq: NURS 370 and 460.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 370 and NURS 460

Complete ALL of the following Courses:
- NURS370 - Telehealth Foundations
- NURS460 - Telehealth Policy, Advocacy, and Clinical Application

NURS478 - Transforming Health Care

Course Information

Course Title
Transforming Health Care

Subject code	Course Number	Academic Level
NURS	478	Undergraduate

Course Description
This senior-level capstone course builds and expands upon work completed to date in the B.S.N. program and is designed to prepare students for leadership roles. Concepts of leadership and management will be described and ultimately applied to seminar topics and clinical experiences. Emphasis is also placed on the interdependence between the nursing profession and various levels of issues as they pertain to real-life world events. Seminar topics include fiscal management, case management and public-policy issues, among others. Clinical experiences will allow the student to practice with a nurse leader in the community. Prereq: ENGL 110, NURS 320, 428. 28 clinical hours total.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and NURS 320 and NURS 428

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- NURS320 - Basis of Professional Practice
- NURS428 - Nursing Research & Evidence-Based Practice

NURS479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
NURS	479	Undergraduate

Course Description
Experimental

NURS489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
NURS	489	Undergraduate

Course Description
Honors Course

NURS498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
NURS	498	Undergraduate

Course Description
An individualized experience based on the students particular interests. Provides an opportunity to demonstrate creativity and initiative to further investigate an area of interest in practice, research or education in nursing. Offered periodically. Prereq: NURS 428.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 428

Complete ALL of the following Courses:

- NURS428 - Nursing Research & Evidence-Based Practice

NURS499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
NURS	499	Undergraduate

Course Description
Departmental Honors

NURS501 - Role Development and Theoretical Foundations of Advanced Practice

Course Information

Course Title
Role Development and Theoretical Foundations of Advanced Practice

Subject code	Course Number	Academic Level
NURS	501	Graduate

Course Description
Serves as the introductory course for the Master's of Science in Nursing degree. It is designed to provide a foundation to advance practice nursing. In this course, students will explore nursing concepts and theory. Emphasis is placed on bridging the theory-practice gap. Students will apply this theoretical basis in exploring advanced practice role development. Advanced practice core competencies will be introduced and analyzed.

NURS502 - Research and Evidence-Based Practice Methodology

Course Information

Course Title
Research and Evidence-Based Practice Methodology

Subject code	Course Number	Academic Level
NURS	502	Graduate

Course Description
Advanced research in nursing builds on previous knowledge of research and statistics to develop an evidenced-based approach to practice. The learner will analyze methods and techniques of research and interpret their usefulness for application in practice. Theory and practice will be used in defining nursing problems and in development of a literature review. 3 hrs. theory. Prereq/Coreq: NURS 501

Simple Requirements

Course Prerequisite or Corequisite

Type
Prerequisite

NURS501

Complete ALL of the following Courses:
- NURS501 - Role Development and Theoretical Foundations of Advanced Practice

NURS503 - Issues and Roles in Advanced Nursing Practice

Course Information

Course Title
Issues and Roles in Advanced Nursing Practice

Subject code	Course Number	Academic Level
NURS	503	Graduate

Course Description
In-depth study of the issues of advanced nursing practice, focusing on the historical, social and political forces which impact advanced nursing practice. Advanced practice roles in nursing are explored and analyzed. 3 hrs. theory. Offered in fall.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS501

Complete ALL of the following Courses:
- NURS501 - Role Development and Theoretical Foundations of Advanced Practice

NURS504 - Technology, Informatics & Professional Nursing Practice

Course Information

Course Title
Technology, Informatics & Professional Nursing Practice

Subject code	Course Number	Academic Level
NURS	504	Graduate

Course Description
Discussion of the ways in which information and technology influence practice and decision making in various aspects of nursing practice, such as clinical, education, leadership and research, is the major focus of the course. Advances in technology that support and enhance the delivery of care and interdisciplinary communication are addressed. The legal, ethical, cultural, economic and social factors affecting healthcare information technology are also explored.

NURS506 - Sustainable Health

Course Information

Course Title
Sustainable Health

Subject code	Course Number	Academic Level
NURS	506	Graduate

Course Description
Discussion of advanced concepts regarding environmental health and evidence-based nursing in the context of sustainable development and global well-being. Using the 17 UN Sustainable Development Goals as a comprehensive framework for understanding health, the environment, and human interaction, as well as how to promote public, international, and planetary health including multinational, interdisciplinary systems supporting all of humanity. Explores and underscores the important role nurses fulfill in promoting local and global health within the framework of sustainability.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS320

Complete ALL of the following Courses:
- NURS320 - Basis of Professional Practice

NURS508 - Advanced Clinical Knowledge

Course Information

Course Title
Advanced Clinical Knowledge

Subject code	Course Number	Academic Level
NURS	508	Graduate

Course Description
Builds upon previous knowledge in physical assessment, pathophysiology, and pharmacology. Using a systems approach, examines principles of select well and disease states. Provides the opportunity to assess, analyze, and explore the findings, treatment, and evaluation of common health issues. Analyzes the relationships between assessment findings, physiologic changes, and pharmaceutical treatments.

NURS511 - Pathophysiology for Advanced Practice

Course Information

Course Title
Pathophysiology for Advanced Practice

Subject code	Course Number	Academic Level
NURS	511	Graduate

Course Description
Advanced physiology and pathophysiology at the cellular, organic and systemic level. Interdependence of organ systems in health and disease is emphasized as a basis for clinical assessment and management. 3 hrs. theory. Offered in spring.

NURS512 - Health Assessment and Diagnostics Evaluation for Advanced Practice

Course Information

Course Title
Health Assessment and Diagnostics Evaluation for Advanced Practice

Subject code	Course Number	Academic Level
NURS	512	Graduate

Course Description
Clinical course. Provides framework for diagnosis and clinical decision making for the advanced practice nurse. Assessment skills and procedures for individuals across the life cycle will be developed. Information gathered in the assessment process will provide a basis for the evaluation of the health status of individuals. An analysis of an individuals response to wellness and illness will include examination of concepts of cultural influences, health-seeking behaviors, and stress and adaptation. 2 hrs. theory, 3 hrs. lab. Prereq: NURS 501, 502, 503 and 511. Offered in fall.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 501 and NURS 502 and NURS 503 and NURS 511

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS502 - Research and Evidence-Based Practice Methodology
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS511 - Pathophysiology for Advanced Practice

NURS513 - Pharmacology & Alternative Therapeutics in Nursing Practice

Course Information

Course Title
Pharmacology & Alternative Therapeutics in Nursing Practice

Subject code	Course Number	Academic Level
NURS	513	Graduate

Course Description
Principles of pharmacology applied to the therapeutic management of the individual and the family across the life cycle. Emphasis on prescribing and monitoring pharmacology and alternative therapeutic regimens. Adverse drug reactions and multiple drug interactions are included. 3 hrs. theory. Prereq: NURS 501, 502, 503 and 511. Offered in fall.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 501 and NURS 502 and NURS 503 and NURS 511

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS502 - Research and Evidence-Based Practice Methodology
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS511 - Pathophysiology for Advanced Practice

NURS521 - Clinical Management of the Young Family

Course Information

Course Title
Clinical Management of the Young Family

Subject code	Course Number	Academic Level
NURS	521	Graduate

Course Description
This course provides the family nurse practitioner student with the necessary knowledge and clinical experience to assist young families with health promotion and chronic and acute health problems. The biophysical, cognitive and psychosocial development of members of the young family is explored. A focus on womens health issues is incorporated in the course content. The role of the family nurse practitioner in caring for the young family is identified. 3 hrs. theory, plus clinical component. Prereq: NURS 501, 503, 511, 512, 513.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 501 and NURS 503 and NURS 511 and NURS 512 and NURS 513

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS511 - Pathophysiology for Advanced Practice
- NURS512 - Health Assessment and Diagnostics Evaluation for Advanced Practice
- NURS513 - Pharmacology & Alternative Therapeutics in Nursing Practice

NURS522 - Clinical Management of the Mature Aging Family

Course Information

Course Title
Clinical Management of the Mature Aging Family

Subject code	Course Number	Academic Level
NURS	522	Graduate

Course Description
This course provides the family nurse practitioner with the necessary knowledge and clinical experience to assist mature and aging families with health promotion and chronic and acute health problems. The biophysical, cognitive and psychosocial development of members of mature and aging families is explored. A focus on womens health issues is incorporated in the course content. The role of the family nurse practitioner in caring for mature and aging families is identified. 3 hrs. theory, plus clinical component. Prereq: NURS 521.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 521

Complete ALL of the following Courses:

- NURS521 - Clinical Management of the Young Family

NURS523 - Family Nurse Practitioner Internship

Course Information

Course Title
Family Nurse Practitioner Internship

Subject code	Course Number	Academic Level
NURS	523	Graduate

Course Description
This course provides an opportunity to integrate theory and practice through an intensive internship experience. Focus is on the domains and competencies of the nurse practitioner as direct provider of primary healthcare. Biweekly seminars will be conducted to discuss current topics. The student will be guided in the practicum by nurse practitioner and physician preceptors in a variety of settings. 1 hr. theory, plus clinical component. Prereq: NURS 521 and 522.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 521 and NURS 522

Complete ALL of the following Courses:
- NURS521 - Clinical Management of the Young Family
- NURS522 - Clinical Management of the Mature Aging Family

NURS531 - Clinical Management of the Pediatric Population

Course Information

Course Title
Clinical Management of the Pediatric Population

Subject code	Course Number	Academic Level
NURS	531	Graduate

Course Description
This course provides the family nurse practitioner student with the necessary knowledge and clinical experience to assist young families and pediatric patients. Assessment, diagnostic reasoning and care management plans are foundational in guiding health promotion and prevention, but also caring for both chronic and acute health problems. The biophysical, cognitive, and psychosocial development of members of the young family is explored. The role of the family nurse practitioner in caring for the young family is identified.

Simple Requirements

Completed Course Prerequisites

Type
Prerequisite

NURS 501 and NURS 503 and NURS 511 and NURS 512 and NURS 513

Complete ALL of the following Courses:
- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS511 - Pathophysiology for Advanced Practice
- NURS512 - Health Assessment and Diagnostics Evaluation for Advanced Practice
- NURS513 - Pharmacology & Alternative Therapeutics in Nursing Practice

NURS532 - Clinical Management of the Female Patient

Course Information

Course Title
Clinical Management of the Female Patient

Subject code	Course Number	Academic Level
NURS	532	Graduate

Course Description
Course Description: This course provides the family nurse practitioner student with the necessary knowledge and clinical experience to assist the female patient with health promotion, chronic conditions, and acute health problems. The unique biophysical, cognitive, and psychosocial needs of women are explored. The role of the family nurse practitioner in caring for women is identified. (Prerequisites: NURS 501, 503, 511, 512, 513).

Simple Requirements

Completed Course Prerequisites

Type
Prerequisite

NURS 501 and NURS 503 and NURS 511 and NURS 512 and NURS 513

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS511 - Pathophysiology for Advanced Practice
- NURS512 - Health Assessment and Diagnostics Evaluation for Advanced Practice
- NURS513 - Pharmacology & Alternative Therapeutics in Nursing Practice

NURS533 - Clinical Management of the Adult Population

Course Information

Course Title
Clinical Management of the Adult Population

Subject code	Course Number	Academic Level
NURS	533	Graduate

Course Description
Provides the family nurse practitioner student with the necessary knowledge and clinical experience to assist adults with health promotion and chronic and acute health problems. The unique biophysical, cognitive, and psychosocial needs of adults are explored. The role of the family nurse practitioner in caring for adults is identified.

Simple Requirements

Completed Course Prerequisites

Type
Prerequisite

NURS 501 and NURS 503 and NURS 511 and NURS 512 and NURS 513

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS511 - Pathophysiology for Advanced Practice
- NURS512 - Health Assessment and Diagnostics Evaluation for Advanced Practice
- NURS513 - Pharmacology & Alternative Therapeutics in Nursing Practice

NURS534 - Clinical Management of the Geriatric Population

Course Information

Course Title
Clinical Management of the Geriatric Population

Subject code	Course Number	Academic Level
NURS	534	Graduate

Course Description
Provides the family nurse practitioner student with the necessary knowledge and clinical experience to assist the geriatric client with health promotion and chronic and acute health problems. The unique biophysical, cognitive, and psychosocial needs of the geriatric population are explored. The role of the family nurse practitioner in caring for the geriatric population is identified.

Requisites
NURS 501, 503, 511, 512, 513

NURS535 - Clinical Management of Vulnerable Populations

Course Information

Course Title
Clinical Management of Vulnerable Populations

Subject code	Course Number	Academic Level
NURS	535	Graduate

Course Description
Provides the family nurse practitioner student with the necessary knowledge and clinical experience to assist vulnerable populations with health promotion and chronic and acute health problems. The unique biophysical, cognitive, and psychosocial needs of various unique populations are explored. A special focus on population level health is included. (Prerequisites: NURS 511, 512, 513, 531, 532, 533, 534).

Simple Requirements

Completed Course Prerequisites

Type
Prerequisite

NURS 501 and NURS 503 and NURS 511 and NURS 512 and NURS 513 and NURS 531 and NURS 532 and NURS 533 and NURS 534

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS511 - Pathophysiology for Advanced Practice
- NURS512 - Health Assessment and Diagnostics Evaluation for Advanced Practice
- NURS513 - Pharmacology & Alternative Therapeutics in Nursing Practice
- NURS531 - Clinical Management of the Pediatric Population
- NURS532 - Clinical Management of the Female Patient
- NURS533 - Clinical Management of the Adult Population
- NURS534 - Clinical Management of the Geriatric Population

NURS536 - Transition to APRN Practice

Course Information

Course Title
Transition to APRN Practice

Subject code	Course Number	Academic Level
NURS	536	Graduate

Course Description
This course provides an opportunity to integrate theory and practice through an intensive internship experience. Focus is on the domains and competencies of the nurse practitioner as direct provider of primary health care. Weekly seminars will be conducted to discuss current topics. The students will be guided in the practicum by nurse practitioner and physician preceptors in a variety of clinical settings. Prerequisites: NURS 501, 503, 511, 512, 513, 531, 532, 533, 534

Simple Requirements

Completed Course Prerequisites

Type
Prerequisite

NURS 501 and NURS 503 and NURS 511 and NURS 512 and NURS 513 and NURS 531 and NURS 532 and NURS 533 and NURS 534

Complete ALL of the following Courses:

- NURS501 - Role Development and Theoretical Foundations of Advanced Practice
- NURS503 - Issues and Roles in Advanced Nursing Practice
- NURS511 - Pathophysiology for Advanced Practice
- NURS512 - Health Assessment and Diagnostics Evaluation for Advanced Practice
- NURS513 - Pharmacology & Alternative Therapeutics in Nursing Practice
- NURS531 - Clinical Management of the Pediatric Population
- NURS532 - Clinical Management of the Female Patient
- NURS533 - Clinical Management of the Adult Population
- NURS534 - Clinical Management of the Geriatric Population

NURS550 - School Nursing and Diverse Learners

Course Information

Course Title
School Nursing and Diverse Learners

Subject code	Course Number	Academic Level
NURS	550	Graduate

Course Description
Focus on the specialty practice area of school nursing, examining the role of the school nurse with emphasis on the special health needs of children in the school setting. Management and evaluation of the special health care needs of diverse learners are discussed with an understanding of the need for outcome criteria. Emphasis is placed on identifying accommodations and adaptations for diverse learners. An overview of common physiological and psychological diagnoses of the school age population are discussed as well as the legal responsibilities of the school nurse when caring for this diverse population.

NURS560 - School Nursing Clinical Practicum

Course Information

Course Title
School Nursing Clinical Practicum

Subject code	Course Number	Academic Level
NURS	560	Graduate

Course Description
Focus on the specialty practice area of school nursing. Laws pertaining to school nursing practice and legal considerations for school nurses are explored. Individualized health plans that address the special health needs of children in the school setting are developed. Management and evaluation of the comprehensive school health program are discussed with an understanding for the need of outcome criteria. Clinical experiences provide the student an opportunity to apply concepts learned in the various school nursing program courses in school health settings at both elementary and secondary levels. Prereq: Undergraduate: faculty permission; Graduate: Baccalaureate degree

Simple Requirements

Course Prerequisites for Undergraduates

Type
Prerequisite

Faculty Permission

Must have permission of faculty.

Course Prerequisites for Graduates

Type
Prerequisite

Baccalaureate Degree

Must have a Baccalaureate degree.

NURS579 - Experimental Course

Course Information

Course Title
Experimental Course

Subject code	Course Number	Academic Level
NURS	579	Graduate

Course Description
Experimental Course Number for Nursing

NURS586 - Topics in Nursing

Course Information

Course Title
Topics in Nursing

Subject code	Course Number	Academic Level
NURS	586	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest in nursing that are not normally covered in regular courses. Topics/methods will vary according to the needs of students and faculty.

NURS587 - Topics in Nursing

Course Information

Course Title
Topics in Nursing

Subject code	Course Number	Academic Level
NURS	587	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest in nursing that are not normally covered in regular courses. Topics/methods will vary according to the needs of students and faculty.

NURS588 - Topics in Nursing

Course Information

Course Title
Topics in Nursing

Subject code	Course Number	Academic Level
NURS	588	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest in nursing that are not normally covered in regular courses. Topics/methods will vary according to the needs of students and faculty.

NURS610 - School Nursing: Grades PK-4 Practicum

Course Information

Course Title
School Nursing: Grades PK-4 Practicum

Subject code	Course Number	Academic Level
NURS	610	Graduate

Course Description
In this course, the focus is on the role of the school nurse in caring for students in grades PK-4. There is an emphasis on the nursing process as it is applied to the school age population while considering acute, chronic, and episodic illness and the overall healthcare needs of the PK-4 grade school population including those with special health needs, disabilities, diverse cultures, and English Language Learners. The physical, emotional, psychosocial, and developmental needs of the PK-4 grade population are explored. Interprofessional collaboration within the school nurse role in the elementary school setting is examined. This course provides 50 of the required 100 hours of practicum experience focusing on the PK-4 grade population under the guidance of a certified school nurse. Prereq: Current unencumbered RN License

Simple Requirements

Course Prerequisites

Type
Prerequisite

Current Unencumbered RN License

Must have a current, unencumbered RN License.

NURS611 - School Nursing: Grades 5-12 Practicum

Course Information

Course Title
School Nursing: Grades 5-12 Practicum

Subject code	Course Number	Academic Level
NURS	611	Graduate

Course Description
In this course, the focus is on the role of the school nurse in caring for students in grades 5-12. There is an emphasis on the nursing process as it is applied to the school age population while considering acute, chronic, and episodic illness and the overall healthcare needs of the 5-12 grade school population including those with special health needs, disabilities, diverse cultures, and English Language Learners. The physical, emotional, psychosocial, and developmental needs of the 5-12 grade age population are explored. Interprofessional collaboration within the school nurse role in the middle and high school setting is examined. This course provides 50 of the required 100 hours of practicum experience focusing on the 5-12 grade population under the guidance of a certified school nurse. Prereq: Current unencumbered RN License

Simple Requirements

Course Prerequisites

Type
Prerequisite

Current Unencumbered RN License

Must have a current, unencumbered RN License.

NURS612 - School Nursing: Health Promotion and Disease Prevention

Course Information

Course Title
School Nursing: Health Promotion and Disease Prevention

Subject code	Course Number	Academic Level
NURS	612	Graduate

Course Description
This course focuses on the school nurse's role in promotion of health in individuals and the school community with an emphasis on vulnerable populations. The integration of evidence-based practice and epidemiological approaches to promote consistent and equitable care for individuals and diverse populations in school communities is explored.

NURS613 - School Nursing: Considerations for the Needs of Diverse Learners and English Language Learners

Course Information

Course Title
School Nursing: Considerations for the Needs of Diverse Learners and English Language Learners

Subject code	Course Number	Academic Level
NURS	613	Graduate

Course Description
This course focuses on the legal mandates of school nursing and how these laws affect the certified school nurse. There is an emphasis on the special health needs of children in the school setting and the nurse's role in identifying health and health education related accommodations and adaptations for diverse learners in order to support student health and promote optimal learning.

NURS625 - Clinical Management of Pediatric and Female Populations

Course Information

Course Title
Clinical Management of Pediatric and Female Populations

Subject code	Course Number	Academic Level
NURS	625	Graduate

Course Description
Provides the family nurse practitioner student with the necessary knowledge and clinical experience to assist young families, pediatric and female patients. Assessment, diagnostic reasoning and care management plans are foundational in guiding health promotion and prevention but also caring for both chronic and acute health problems. The biophysical, cognitive, and psychosocial development of members of the young family is explored. The role of the family nurse practitioner in caring for the young family is identified.

Simple Requirements

NURS 511, 512, and 513

Type
Prerequisite

Complete ALL of the following :

NURS626 - Clinical Management of Adult and Geriatric Populations

Course Information

Course Title
Clinical Management of Adult and Geriatric Populations

Subject code	Course Number	Academic Level
NURS	626	Graduate

Course Description
Provides the family nurse practitioner student with the necessary knowledge and clinical experience to assist adults and older adults/geriatric population with health promotion and chronic and acute health problems. The unique biophysical, cognitive, and psychosocial needs of adults are explored. The role of the family nurse practitioner in caring for adults and older adults/geriatric population is identified

Simple Requirements

NURS 511, 512, and 513

Type
Prerequisite

Complete ALL of the following :

NURS 625

Type
Prerequisite

NURS627 - Clinical Management of Vulnerable Populations and Transition to Practice

Course Information

Course Title
Clinical Management of Vulnerable Populations and Transition to Practice

Subject code	Course Number	Academic Level
NURS	627	Graduate

Course Description
Provides the family nurse practitioner student with the necessary knowledge and clinical experience to assist vulnerable populations with health promotion and chronic and acute health problems. The unique biophysical, cognitive, and psychosocial needs of various unique populations are explored. A special focus on population level health is included. As the final clinical course, additional focus on domains and competencies of FNP practice as well as strategies for transition to practice

Simple Requirements

NURS 511, 512, and 513

Type
Prerequisite

Complete ALL of the following :

NURS 625 and 626

Type
Prerequisite

NURS630 - Effective Teaching: Theories and Methods in Nurse Ed

Course Information

Course Title
Effective Teaching: Theories and Methods in Nurse Ed

Subject code	Course Number	Academic Level
NURS	630	Graduate

Course Description
Educational theories and methods are explored in this course. The advantages and challenges of technology-based teaching and learning are presented. Past and future trends in education are discussed. Theory and research findings about the learning process, the nature of the learner and the goals of instruction are discussed.

NURS631 - Measurement and Evaluation in Nurse Education

Course Information

Course Title
Measurement and Evaluation in Nurse Education

Subject code	Course Number	Academic Level
NURS	631	Graduate

Course Description
This course introduces the student to the concepts of measurement and evaluation. Techniques in designing instructional objectives and test items are developed. Grading methods and test analysis are explored. The purpose of program evaluation is emphasized.

NURS632 - Nursing Curriculum and Program Design

Course Information

Course Title
Nursing Curriculum and Program Design

Subject code	Course Number	Academic Level
NURS	632	Graduate

Course Description
This course focuses on curriculum foundations, principles and issues. Through investigation and discussion, students learn about curriculum threads and designing effective programs. The importance of organizational mission and priority in relation to program development is emphasized.

NURS633 - Nursing Education Practicum I

Course Information

Course Title
Nursing Education Practicum I

Subject code	Course Number	Academic Level
NURS	633	Graduate

Course Description
This course provides an opportunity to integrate theory and practice through a practicum experience in nursing academic education. Focus is on the role of the nurse educator and the learning environment. Seminars will be conducted to discuss current topics related to nursing academic education. The students will be guided in the practicum by preceptors who are nurse educators in academia. (Prereq: N630; N631, N632)

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 630 and NURS 631 and NURS 632

Complete ALL of the following Courses:

- NURS630 - Effective Teaching: Theories and Methods in Nurse Ed
- NURS631 - Measurement and Evaluation in Nurse Education
- NURS632 - Nursing Curriculum and Program Design

NURS634 - Nursing Education Practicum II

Course Information

Course Title
Nursing Education Practicum II

Subject code	Course Number	Academic Level
NURS	634	Graduate

Course Description
This course provides an opportunity to integrate theory and practice through a practicum experience in nursing professional development. Focus is on the role of the nurse educator and the learning environment. Seminars will be conducted to discuss current topics related to nursing professional development. The students will be guided in the practicum by preceptors who are nurse educators in a professional development role. (Prereq: N630; N631, N632)

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 630 and NURS 631 and NURS 632

Complete ALL of the following Courses:

- NURS630 - Effective Teaching: Theories and Methods in Nurse Ed
- NURS631 - Measurement and Evaluation in Nurse Education
- NURS632 - Nursing Curriculum and Program Design

NURS641 - Advanced Nursing Informatics

Course Information

Course Title
Advanced Nursing Informatics

Subject code	Course Number	Academic Level
NURS	641	Graduate

Course Description
Advanced discussion the role and impact of the nursing informatics specialist. Analysis of the impact on health and safety (QSEN) outcomes, as well as the impact of the human-technology interaction is included. Additional focus on the impact of technological and societal trends on patients and patient outcomes, as well as compliance and regulatory mandates.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS504

Complete ALL of the following Courses:

- NURS504 - Technology, Informatics & Professional Nursing Practice

NURS642 - Healthcare Informatics Systems Analysis and Design

Course Information

Course Title
Healthcare Informatics Systems Analysis and Design

Subject code	Course Number	Academic Level
NURS	642	Graduate

Course Description
Focused on the impacts of knowledge discovery and meta-analysis of data trends to impact healthcare outcomes. Understanding workflow processes, informatics solutions and their interplay are core concepts address. Methods to synthesize knowledge, use decision support and outcomes management to support reimbursement and advanced nursing science are addressed.

NURS643 - Healthcare Project Management

Course Information

Course Title
Healthcare Project Management

Subject code	Course Number	Academic Level
NURS	643	Graduate

Course Description
Examination of the role of design thinking and project management on operational architecture and information management. Consideration of the system life cycle to manage information exchange and accomplish key clinical operations.

NURS644 - Healthcare Data Science and Data Analytics

Course Information

Course Title
Healthcare Data Science and Data Analytics

Subject code	Course Number	Academic Level
NURS	644	Graduate

Course Description
Introduction the principles of data science and data analytics in context of healthcare. Focus on use of data, data visualization, and data analysis to impact and improve patient care outcomes and healthcare workflow processes. Examination spans generation of quality data using common languages through analysis, application, and evaluation.

NURS645 - Practicum in Nursing Informatics

Course Information

Course Title
Practicum in Nursing Informatics

Subject code	Course Number	Academic Level
NURS	645	Graduate

Course Description
This course provides an opportunity to integrate theory and practice through an intensive practicum experience. The practicum provides the opportunity for the nursing informatics student to develop advanced clinical experience within a selected population and/or setting (112 hours of practicum required).

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS641 and NURS642 and NURS643 and NURS644

Complete ALL of the following Courses:

- NURS641 - Advanced Nursing Informatics
- NURS642 - Healthcare Informatics Systems Analysis and Design
- NURS643 - Healthcare Project Management
- NURS644 - Healthcare Data Science and Data Analytics

NURS650 - Nursing Leadership and Administration

Course Information

Course Title
Nursing Leadership and Administration

Subject code	Course Number	Academic Level
NURS	650	Graduate

Course Description
Focused on the integration of the conceptual and theoretical frameworks of leadership into the role of the nurse leader. The role of the nurse leader to support the full spectrum of healthcare is addressed and analyzed . Additional focus on the role of change theory, organizational development, and complex healthcare systems.

NURS651 - Leading Quality and Safety

Course Information

Course Title
Leading Quality and Safety

Subject code	Course Number	Academic Level
NURS	651	Graduate

Course Description
Focused on the role of the nurse leader in advancing the quality of patient care within complex healthcare systems. Investigates the impact of performance and quality improvement on patient safety. Using the guidelines developed by the Quality and Safety Education for Nurses (QSEN), methods to positively impact patient safety and care quality are discussed.

NURS652 - Healthcare Financing and Value-Based Care

Course Information

Course Title
Healthcare Financing and Value-Based Care

Subject code	Course Number	Academic Level
NURS	652	Graduate

Course Description
Focus on the healthcare industrys shift to value-based and risk-based reimbursement. Analysis of the impact of the change on every component of healthcare. Focused on high-value, cost-effective, and evidence-based measures that incorporate innovation, resource stewardship, and systems thinking. Examines new payment models, where reimbursement is tied directly to clinical, organizational, and consumer outcomes.

NURS653 - Leading Others and Organizations

Course Information

Course Title
Leading Others and Organizations

Subject code	Course Number	Academic Level
NURS	653	Graduate

Course Description
Focus on the essential competencies of the nurse leader in relation to communication, conflict management, employee development, and building relationships. Developing a business acumen though use of change management, decision-making strategies, and systems thinking. Additional emphasis on strategic planning, project management, and policy development.

NURS654 - Nursing Leadership Practicum

Course Information

Course Title
Nursing Leadership Practicum

Subject code	Course Number	Academic Level
NURS	654	Graduate

Course Description
Provides an opportunity to integrate theory and practice through an intensive practicum experience. The practicum provides the opportunity for the nursing leadership students to engage in an advanced leadership experience within a selected setting (112 practicum hours required)

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS650 and NURS651 and NURS652 and NURS653

Complete ALL of the following Courses:

- NURS650 - Nursing Leadership and Administration
- NURS651 - Leading Quality and Safety
- NURS652 - Healthcare Financing and Value-Based Care
- NURS653 - Leading Others and Organizations

NURS686 - Topics in Nursing

Course Information

Course Title
Topics in Nursing

Subject code	Course Number	Academic Level
NURS	686	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest in nursing that are not normally covered in regular courses. Topics/methods will vary according to the needs of students and faculty.

NURS687 - Topics in Nursing

Course Information

Course Title
Topics in Nursing

Subject code	Course Number	Academic Level
NURS	687	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest in nursing that are not normally covered in regular courses. Topics/methods will vary according to the needs of students and faculty.

NURS688 - Topics in Nursing

Course Information

Course Title
Topics in Nursing

Subject code	Course Number	Academic Level
NURS	688	Graduate

Course Description
In-depth investigation and development of one or more topics of current interest in nursing that are not normally covered in regular courses. Topics/methods will vary according to the needs of students and faculty.

NURS691 - Ind Stdy Adv Nursing Practice

Course Information

Course Title
Ind Stdy Adv Nursing Practice

Subject code	Course Number	Academic Level
NURS	691	Graduate

Course Description
In-depth approach to an individually structured problem. Focus will vary according to the needsw of students and faculty involved.

NURS698 - Capstone Project

Course Information

Course Title
Capstone Project

Subject code	Course Number	Academic Level
NURS	698	Graduate

Course Description
Capstone project is intended to be innovative, scholarly, and relevant to advanced nursing practice. It is completed under the supervision of an individual faculty member. Taken during last year of MSN curriculum courses.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS502 and NURS521 and NURS522

Complete ALL of the following Courses:

- NURS502 - Research and Evidence-Based Practice Methodology
- NURS521 - Clinical Management of the Young Family
- NURS522 - Clinical Management of the Mature Aging Family

NURS699 - Foundations of Nursing Doctoral Study

Course Information

Course Title
Foundations of Nursing Doctoral Study

Subject code	Course Number	Academic Level
NURS	699	Graduate

Course Description
Prepares students to be disciplined thinkers and effective communicators in order to develop the skills and competencies necessary for success in the DNP role. Emphasize on self-assessment of leadership strengths and emotional intelligence. Specific attention to the important of well-being and self-care for self and others. Guides development of a conceptual framework for the DNP role with a focus on identifying actionable problems in the healthcare setting.

NURS700 - Transformational Leadership for DNPs

Course Information

Course Title
Transformational Leadership for DNPs

Subject code	Course Number	Academic Level
NURS	700	Graduate

Course Description
Emphasizes the roles of the advanced practice nurse as a clinical scholar, clinical expert and as a leader in evidence-based practice and transformation of health care. Theories of leadership, change, transformation, and innovation diffusion are examined. Systems theory, organizational and other mid-level theories are addressed. The interface between ethical and regulatory/legal obligations will be examined.

NURS701 - Health Policy & Healthcare Economics

Course Information

Course Title
Health Policy & Healthcare Economics

Subject code	Course Number	Academic Level
NURS	701	Graduate

Course Description
Emphasizes the roles of the advanced practice nurse as a clinical scholar, clinical expert and as a leader in evidence-based practice and transformation of health care. Evolution and need for doctoral education in nursing is considered. Theories of leadership change and transformation, and innovation diffusion are introduced. Systems theory, organizational and other mid-level theories are addressed. The interface between ethical and regulatory/legal obligations will be examined.

NURS702 - Applied Research

Course Information

Course Title
Applied Research

Subject code	Course Number	Academic Level
NURS	702	Graduate

Course Description
The relationships among basic and applied research, translational science, and evidence-based practice in healthcare settings are examined through this course. Research elements and methods are analyzed with an emphasis on research ethics and reading, interpreting, and evaluating quantitative and qualitative research studies that can be used to inform nursing practice.

Simple Requirements

NURS 700

Type
Prerequisite

NURS703 - Epidemiology and Health Promotion

Course Information

Course Title
Epidemiology and Health Promotion

Subject code	Course Number	Academic Level
NURS	703	Graduate

Course Description
Focus on the integration of evidence-based practice and epidemiological approaches to promote consistent and equitable care for diverse populations. Data will be critically analyzed to identify barriers to equitable quality healthcare. Analyze epidemiological, biostatistical, occupational, and environmental data in the development, implementation, and evaluation of clinical prevention and population health. Additional focus will be placed on underserved populations, social determinants of health, and environmental health concerns.

NURS704 - Complex Health Care Systems

Course Information

Course Title
Complex Health Care Systems

Subject code	Course Number	Academic Level
NURS	704	Graduate

Course Description
Focus on the major theories and approaches to sustainable healthcare business practices. Key areas of interest include application of organizational theory and consideration of organizational culture. Focus on quality improvement and ensuring patient safety, with an emphasis on outcome indicators and the relationship among processes, outcomes and costs.

NURS705 - Evidence-Based Practice Process

Course Information

Course Title
Evidence-Based Practice Process

Subject code	Course Number	Academic Level
NURS	705	Graduate

Course Description
Focuses on developing the necessary skills needed for applying EBP processes within the context of a practice setting, health care organization, or community. Provides the foundation for the DNP Capstone experience. Emphasis on the scholarly, systematic evidenced-based practice approach to problem-solving. The relationship between nursing interventions and patient outcomes is examined and opportunities for improvement are sought.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 702

Complete ALL of the following Courses:

- NURS702 - Applied Research

NURS706 - Statistical Methods

Course Information

Course Title
Statistical Methods

Subject code	Course Number	Academic Level
NURS	706	Graduate

Course Description
Exploration of statistical methods commonly used by advanced practice nurses to understand human health patterns. Descriptive and inferential statistics are applied through the use of statistical software packages and manipulation of datasets. Appraisal of appropriateness of research methods and techniques is included.

NURS707 - Scholarly Project Design Seminar

Course Information

Course Title
Scholarly Project Design Seminar

Subject code	Course Number	Academic Level
NURS	707	Graduate

Course Description
Focus is on the design and defense of the student's proposed capstone project. Integration of foundational courses to develop, design and successful defend the proposed capstone project. Seminar style allows for increased interaction with faculty advisors and course peers. 3 cr; 1 cr lecture 2 cr (110 hours) clinical.

NURS708 - Informatics and Data Management

Course Information

Course Title
Informatics and Data Management

Subject code	Course Number	Academic Level
NURS	708	Graduate

Course Description
Design, select, and use information systems/technology to evaluate programs of care, outcomes of care, and care systems. Examine how information systems/technology provide a mechanism to apply budget and productivity tools, practice information systems and decision supports, and web-based learning or intervention tools to support and improve patient care.

NURS709 - Scholarly Project Design and Implementation

Course Information

Course Title
Scholarly Project Design and Implementation

Subject code	Course Number	Academic Level
NURS	709	Graduate

Course Description
Focus is on the design, defense, and implementation of the student's scholarly project. Integration of foundational courses to develop, design and successfully defend the proposed scholarly project. Students also engage in implementation of the scholarly project, as well as collection of specified outcome measures. Students will engage in their select area of practice to enact the previously approved scholarly project. Taught via independent instruction with the assigned project advisor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 705

Complete ALL of the following Courses:
- NURS705 - Evidence-Based Practice Process

NURS710 - Transforming Healthcare

Course Information

Course Title
Transforming Healthcare

Subject code	Course Number	Academic Level
NURS	710	Graduate

Course Description
This culminating course reflects the student's ability to assume a leadership role, employ effective communication and collaboration skills, evaluate practice, and successfully negotiate transformational change in the healthcare setting. Special attention is paid to the theoretical underpinnings and the broader implications of the capstone projects.

NURS711 - Scholarly Evidence-Based Practice Evaluation and Dissemination

Course Information

Course Title
Scholarly Evidence-Based Practice Evaluation and Dissemination

Subject code	Course Number	Academic Level
NURS	711	Graduate

Course Description
Focus is on the evaluation and completion of the student's scholarly project, including statistical analysis of the specified outcome measures. Analysis and application of the findings in the context of the greater healthcare system is essential. Emphasis on dissemination of results and sustainability of project. Taught via independent instruction with the assigned project advisor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

NURS 709

Complete ALL of the following Courses:
- NURS709 - Scholarly Project Design and Implementation

NURS712 - Foundation of Nursing Education

Course Information

Course Title
Foundation of Nursing Education

Subject code	Course Number	Academic Level
NURS	712	Graduate

Course Description
Focus on developing and refining knowledge and skills associated with teaching at a college or university. Focus on the purpose and structure of higher education, process of preparing and managing a course, the teaching strategies to achieve student learning outcomes, methods for assessing student learning outcomes, and the work of a faculty member beyond teaching responsibilities (teaching, scholarship, and service).

NURS786 - Topics: Clin Adv Doct Nsg Prac

Course Information

Course Title
Topics: Clin Adv Doct Nsg Prac

Subject code	Course Number	Academic Level
NURS	786	Graduate

Course Description
In-depth clinical practice in the current interest or need in advanced nursing which are not normally covered in regular courses. This clinical topics course will vary according to the needs of students and faculty involved.

NURS787 - Topic Adv Doct Nsg Pract

Course Information

Course Title
Topic Adv Doct Nsg Pract

Subject code	Course Number	Academic Level
NURS	787	Graduate

Course Description
In depth investigation and development of one or more topics of current interest in advanced nursing which are not normally covered in current courses. Special topics to be covered and methods used will vary according to the needs of students and faculty involved.

NURS791 - Ind Stdy: Doct Nurs Practice

Course Information

Course Title
Ind Stdy: Doct Nurs Practice

Subject code	Course Number	Academic Level
NURS	791	Graduate

Course Description
In-depth approach to an individually structured problem. Focus will vary according to the needs of students and faculty involved.

NURS799 - Appl Supervsn:Schl Hlth Srvcs

Course Information

Course Title
Appl Supervsn:Schl Hlth Srvcs

Subject code	Course Number	Academic Level
NURS	799	Graduate

Course Description
Provides field experiences in a school setting, with emphasis on the comprehensive role of school health services supervision, methods for personnel evaluation, observing and supervising school health personnel budget, staff in-service development, health curriculum evaluation, and school health program assessment/revision and community relations. Prereq: EDSU 700, 701 and 703.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDSU 700 and EDSU 701 and EDSU 703

Complete ALL of the following Courses:

- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision

Psychology Department

The Department of Psychology offers a B.A. degree in psychology and behavioral and human services, double majors with sociology and philosophy, a departmental honors program and a selection of elective courses for all Millersville University students. Psychology majors, through departmental advisement, usually plan a program that leads to one of three goals:

1. graduate with a bachelor’s degree and enter the human service field;
2. graduate with a bachelor’s degree and enter the business/industrial field; or
3. graduate with a bachelor’s degree and enter graduate school for advanced study in psychology or related fields.

A minor in psychology is also available to undergraduate students. It provides a general survey of the field and training in psychological research methods.

Some undergraduate psychology courses are open to liberal arts and teacher education students. However, some laboratory, specialized and upper-level courses are open only to psychology majors and minors.

The cooperative education program in psychology is an optional arrangement whereby students combine practical on-the-job experience with their formal classroom instruction. The co-op program is available to all psychology majors who satisfy the departmental admissions requirements. For further information, see Cooperative Education in the Special Academic Opportunities section of this catalog.

Departmental Policies

The Admission to the Major Policy and the Retention in the Major Policy apply to all majors enrolled in the psychology B.A. program.

Admission to the Major Policy

Current students at Millersville University will be permitted to declare psychology as a major only if they have a CGPA of 2.25 or higher, based on at least 15 credit hours, including PSYC 100 General Psychology, and if space is available. Decisions to accept new majors are based in part on space available and hence are competitive based upon previous academic performance, both in psychology courses and overall, and on math preparation. Readmitted students must have a 2.25 or higher CGPA at Millersville University in order to be admitted to the psychology major.

Retention in the Major Policy

At the end of each semester, the psychology department will review the academic performance of its majors. If any student with zero to 59.5 earned credits has a CGPA below 2.0, he/she will be notified by the department that he/she has been placed on probation in the major status for the semester in which notification is made. The department will specify minimal achievement during the probationary semester to continue in the major. If the student is not successful in meeting the requirements during the probationary semester, he/she will be removed from the major.

Students must successfully complete PSYC 211 Principles of Statistics and Experimental Design 1 and two core electives prior to completing 90 credit hours.

Completion of the Major Policy

Students must earn a C- or higher in all required psychology courses as defined in the catalog and curriculum (blue) sheet. The policy currently applies to the 15 credits of coursework required in the major (PSYC 211 Principles of Statistics and Experimental Design 1, PSYC 212 Principles of Statistics and Experimental Design 2 and an Advanced Lab—currently one of PSYC 314 Adv. Lab Cognitive Psychology, PSYC 315 Adv Lab Sensation & Perception, PSYC 316 Adv Lab Learn Beh Analysis, PSYC 327 Adv Lab in Developmental Science) but not to elective courses (core or general) taken to complete their psychology requirements.

Students must complete at least three capstone credits. To be eligible for capstone credits, psychology majors must have earned at least 75 credits and have completed or be enrolled in their advanced laboratory course. The following can be taken for capstone credit:

Course List

Code	Title	Hours
PSYC 454	History and Systems of Psych	3
PSYC 455	Seminar in Psychology	1-3
PSYC 495	Directed Projects in Psych	1-6
PSYC 489	Honors Course	1-4
PSYC 490	Honors Seminar	1
PSYC 499	Departmental Honors	1-4
PSYC 498	Independent Study in Psych	1-4
COOP 300		

Policy Regarding Advanced Placement (AP) Credit in Psychology

Entering students who receive a score of 3 on the Advanced Placement (AP) Examination in Psychology shall be awarded three credits for an elective course designated as a 100-level PSYC course. Entering students who receive a score of 4 or 5 on the AP examination shall be awarded three credits for PSYC 100 General Psychology.

Pass/Fail Restriction on Courses for Psychology Majors and Minors

Psychology majors may not take any psychology courses or any required related courses on a pass/fail basis. Psychology minors may not take any psychology courses on a pass/fail basis.

Policy on Credit Restriction for Developmental Psychology Courses

The psychology department offers three undergraduate developmental psychology courses: PSYC 227 Development of the Child and Adolescent, PSYC 228 Life Span Human Development and PSYC 229 Psychology of Aging. Credit is awarded for any one of the individual courses. Credit is also awarded for the combination of PSYC 227 Development of the Child and Adolescent and PSYC 229 Psychology of Aging, but not for any other combination of developmental psychology courses.

Policy Regarding Cooperative Education and Directed Projects in Psychology

A limit of six s.h. of cooperative education (PSYC 300 Co-Op Ed Experience in Psyc, PSYC 400 Co-Op Ed Experience in Psyc or PSYC 495 Directed Projects in Psych) or any combination of the two may be taken by a student and counted in the psychology major. In unusual circumstances, and with written permission of the student's faculty advisor, the directed projects instructor and the department of psychology's cooperative education advisor, up to six additional s.h. may be taken; however, these credits may not be counted toward the psychology major.

FACULTY LIST
Baker, Jason; Associate Professor College of Education and Human Services B.S., Juniata College, 1999; M.Ed., The Pennsylvania State University, 2002; Ph.D., Regent University, 2008
Banna, Kelly; Associate Professor College of Education and Human Services B.S., James Madison University, 1999; M.S., Auburn University, 2005; Ph.D., Ibid., 2007
Behun, Richard Joseph; Associate Professor College of Education and Human Services B.A., California University of Pennsylvania, 2005; M.S., The University of Pittsburgh School of Law, 2007; M.S.Ed., Duquesne University (School Counseling), 2008; M.S.Ed., Ibid. (School Administration), 2013; Ph.D., Ibid., 2013
Bland, Andrew; Associate Professor College of Education and Human Services B.S., University of Georgia, 2000; M.A., University of West Georgia, 2003; Ph.D., Indiana State University, 2013
Cook, Shaun; Associate Professor College of Education and Human Services B.S., Bridgewater State College, 1996; M.A., Brandeis University, 1999; Ph.D., University of Arizona, 2006
Gallagher, Shawn; Professor College of Education and Human Services B.S., The Pennsylvania State University, 1990; M.A., University of Delaware, 1999; Ph.D., Ibid., 2002
Garner, Nadine; Associate Professor College of Education and Human Services B.M., Westminster Choir College, 1991; M.S., Shippensburg University, 1992; M.Ed., Ibid., 1994; Ed.D., Duquesne University, 2000
Grady, Jessica; Associate Professor College of Education and Human Services B.S., Lebanon Valley College, 2006; M.S., West Virginia University, 2008; Ph.D., Ibid., 2011
MacIntyre, Rachel; Assistant Professor College of Education and Human Services B.S., Bucknell University, 2013; M.S., Old Dominion University, 2017; Ph.D., Ibid., Eastern Virginia Medical School, and Norfolk State University, 2021
Ralston, Alura; Assistant Professor College of Education and Human Services B.A., Temple University 2013; M.A., University of Nebraska-Lincoln 2018; Ph.D. University of Nebraska-Lincoln 2023
Rush, Karena; Professor College of Education and Human Services A.B., Bryn Mawr College, 1991; Ed. M., Harvard University, 1994; M.A., Louisiana State University, 1997; Ph.D., Ibid., 2000
Thyrum, Elizabeth; Associate Professor College of Education and Human Services B.A., Millersville University, 1986; M.S., Rutgers University, 1989; Ph.D., Ibid., 1992
Vredenburg, Debra; Department Chairperson, Associate Professor College of Education and Human Services B.A., Slippery Rock University, 1990; M.A., Ibid., 1992; Ph.D., Ohio University, 1998
Winnick, Joel; Assistant Professor College of Education and Human Services B.A. Susquehanna University 2005; M.Ed., The Pennsylvania State University 2010; Ph.D., The Pennsylvania State University 2014

FACULTY LIST
Zink, Henry H.; Assistant Professor College of Education and Human Services B.S., Fordham University, 2020; M.Ed., Lehigh University, 2022; Ph.D. Ibid, 2026

Programs

School Psychology, Ed.S.

Overview

The Educational Specialist degree (Ed.S.) program in school psychology is a 64-credit graduate course of study, leading to certification in school psychology in the Commonwealth of Pennsylvania. The program is fully approved by the National Association of School Psychology. Upon completion of a specified 30 credit hours of coursework, a Master of Science (M.S.) in Psychology, School Psychology, is awarded. Following successful completion of the program, which includes a 1200-hour internship, the candidate earns an Educational Specialist degree (Ed. S.) and is recommended for certification as a school psychologist to the Pennsylvania Department of Education. Students may also transfer graduate coursework or a master's degree in psychology or a related area into the program. When that is the case, a review of previous work will be conducted to determine which competencies have been met and the remaining program requirements.

Curriculum

Simple Requirements

Major in School Psychology

Type
Completion Requirement

School Psychology Master's Competencies

Fulfill ALL of the following requirements:

Core Competency Examination

Must pass the Core Competency Exam for the School Psychology Program.

AND

Admission to degree candidacy

Students must meet the following requirements for degree candidacy: Pass all core with B- or higher; Pass the Core Competency Exam and Receive a satisfactory evaluation from the psychology department graduate committee.

AND

Required Courses (30 credits)

Complete ALL of the following Courses:

- PSYC530 - Child Development within the Family System
- PSYC612 - Research Design & Statistical Analysis
- PSYC600 - Professional Seminar
- PSYC631 - Psychotherapy and Intervention Skills
- PSYC536 - Applications of Biopsychology
- PSYC547 - Applied Social Psychology
- PSYC540 - Applied Behavior Analysis in a MTSS
- SPED600 - Introduction to Exceptional Education
- READ621 - Foundations of Reading and Writing
- EDUC671 - Curriculum Development in the School

Educational Specialist Coursework

Fulfill ALL of the following requirements:

Required Courses (22 credits)

Complete ALL of the following Courses:

- PSYC671 - Cognitive Achve & Adapt Assess
- PSYC672 - Academic Assess & Intervention in MTSS
- PSYC674 - Assessment of English Language Learners
- PSYC675 - Behavioral Assessment Child/ Adolescent
- PSYC646 - Consultation
- PSYC634 - Child Psychopathology and Intervention
- PSYC685 - Practicum and Seminar in School Psychology

AND

Elective (3 credits)

Complete at least 1 of the following courses:

- GFED670 - Psychology of the Gifted
- ECED611 - Affectve and Psychmtr Emphasis

- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment
- EDFN545 - Advanced Educational Psychology
- EDFN590 - Social Foundation of Educ
- EDFN604 - Education and Public Policy
- PSYC517 - Tests and Measurements
- PSYC527 - Childhood Disorders
- PSYC537 - Ethics and Professional Practice
- PSYC630 - Group Work: Theory & Intervention
- PSYC633 - Systems of Psychotherapy
- PSYC635 - Psychopathology
- PSYC637 - Theories of Family Dynamics
- PSYC638 - Cognitive Behavioral Therapies
- PSYC699 - Thesis:
- SCCO630 - Multicultural Counseling
- SCCO657 - Brief Counseling
- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities

AND

Internship and Seminar in School Psychology (9 credits)

Earn at least 9 credits from the following:

- PSYC686 - Internship and Seminar in School Psychology

School Counseling, M.Ed.

Overview

This is a 54-s.h. post-baccalaureate program. Upon completion of specified coursework (42 s.h.) in the program, the student is awarded a Master of Education degree in school counseling. Following successful completion of the remaining coursework and fieldwork, the student is certified as a preK-12 school counselor in the Commonwealth of Pennsylvania.

In order to be considered for an interview, applicants are required to have a minimum of six semester hours in undergraduate or graduate psychology. Applicants must also be computer literate.

Prerequisite courses in psychology may be in process during the semester in which application to the program is submitted. In this case, evidence that the coursework is currently being taken (either in the form of a mid-semester grade report or a letter from the instructor) must be submitted with the program application. In addition, experience with children in applied settings is preferred.

Master of Education in School Counseling

1. Provisional acceptance
2. All coursework completed and School Counseling Competency Project passed
3. Pre-internship portfolio completed
4. Recommendation of graduate faculty
5. Admission to degree candidacy

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Requirements

Complete at least 3 of the following:

Methd of Resrch or Resrch Design & Stat Analysis (3 credits)

Complete at least 1 of the following courses:

- EDFN601 - Research Methods

- PSYC612 - Research Design & Statistical Analysis

OR

Psychological Core Requirement (3 credits)

Complete at least 1 of the following courses:

- PSYC625 - Human Growth and Development

OR

Complete at least 1 of the following courses:

- PSYC537 - Ethics and Professional Practice
- SCCO625 - Ethics School Counseling

Major in School Counseling -MED (33 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Phase I: Core (15 credits)

Complete ALL of the following Courses:

- SCCO525 - Intro to Professional School Counseling
- PSYC530 - Child Development within the Family System
- SCCO612 - Study Of the Individual
- SCCO621 - Counseling Theory and Practice I
- SCCO645 - Career Development

AND

Phase II (12 credits)

Complete ALL of the following Courses:

- SCCO622 - Group Procedures in Counseling
- SCCO630 - Multicultural Counseling
- SCCO631 - Appraisal Techniques for Guidance Purposes
- SCCO651 - Theory and Practice 2

AND

Phase III (6 credits)

Complete ALL of the following Courses:

- SCCO657 - Brief Counseling
- SCCO671 - Guidance Program Development

Certification in School Counseling (12 credits)

Type
Completion Requirement

Certification Requirements

Complete ALL of the following Courses:

- PSYC540 - Applied Behavior Analysis in a MTSS
- SPED600 - Introduction to Exceptional Education
- SCCO665 - School Counseling Practicum
- SCCO675 - Internship 1: School Counseling

Additional Comments:
These requirements must be completed to be eligible for School Counseling Certification from the PA Dept of Education.

Licensure Eligibility in Counseling (6 credits)

Type
Completion Requirement

Elective Requirement (3 credits)

Complete at least 1 of the following courses:

- SCCO586 - Topics In Counselor Education

Internship 2: School Counseling or Supervised Experience in Higher Education and Community Agencies (3 credits)

Earn at least 3 credits from the following:

- SCCO676 - Internship 2: School Counselng
- SCCO641 - Internship: Higher Ed & Comm

Additional Comments:
These requirements must be completed to be eligible for

licensure as a licensed professional counselor (LPC)

Psychology/Clinical Psychology, M.S

Overview

The clinical program is designed for students who wish to pursue a career in mental health, functioning as counselors and clinicians. It also prepares students for further graduate study. It emphasizes the development of assessment and psychotherapeutic skills through coursework and supervised experience with clients in the department's training clinic, and through internships in local mental-health agencies and hospitals. Students wishing to pursue licensure as a professional counselor after graduation are advised to complete the clinical program with the following courses, which may be helpful when taking the National Counselor Exam (NCE): SCCO630 Multicultural Counseling Multicultural Counseling; SCCO645 Career Development Career Development; and PSYC537 Ethics & Professional Practice Ethics and Professional Practice. Students are advised to obtain 60 graduate credits in order to meet educational requirements for licensure.

Curriculum

Simple Requirements

Major in Psychology - Clinical

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Competency Examination

Must pass the Core Competency Exam for the Clinical Psychology Program.

AND

Clinical Core (9 credits)

Complete ALL of the following Courses:

- PSYC530 - Child Development within the Family System
- PSYC612 - Research Design & Statistical Analysis
- PSYC635 - Psychopathology

AND

Therapy/Assessment

Fulfill ALL of the following requirements:

Passed CCE Sections

Must pass all sections of the CCE before enrolling in Assessment courses. Insurance required.

AND

Group Counseling/Psychotherapy or Group Process/Personality (3 credits)

Complete at least 1 of the following courses:

- PSYC630 - Group Work: Theory & Intervention
- PSYC632 - Group Cnslng and Psychotherapy

AND

Required Courses (7 credits)

Complete ALL of the following Courses:

- PSYC631 - Psychotherapy and Intervention Skills
- PSYC670 - Clinical Interviewing and Appraisal Skills

AND

Selected Therapies

Complete at least 2 of the following courses:

- PSYC587 - Topics in Psychology
- PSYC632 - Group Cnslng and Psychotherapy
- PSYC634 - Child Psychopathology and Intervention
- PSYC630 - Group Work: Theory & Intervention
- PSYC638 - Cognitive Behavioral Therapies
- PSYC639 - Selected Therapies: Existential and Humanistic Therapies

Must select two different therapies. One therapy course must be completed before enrolling in internship.

AND

Licensure Required (12 credits)

Complete ALL of the following Courses:

- PSYC537 - Ethics and Professional Practice
- PSYC625 - Human Growth and Development
- SCCO630 - Multicultural Counseling
- SCCO645 - Career Development

AND

Electives (5-10 credits)

Complete at least 3 of the following courses:

- PSYC515 - Physiological Psychology
- PSYC517 - Tests and Measurements
- PSYC526 - Advanced Adolescent Psychology
- PSYC527 - Childhood Disorders
- PSYC536 - Applications of Biopsychology
- PSYC540 - Applied Behavior Analysis in a MTSS
- PSYC547 - Applied Social Psychology
- PSYC586 - Topics in Psychology
- PSYC633 - Systems of Psychotherapy
- PSYC634 - Child Psychopathology and Intervention
- PSYC637 - Theories of Family Dynamics
- PSYC671 - Cognitive Achve & Adapt Assess
- PSYC696 - Research Methods in Psychology
- PSYC699 - Thesis:
- PSYC679 - Experimental
- SCCO586 - Topics In Counselor Education

AND

Internship (1 credit)

Complete ALL of the following Courses:

- PSYC682 - Practicum/Internship in Clinical/ Counseling Psychology

Practicum/Internship starts in Fall semester and continues into winter and through spring semester.

A minimum of 700 hours in the field is required.

Requirements for LPC (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Master of Science in Psychology

See separate block

AND

Required Courses (12 credits)

Complete ALL of the following Courses:

- PSYC537 - Ethics and Professional Practice
- PSYC625 - Human Growth and Development
- SCCO630 - Multicultural Counseling
- SCCO645 - Career Development

AND

Electives (6 credits)

Earn at least 6 credits from the following:

- PSYC505 - Recent Developments in Psych
- PSYC511 - Substance-Related Disorders
- PSYC515 - Physiological Psychology
- PSYC517 - Tests and Measurements
- PSYC526 - Advanced Adolescent Psychology
- PSYC536 - Applications of Biopsychology
- PSYC547 - Applied Social Psychology
- PSYC586 - Topics in Psychology
- PSYC632 - Group Cnslng and Psychotherapy
- PSYC633 - Systems of Psychotherapy
- PSYC634 - Child Psychopathology and Intervention
- PSYC636 - Cognitive Therapy
- PSYC637 - Theories of Family Dynamics
- PSYC638 - Cognitive Behavioral Therapies
- PSYC646 - Consultation
- PSYC674 - Assessment of English Language Learners
- PSYC691 - Ind Stdy:
- PSYC696 - Research Methods in Psychology
- PSYC699 - Thesis:
- PSYC679 - Experimental
- SCCO657 - Brief Counseling

Additional Comments:
Requirements for LPC

Psychology/School Psychology, M.S.

Overview

The Master's Degree in Psychology program (M.S.) is a 30-credit graduate course of study, which is required for admission into the Education Specialist (Ed.S.) Program in School Psychology. The M.S. program will provide the foundational theories, knowledge, and research methods of psychology, which will serve as a base for the Ed.S. in School Psychology. The program is fully approved by the National Association of School Psychology. Upon completion of the specified 30 credit hours of coursework, a M.S. in Psychology, School Psychology, is awarded. This M.S. degree in Psychology, School, does not certify the candidate for practice as a school psychologist in public schools. Following successful completion of the M.S. program, candidates continue to earn 34 additional credits, which includes a 1200-hour internship. The candidate then earns an Ed.S. in School Psychology and is recommended for certification as a school psychologist to the Pennsylvania Department of Education. Students may also transfer graduate coursework or a master's degree in psychology or a related area into the program. When that is the case, a review of previous work will be conducted to determine which competencies have been met and the remaining program requirements.

Curriculum

Simple Requirements

Major in Psychology - School Psychology (30 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Core Competency Examination

Must pass the Core Competency Exam for the School Psychology Program.

AND

Required Courses (30 credits)

Complete ALL of the following Courses:

- PSYC530 - Child Development within the Family System
- PSYC612 - Research Design & Statistical Analysis
- PSYC600 - Professional Seminar
- PSYC631 - Psychotherapy and Intervention Skills
- PSYC536 - Applications of Biopsychology
- PSYC547 - Applied Social Psychology
- PSYC540 - Applied Behavior Analysis in a MTSS
- SPED600 - Introduction to Exceptional Education
- READ621 - Foundations of Reading and Writing
- EDUC671 - Curriculum Development in the School

Behavioral Health and Counseling Graduate Certificate

Overview

The certificate provides a clear pathway for post-baccalaureate students to navigate foundational coursework necessary for the development of counseling skills in behavioral health and school settings. The selected courses in the certificate program represent an array of topics including observation and measurement of behaviors, growth and development over the lifespan, the assessment, treatment, and prevention of maladaptive behaviors, and the process and practice of counseling.

Curriculum

Simple Requirements

Behavioral Health & Counseling - Post-Bacc Cert (19 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (13 credits)

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- PSYC211 - Principles of Statistics and Experimental Design 1
- PSYC337 - Abnormal Psychology
  OR PSYC337H - H:Abnormal Psychology
- PSYC447 - Counseling Strategies
  OR PSYC447H - Hon: Counseling Strategies

AND

Development or Lifespan (3 credits)

Complete at least 1 of the following courses:

- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
- PSYC228 - Life Span Human Development
- PSYC229 - Psychology of Aging

AND

Electives (3 credits)

Complete ALL of the following Courses:

- PSYC215 - Intro to Physiological Psychology
- PSYC311 - Psychology of Drug Addiction
  OR PSYC311H - H:Psychology of Drug Addiction
- PSYC317 - Social Psychology
  OR PSYC317H - HNRS: Social Psychology
- PSYC335 - Personality Theory
  OR PSYC335H - H:Personality Theory
- PSYC346 - Applied Behavior Analysis
  OR PSYC346H - H: Applied Behavior Analysis
- PSYC403 - Family Systems
- PSYC427 - Childhood Disorders
  OR PSYC427H - Hon: Childhood Disorders

School Counseling, Post-Masters Certification

Overview

This is a 15 credit post-master's certification program. For applicants who already hold a master’s degree in a counseling field (i.e., clinical mental health counseling or rehabilitation counseling), fewer courses are required to complete the school counseling certification track at a faster pace. The certification track is not an option for students who do not already hold a master’s degree. Following successful completion of the remaining coursework and fieldwork, the student is certified as a preK-12 school counselor in the Commonwealth of Pennsylvania.

Curriculum

Simple Requirements

Post-Masters Certification in School Counseling (15 credits)

Type
Completion Requirement

Certification Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- PSYC540 - Applied Behavior Analysis in a MTSS
- SPED600 - Introduction to Exceptional Education
- SCCO525 - Intro to Professional School Counseling
- SCCO671 - Guidance Program Development
- SCCO675 - Internship 1: School Counseling

Complete ALL of the following :

Additional Comments:
In addition to having completed the MED in School Counseling with practicum experience or a Licensure Eligible program of study, these requirements must be completed to be eligible for School Counseling Certification from the PA Dept of Education.

Psychology Minor

Overview

A minor in psychology provides students with an introduction to the foundational principles of human behavior and research methods in psychology. Students who are interested in the minor should know that some courses require successful completion of prerequisites (i.e., PSYC and MATH courses) and to consult with their advisor before applying to the minor.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Psychology

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (7 credits)

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- PSYC211 - Principles of Statistics and Experimental Design 1

AND

Psychology Electives (12 credits)

Choose a minimum of 4 courses/12 credits of Psychology electives in consultation with your Psychology minor advisor. At least two courses must be on the 300-400 level. Search the web schedule for current courses. PSYC 1XX from AP credit may not be counted as it is considered a lower-level duplicate of PSYC 100 which is required.

Behavioral and Human Services, B.A.

Overview

The Behavioral and Human Services (BA) is designed for students who desire to improve the quality of life for others in applied settings, such as nonprofits, community programs, behavioral health and healthcare systems, educational support services, counseling and social services, and other client-focused agencies and government settings. The degree prepares graduates for a breadth of human services occupations. The program provides an interdisciplinary curriculum with a strong behavioral foundation grounded in psychological principles and theory. The degree requires 40 credit hours of interdisciplinary coursework including a capstone field experience and 9 credit hours (total) in required related courses in anthropology, communications and sociology.

Curriculum

Simple Requirements

Major in Behavioral and Human Services, BA (40 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirements

- Behavioral and Human Services Major Credits
- Behavioral and Human Services Residency Credits
- Behavioral and Human Services GPA

AND

Overview of Behavioral Core (7 credits)

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
  OR PSYC101 - Introduction to Psychological Science
- PSYC211 - Principles of Statistics and Experimental Design 1
  OR PSYC212 - Principles of Statistics and

Experimental Design 2

AND

Required Courses

Fulfill ALL of the following requirements:

Child, Adult or Lifespan Developmental (3 credits)

Complete at least 1 of the following courses:

- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
- PSYC228 - Life Span Human Development
- PSYC229 - Psychology of Aging

AND

Additional Courses (12 credits)

Complete ALL of the following Courses:

- PSYC447 - Counseling Strategies
  OR PSYC447H - Hon: Counseling Strategies
- PSYC329 - Industrial Psychology
  OR PSYC329H - Hon: Industrial Psychology
- PSYC335 - Personality Theory
  OR PSYC335H - H:Personality Theory
- PSYC346 - Applied Behavior Analysis
  OR PSYC346H - H: Applied Behavior Analysis

AND

Social Psychology or Psychology of Racism (3 credits)

Complete at least 1 of the following courses:

- PSYC317 - Social Psychology
  OR PSYC317H - HNRS: Social Psychology
- PSYC318 - Psychology of Racism
  OR PSYC318H - H:Psychology of Racism

AND

Abnormal Psychology or Health Psychology (3 credits)

Complete at least 1 of the following courses:

- PSYC337 - Abnormal Psychology
  OR PSYC337H - H:Abnormal Psychology
- PSYC356 - Health Psychology

AND

Required Electives (9 credits)

Earn at least 9 credits from the following:

- BIOL100 - General Biology
- BUSN101A - Introduction to Business
- BUSN101B - Introduction to Business
- EHEM201 - Introduction to Emergency Management
- PSYC256 - Psychology Human Adjustment
  OR PSYC256H - Hon: Psychology Human Adjustment
- PSYC311 - Psychology of Drug Addiction
  OR PSYC311H - H:Psychology of Drug Addiction
- PSYC317 - Social Psychology
  OR PSYC317H - HNRS: Social Psychology
- PSYC318 - Psychology of Racism
  OR PSYC318H - H:Psychology of Racism
- PSYC325 - Happiness and Well-Being
  OR PSYC325H - Happiness and Well-Being
- PSYC337 - Abnormal Psychology
  OR PSYC337H - H:Abnormal Psychology
- PSYC356 - Health Psychology
- PSYC400 - Co-Op Ed Experience in Psyc
- PSYC403 - Family Systems
- PSYC427 - Childhood Disorders
  OR PSYC427H - Hon: Childhood Disorders
- SOWK102 - Modern Social Welfare Dilemmas
- SOWK304 - Sowk, Corrections & Alt Trmnt
- SOWK306 - Social Work and Aging
- SOWK208 - Substance Use Disorders: Effective Interventions
- SOCI210 - Sociology of the Family

- SOCI211 - Social Problems
  OR SOCI211H - H:Social Problems
- SOCI230 - Criminology
  OR SOCI230H - Hon: Criminology
- SOCI317 - Medical Sociology
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology
- SOCI331 - Sociology of Policing & Courts

AND

Capstone Field Experience (3 credits)

Earn at least 3 credits from the following:

- PSYC495 - Directed Projects in Psych
- PSYC300 - Co-Op Ed Experience in Psyc

Req Related for Behavioral and Human Services (9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirement

Required Related Credits

AND

Required Courses (6 credits)

Complete ALL of the following Courses:

- ANTH121 - Cultural Anthropology
- COMM217 - Interpersonal Communication
  OR COMM317 - Intercultural Communication

AND

Sociology Course (3 credits)

Complete at least 1 of the following courses:

- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI210 - Sociology of the Family
- SOCI211 - Social Problems

OR SOCI211H - H:Social Problems

Psychology, B.A.

Overview

Millersville University's Psychology BA prepares students to be well versed in many aspects of psychology, qualifying them for graduate school or a job in an incredibly diversified field. The program exposes students to both the humanistic and the more traditional experimental approaches to the study of behavior. Curriculum flexibility allows psychology majors to prepare for graduate training in psychology and related fields, or for employment in a variety of human service or business and industrial areas. Through learning experiences in and out of the classroom, our undergraduate program prepares students who are well-versed in psychological theories and scientific methodologies and who demonstrate cultural sensitivity and embrace a variety of points of view.

Curriculum

Simple Requirements

Major in Psychology, BA (29-39 credits)

Type
Completion Requirement

Requirements

- Credits Required for Major
- Minimum Residency 50% of Major credits
- You must successfully complete two required courses and two core electives prior to completing 90 credits hours to be retained in the PSYC major

Minimum GPA

Earn a minimum GPA of 2.0

Requirements

Fulfill ALL of the following requirements:

Overview of Psychology (3 credits)

Earn a minimum grade of C- in the following:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

AND

Methods in Psychology (8 credits)

Earn a minimum grade of C- in the following:

- PSYC211 - Principles of Statistics and Experimental Design 1
- PSYC212 - Principles of Statistics and Experimental Design 2

PSYC211 Statistics and Exper Design 1 must be successfully completed prior to completing 90 credits hours to be retained in the PSYC Major.

AND

Advanced Laboratory Course (4 credits)

Earn a minimum grade of C- in the following:

- PSYC314 - Adv. Lab Cognitive Psychology
- PSYC315 - Adv Lab Sensation & Perception
- PSYC316 - Adv Lab Learn Beh Analysis
- PSYC327 - Adv Lab in Developmental Science

AND

Psychology Core Electives (9-15 credits)

Complete at least 4 of the following courses:

- PSYC215 - Intro to Physiological Psychology
- PSYC216 - Intro Learn Beh Analysis
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
- PSYC228 - Life Span Human Development
- PSYC229 - Psychology of Aging
- PSYC314 - Adv. Lab Cognitive Psychology
- PSYC315 - Adv Lab Sensation & Perception
- PSYC316 - Adv Lab Learn Beh Analysis
- PSYC317 - Social Psychology
  OR PSYC317H - HNRS: Social Psychology
- PSYC327 - Adv Lab in Developmental Science
- PSYC329 - Industrial Psychology
  OR PSYC329H - Hon: Industrial Psychology

- PSYC335 - Personality Theory
  OR PSYC335H - H:Personality Theory
- PSYC337 - Abnormal Psychology
  OR PSYC337H - H:Abnormal Psychology
- PSYC356 - Health Psychology
- PSYC417 - Tests and Measurements
- PSYC454 - History and Systems of Psych

PSYC227 Devlopmnt Child and Adolescent and PSYC229 Psychology of Aging may both be taken for credit and however and both are equivalent to PSYC228 Life Span Human Devlopment and so credit will not be given for either of these courses in combination with PSYC228 Life Span Human Devlopment. Only one of these courses may count as a Core Elective.

AND

Psychology General Electives (6 credits)

Earn at least 6 credits from the following:

- PSYC205 - Psychology Misconceptions
- PSYC234 - Human Relations
- PSYC246 - Evolutionary Psychology
- PSYC256 - Psychology Human Adjustment
  OR PSYC256H - Hon: Psychology Human Adjustment
- PSYC311 - Psychology of Drug Addiction
  OR PSYC311H - H:Psychology of Drug Addiction
- PSYC318 - Psychology of Racism
  OR PSYC318H - H:Psychology of Racism
- PSYC326 - Human-Animal Bond
- PSYC328 - Psycholgy and Religion
- PSYC346 - Applied Behavior Analysis
  OR PSYC346H - H: Applied Behavior Analysis
- PSYC350 - Cognitive Science
  OR PSYC350H - H: Cognitive Science
- PSYC357 - Neuropsychology
  OR PSYC357H - Hon: Neuropsychology
- PSYC365 - Human Memory
- PSYC403 - Family Systems
- PSYC415 - Advanced Physiological Psych
- PSYC427 - Childhood Disorders
  OR PSYC427H - Hon: Childhood Disorders
- PSYC447 - Counseling Strategies
  OR PSYC447H - Hon: Counseling Strategies
- PSYC455 - Seminar in Psychology
- PSYC462 - Art, Music and Written Word
  OR PSYC462H - Hon: Art, Music and Written Word
- PSYC489 - Honors Course
- PSYC490 - Honors Seminar
- PSYC495 - Directed Projects in Psych
- PSYC496 - Topics In Psychology
- PSYC498 - Independent Study in Psych
- PSYC499 - Departmental Honors
- PSYC300 - Co-Op Ed Experience in Psyc
- PSYC400 - Co-Op Ed Experience in Psyc

Credit may only be received for one of the three courses: PSYC314 Adv. Lab Cognitive Psychology, PSYC350 Cognitive Science or CMSC350 Cognitive Science. A maxiumum of 6 credits in PSYC 495 and/or Cooperative Education may be taken and counted toward Psychology major requirements.

AND

Psychology Capstone Course (3 credits)

Earn a minimum grade of C- in the following:

- PSYC454 - History and Systems of Psych
- PSYC455 - Seminar in Psychology
- PSYC495 - Directed Projects in Psych
- PSYC489 - Honors Course
- PSYC490 - Honors Seminar
- PSYC498 - Independent Study in Psych
- PSYC499 - Departmental Honors
- PSYC300 - Co-Op Ed Experience in Psyc

Majors must complete 3 credits of PSYC capstone credits. Majors must have completed 75 total credits and have completed or be enrolled in their Psychology Advanced Lab course prior to enrolling in a capstone course. Listed capstone courses taken prior to completing 75 total credits and the Psychology Advanced Lab will count as Core or General Electives (as applicable), not as a capstone.

Req Related for Psychology (9 credits)

Type
Completion Requirement

Requirements

Required Related Credits

Requirements

Fulfill ALL of the following requirements:

Biology (3 credits)

Complete ALL of the following Courses:

- BIOL100 - General Biology

AND

Other Required Related

Fulfill ALL of the following requirements:

Philosophy Course (3 credits)

Complete at least 1 course in the following course sets:

- Any PHIL course(s)

AND

Sociology Course (3 credits)

Complete at least 1 course in the following course sets:

- Any SOCI course(s)

Courses

FYEX100T - FYEX: Psychology

Course Information

Course Title
FYEX: Psychology

Subject code	Course Number	Academic Level
FYEX	100T	Undergraduate

Course Description
First-Year Seminar courses are designed to support students' successful transition to university life. FYEX Psychology is designed for Psychology majors to provide a foundation in psychology concepts that will help prepare them for success in future psychology coursework. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

PSYC100 - General Psychology

Course Information

Course Title
General Psychology

Subject code	Course Number	Academic Level
PSYC	100	Undergraduate

Course Description
An introduction to the study of behavior and mental activity, including such aspects as motivation, emotions, sensation and perception, individual differences, the nervous system, learning and personality with a view of understanding behavior.

Gateway Stage Labels
Personal Wellness (PWEL)

PSYC100H - Hnrs:General Psychology

Course Information

Course Title
Hnrs:General Psychology

Subject code	Course Number	Academic Level
PSYC	100H	Undergraduate

Course Description
Hnrs:General Psychology

Gateway Stage Labels
Personal Wellness (PWEL)

PSYC101 - Introduction to Psychological Science

Course Information

Course Title
Introduction to Psychological Science

Subject code	Course Number	Academic Level
PSYC	101	Undergraduate

Course Description
This introduction of psychological science provides the foundation of modern psychological knowledge essential for all higher-level courses. Topics include the scientific study of behavior and cognitive processing, such as motivation, emotion, sensation and perception, the nervous system, learning, clinical phenomena, and social interactions, with an emphasis on research methodology.

Requisites
Reserved for PSYC majors. No credit for PSYC 101 if PSYC 100 was taken.

PSYC179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PSYC	179	Undergraduate

Course Description
Experimental

PSYC205 - Psychology Misconceptions

Course Information

Course Title
Psychology Misconceptions

Subject code	Course Number	Academic Level
PSYC	205	Undergraduate

Course Description
This course will provide an introduction to the some of the most popular and persistent misconceptions in Psychology. These misconceptions will cut across sub-disciplines within Psychology, to include clinical, cognitive, and social psychology, as a few examples. The origin as of these myths will be explored, as well as how they are seen today in the popular media, in practice, in education, and in research domains. The implications of the myths will also be considered. The course will also address how to effectively combat these myths. Prerequisites: PSYC 100 and ENGL 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC100 or PSYC100H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

PSYC211 - Principles of Statistics and Experimental Design 1

Course Information

Course Title
Principles of Statistics and Experimental Design 1

Subject code	Course Number	Academic Level
PSYC	211	Undergraduate

Course Description
An introduction to research methods and design and to statistical analysis of psychological data. 3 hrs. lec., 2 hrs. lab. Prereq: ENGL 110, PSYC 100 and MATH 101, 105, 204 or 130 with a minimum grade of C- or math placement into MATH 130 or above.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 100 or PSYC 100H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

MATH 101 or MATH 105 or MATH 130 or MATH 160 or MATH 161 or MATH 161H or MATH 163H or MATH 204 or MATH 235

Earn a minimum grade of C- in the following:

- MATH101 - College Algebra
  OR MATH105 - Fundamentals of Math 2
  OR MATH130 - Elements of Statistics 1
  OR MATH160 - Precalculus
  OR MATH161 - Calculus 1
  OR MATH161H - Hon: Calculus 1
  OR MATH163H - Honors Calculus 1
  OR MATH204 - Algebraic Foundations for Mid-Level Teacher
  OR MATH235 - Survey of Statistics

Or Math placement into MATH 130 or above.

PSYC212 - Principles of Statistics and Experimental Design 2

Course Information

Course Title
Principles of Statistics and Experimental Design 2

Subject code	Course Number	Academic Level
PSYC	212	Undergraduate

Course Description
A study of standard experimental designs and statistical procedures widely used in psychological research. 3 hrs. lec., 2 hrs. lab. Prereq: PSYC 211 with a grade of C- or higher and MATH 130 with a grade of C- or higher.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 211 and MATH 130

Earn a minimum grade of C- in the following:

- PSYC211 - Principles of Statistics and Experimental Design 1
- MATH130 - Elements of Statistics 1

PSYC215 - Intro to Physiological Psychology

Course Information

Course Title
Intro to Physiological Psychology

Subject code	Course Number	Academic Level
PSYC	215	Undergraduate

Course Description
Serves as an introduction to the nervous systemin relation to cognition and behavior. It will begin at the cellular level, building up to the systems level. Offered fall, spring. Prereq: BPE 100 or BIO 100 or 101 and PSYC 100.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 or BIOL 101 and PSYC 100 or PSYC 100H

Complete ALL of the following Courses:

- BIOL100 - General Biology
  OR BIOL101 - Foundations of Biology
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

PSYC216 - Intro Learn Beh Analysis

Course Information

Course Title
Intro Learn Beh Analysis

Subject code	Course Number	Academic Level
PSYC	216	Undergraduate

Course Description
This course provides an introduction to the field of Behavior Analysis, and covers the basic principles of conditioning, learning, and behavior change derived from the experimental literature. Topics include an introduction to the philosophy of Radical Behaviorism, historical development of the field, single-subject experimental design and data analysis, and principles of respondent and operant conditioning. Prereq: PSYC 100

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC227 - Development of the Child and Adolescent

Course Information

Course Title
Development of the Child and Adolescent

Subject code	Course Number	Academic Level
PSYC	227	Undergraduate

Course Description
A study of the theory and research pertaining to the growth, development and behavior of children through adolescence. Prereq: PSYC 100. No course credit given if credit earned for separate course in child psychology or adolescent psychology. No credit given if credit earned for PSYC 228. PSYC Majors may only count one of PSYC 227, 228 or 229 as a core elective.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC227H - Hnrs:Development of the Child and Adolescent

Course Information

Course Title
Hnrs:Development of the Child and Adolescent

Subject code	Course Number	Academic Level
PSYC	227H	Undergraduate

Course Description
Hnrs:Devel Child and Adolescnt

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:

- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC228 - Life Span Human Development

Course Information

Course Title
Life Span Human Development

Subject code	Course Number	Academic Level
PSYC	228	Undergraduate

Course Description
A focus upon the major stages of human development, beginning with infancy and continuing through the developmental changes of childhood, adolescence and adulthood through to old age and death. Cognitive and psychosocial aspects of human development are emphasized. Offered Periodically. Prereq: ENGL 110 and PSYC 100. No credit given if credit earned for PSYC 227 or 229. PSYC Majors may only count one of PSYC 227, 228 or 229 as a core elective.

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 100 or PSYC 100H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

PSYC229 - Psychology of Aging

Course Information

Course Title
Psychology of Aging

Subject code	Course Number	Academic Level
PSYC	229	Undergraduate

Course Description
An examination of the years of advanced age, beginning with the typical retirement age. Focuses on physical, cognitive and social-emotional development. Offered periodically. Prereq: PSYC 100. No credit given if credit earned for PSYC 228. PSYC Majors may only count one of PSYC 227, 228 or 229 as a core elective.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC234 - Human Relations

Course Information

Course Title
Human Relations

Subject code	Course Number	Academic Level
PSYC	234	Undergraduate

Course Description
An examination of human interactions, both historically and currently, in diverse structures (e.g., family, social, educational, political, economic, etc.). Course content targets increased awareness and understanding of values, traditions and rites of dominant and minority groups and their effect upon interpersonal and intergroup relations. Offered periodically.

PSYC246 - Evolutionary Psychology

Course Information

Course Title
Evolutionary Psychology

Subject code	Course Number	Academic Level
PSYC	246	Undergraduate

Course Description
Reviews evolutionary theory, surveys research and, most importantly, explains how evolutionary psychology can be applied to disciplines with and beyond the field of psychology. Offered periodically. Prereq: BPE 100 or BIOL 100 or 101 and PSYC 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 or BIOL 101 and PSYC 211

Complete ALL of the following Courses:
- BIOL100 - General Biology
  OR BIOL101 - Foundations of Biology
- PSYC211 - Principles of Statistics and Experimental Design 1

PSYC256 - Psychology Human Adjustment

Course Information

Course Title
Psychology Human Adjustment

Subject code	Course Number	Academic Level
PSYC	256	Undergraduate

Course Description
An examination of factors that shape personal and social behavior, with a focus on basic issues, problems and therapies as they relate to personal adjustment. Offered in fall, spring. Prereq: ENGL 110 and PSYC 100.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 100 or PSYC 100H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

PSYC256H - Hon: Psychology Human Adjustment

Course Information

Course Title
Hon: Psychology Human Adjustment

Subject code	Course Number	Academic Level
PSYC	256H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 100 or PSYC 100H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

PSYC279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PSYC	279	Undergraduate

Course Description
Experimental

PSYC300 - Co-Op Ed Experience in Psyc

Course Information

Course Title
Co-Op Ed Experience in Psyc

Subject code	Course Number	Academic Level
PSYC	300	Undergraduate

Course Description
Cooperative Education in Psychology

PSYC311 - Psychology of Drug Addiction

Course Information

Course Title
Psychology of Drug Addiction

Subject code	Course Number	Academic Level
PSYC	311	Undergraduate

Course Description
An investigation of the problems associated with drug addiction. Evaluations of opiates, stimulants, barbiturates, depressants, hallucinogens, marijuana and alcohol, with consideration of the effects of these drugs on the individual. Offered in fall, spring. Prereq: ENGL 110 and PSYC 227 or 228 or 229 or 234.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 227 or PSYC 227H or PSYC 228 or PSYC 229 or PSYC 234

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
  OR PSYC228 - Life Span Human Development
  OR PSYC229 - Psychology of Aging
  OR PSYC234 - Human Relations

PSYC311H - H:Psychology of Drug Addiction

Course Information

Course Title
H:Psychology of Drug Addiction

Subject code	Course Number	Academic Level
PSYC	311H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 227 or PSYC 227H or PSYC 228 or PSYC 229 or PSYC 234

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
  OR PSYC228 - Life Span Human Development
  OR PSYC229 - Psychology of Aging
  OR PSYC234 - Human Relations

PSYC314 - Adv. Lab Cognitive Psychology

Course Information

Course Title
Adv. Lab Cognitive Psychology

Subject code	Course Number	Academic Level
PSYC	314	Undergraduate

Course Description
A laboratory course designed to examine the nature of human memory, perception and thought, and to provide an introduction to the techniques used to study these phenomena. 3 hrs. lec., 2 hrs. lab. Offered annually. Prereq: C- or higher in PSYC 211, 212 and 215.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 211 and PSYC 212 and PSYC 215

Earn a minimum grade of C- in the following:

- PSYC211 - Principles of Statistics and Experimental Design 1
- PSYC212 - Principles of Statistics and Experimental Design 2
- PSYC215 - Intro to Physiological Psychology

PSYC315 - Adv Lab Sensation & Perception

Course Information

Course Title
Adv Lab Sensation & Perception

Subject code	Course Number	Academic Level
PSYC	315	Undergraduate

Course Description
A laboratory course designed to develop an understanding of the models and theories of the sensory and perceptual systems. 3 hrs. lec., 2 hrs. lab. Offered in fall, spring. Prereq: C- or higher in PSYC 211, 212 and 215.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 211 and PSYC 212 and PSYC 215

Earn a minimum grade of C- in the following:

- PSYC211 - Principles of Statistics and Experimental Design 1
- PSYC212 - Principles of Statistics and Experimental Design 2
- PSYC215 - Intro to Physiological Psychology

PSYC316 - Adv Lab Learn Beh Analysis

Course Information

Course Title
Adv Lab Learn Beh Analysis

Subject code	Course Number	Academic Level
PSYC	316	Undergraduate

Course Description
A theoretical laboratory course designed to investigate and apply the concepts of learning and motivation to both human and animal behavior. 3 hrs. lec., 2 hrs. lab. Offered annually. Prereq: C- or higher in PSYC 211, 212 and 216.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 211 and PSYC 212 and PSYC 216

Earn a minimum grade of C- in the following:

- PSYC211 - Principles of Statistics and Experimental Design 1
- PSYC212 - Principles of Statistics and Experimental Design 2
- PSYC216 - Intro Learn Beh Analysis

PSYC317 - Social Psychology

Course Information

Course Title
Social Psychology

Subject code	Course Number	Academic Level
PSYC	317	Undergraduate

Course Description
A review of the principles of social psychology derived from experimental study. Offered in spring. Offered in spring. Prereq: PSYC 100. PSYC 211 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC 211 recommended.

PSYC317H - HNRS: Social Psychology

Course Information

Course Title
HNRS: Social Psychology

Subject code	Course Number	Academic Level
PSYC	317H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC 211 recommended.

PSYC318 - Psychology of Racism

Course Information

Course Title
Psychology of Racism

Subject code	Course Number	Academic Level
PSYC	318	Undergraduate

Course Description
Examination of individual and institutional racism in all its aspects, with an emphasis on the various psychological explanatory theories and supporting research as well as the various techniques for alleviating this problem. Additional overview of resultant effects on the victims. Prereq: COMM 100, ENGL 110, PSYC 100 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC318H - H:Psychology of Racism

Course Information

Course Title
H:Psychology of Racism

Subject code	Course Number	Academic Level
PSYC	318H	Undergraduate

Course Description
Honors Psychology of Racism

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC325 - Happiness and Well-Being

Course Information

Course Title
Happiness and Well-Being

Subject code	Course Number	Academic Level
PSYC	325	Undergraduate

Course Description
This course will examine the constructs of happiness and well-being across multiple variables such as culture, environment, spirituality, and personal factors. Common myths and misconceptions will also be evaluated. Students will leave the course with a greater understanding of the science behind the constructs of happiness and well-being as well as strategies to apply in their own pursuit of living a fulfilling life. Junior status.

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

PSYC100 or PSYC100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC325H - Happiness and Well-Being

Course Information

Course Title
Happiness and Well-Being

Subject code	Course Number	Academic Level
PSYC	325H	Undergraduate

Course Description
Honors Happiness and Well-Being

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

PSYC100 or PSYC100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC326 - Human-Animal Bond

Course Information

Course Title
Human-Animal Bond

Subject code	Course Number	Academic Level
PSYC	326	Undergraduate

Course Description
The course will introduce students to the interaction between human and animals with emphasis on the bond between people and their pets. The course will provide an overview of the social, emotional, and psychological implications of pet ownership including attachment and pet loss. The use of companion animals in education, healthcare and clinical settings will be covered as well as the connection between animal maltreatment and interpersonal violence. A service learning project involving contact with companion animals is required. Prereq: PSYC 100 and PSYC 211

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H and PSYC 211

Complete ALL of the following Courses:
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- PSYC211 - Principles of Statistics and Experimental Design 1

PSYC327 - Adv Lab in Developmental Science

Course Information

Course Title
Adv Lab in Developmental Science

Subject code	Course Number	Academic Level
PSYC	327	Undergraduate

Course Description
Examines advanced topics in child and adolescent development in depth through the application of experimental and nonexperimental research approaches an through critical reading of the research literature. 3 hrs. lec., 2 hrs. lab. Offered annually. Prereq: C- or higher in PSYC 211, 212 and 227 or 228.Submission of satisfactory FBI, Act 34/151 clearances required prior to the start of the course, but not for registration.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 211 and PSYC 212 and PSYC 227 or PSYC 227H or PSYC 228

Earn a minimum grade of C- in the following:

- PSYC211 - Principles of Statistics and Experimental Design 1
- PSYC212 - Principles of Statistics and Experimental Design 2
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
  OR PSYC228 - Life Span Human Development

FBI and Act 34/151 Clearances

Submission of satisfactory FBI and Act 34/151 clearances required prior to the start of the course, but not for registration.

PSYC328 - Psycholgy and Religion

Course Information

Course Title
Psycholgy and Religion

Subject code	Course Number	Academic Level
PSYC	328	Undergraduate

Course Description
An exploration of psychological and religious questions, issues and processes in the search to give meaning to ones personal and shared journey. Prereq: COMM 100, ENGL 110, PSYC 100 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:

- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC329 - Industrial Psychology

Course Information

Course Title
Industrial Psychology

Subject code	Course Number	Academic Level
PSYC	329	Undergraduate

Course Description
A study of research and applications of psychology to the work setting. Knowledge of the psychological processes of learning, motivation, perception and assessment is used to analyze selection, training, work design and performance. Offered annually. Prereq: ENGL 110 and PSYC 100 and MATH 130, 235 or PSYC 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 100 or PSYC 100H and MATH 130 or MATH 235 or PSYC 211

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- MATH130 - Elements of Statistics 1
  OR MATH235 - Survey of Statistics
  OR PSYC211 - Principles of Statistics and Experimental Design 1

PSYC329H - Hon: Industrial Psychology

Course Information

Course Title
Hon: Industrial Psychology

Subject code	Course Number	Academic Level
PSYC	329H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 100 or PSYC 100H and MATH 130 or MATH 235 or PSYC 211

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- MATH130 - Elements of Statistics 1
  OR MATH235 - Survey of Statistics
  OR PSYC211 - Principles of Statistics and Experimental Design 1

PSYC335 - Personality Theory

Course Information

Course Title
Personality Theory

Subject code	Course Number	Academic Level
PSYC	335	Undergraduate

Course Description
An introduction to historic and contemporary theories of the human personality. Offered in fall, spring. Prereq: PSYC 100.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC335H - H:Personality Theory

Course Information

Course Title
H:Personality Theory

Subject code	Course Number	Academic Level
PSYC	335H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC337 - Abnormal Psychology

Course Information

Course Title
Abnormal Psychology

Subject code	Course Number	Academic Level
PSYC	337	Undergraduate

Course Description
A comprehensive study of the etiology, characteristics and treatment in the categories of abnormal behavioral manifestation. Offered in fall, spring. Prereq: ENGL 110 and PSYC 100.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 100 or PSYC 100H

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- PSYC100 - General Psychology **OR** PSYC100H - Hnrs:General Psychology

PSYC337H - H:Abnormal Psychology

Course Information

Course Title
H:Abnormal Psychology

Subject code	Course Number	Academic Level
PSYC	337H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and PSYC 100 or PSYC 100H

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- PSYC100 - General Psychology **OR** PSYC100H - Hnrs:General Psychology

PSYC346 - Applied Behavior Analysis

Course Information

Course Title
Applied Behavior Analysis

Subject code	Course Number	Academic Level
PSYC	346	Undergraduate

Course Description
An examination of theory, research and techniques related to the applied behavior analysis, with special emphasis placed on the application in a variety of settings (e.g., family, school and industry). Prereq: PSYC 100.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:

- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC346H - H: Applied Behavior Analysis

Course Information

Course Title
H: Applied Behavior Analysis

Subject code	Course Number	Academic Level
PSYC	346H	Undergraduate

Course Description
Honors Applied Behavioral Analysis.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

PSYC350 - Cognitive Science

Course Information

Course Title
Cognitive Science

Subject code	Course Number	Academic Level
PSYC	350	Undergraduate

Course Description
Basic introduction to cognitive science. Reviews attempts to understand cognition using insights from psychology, artificial intelligence, philosophy, linguistics and the neurosciences. Examines the synthesis of those attempts in the emergent field of cognitive science. Offered periodically. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC350H - H: Cognitive Science

Course Information

Course Title
H: Cognitive Science

Subject code	Course Number	Academic Level
PSYC	350H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC356 - Health Psychology

Course Information

Course Title
Health Psychology

Subject code	Course Number	Academic Level
PSYC	356	Undergraduate

Course Description
A review of research and theory linking psychological factors to health. Discussion of psychosocial aspects of health behavior, pain, stress and the impact on biological systems. Evaluation of psychological and behavior interventions for health behavior change and chronic illness. Offered in fall. Prereq: PSYC 100 and PSYC 227 or 228 or 229 or 234 or 256.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H and PSYC 227 or PSYC 227H or PSYC 228 or PSYC 229 or PSYC 234 or PSYC 256 or PSYC 256H

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
  OR PSYC228 - Life Span Human Development
  OR PSYC229 - Psychology of Aging
  OR PSYC234 - Human Relations
  OR PSYC256 - Psychology Human Adjustment
  OR PSYC256H - Hon: Psychology Human Adjustment

PSYC357 - Neuropsychology

Course Information

Course Title
Neuropsychology

Subject code	Course Number	Academic Level
PSYC	357	Undergraduate

Course Description
This survey course will provide a thoughtful and comprehensive introduction to the field of human neuropsychology, including the history, methods, and logic of neuropsychological investigations. Prereq: BIOL 100 or BIOL 101 and PSYC 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 or BIOL 101 and PSYC 211

Complete ALL of the following Courses:

- BIOL100 - General Biology
  OR BIOL101 - Foundations of Biology
- PSYC211 - Principles of Statistics and Experimental Design 1

PSYC357H - Hon: Neuropsychology

Course Information

Course Title
Hon: Neuropsychology

Subject code	Course Number	Academic Level
PSYC	357H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 or BIOL 101 and PSYC 211

Complete ALL of the following Courses:

- BIOL100 - General Biology
  OR BIOL101 - Foundations of Biology
- PSYC211 - Principles of Statistics and Experimental Design 1

PSYC365 - Human Memory

Course Information

Course Title
Human Memory

Subject code	Course Number	Academic Level
PSYC	365	Undergraduate

Course Description
This survey course will provide a scientific introduction to human memory. The structure and processes of human memory will be covered, There will be consideration of the current and past research, as well as models on memory. Prereq: BIOL 100 or 101 and PSYC 211.

Simple Requirements

Course Prerequisites

Type
Prerequisite

BIOL 100 or BIOL 101 and PSYC 211

Complete ALL of the following Courses:

- BIOL100 - General Biology
  OR BIOL101 - Foundations of Biology
- PSYC211 - Principles of Statistics and Experimental Design 1

PSYC379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PSYC	379	Undergraduate

Course Description
Experimental

PSYC400 - Co-Op Ed Experience in Psyc

Course Information

Course Title
Co-Op Ed Experience in Psyc

Subject code	Course Number	Academic Level
PSYC	400	Undergraduate

Course Description
Cooperative Education in Psychology

PSYC403 - Family Systems

Course Information

Course Title
Family Systems

Subject code	Course Number	Academic Level
PSYC	403	Undergraduate

Course Description
An investigation of the impact of the multigenerational family system on the individual. Assessment of functional and dysfunctional family systems. Emphasis upon theorists and their orientations and intervention strategies. Offered periodically. Prereq: PSYC 100 and junior or senior standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:

- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC415 - Advanced Physiological Psych

Course Information

Course Title
Advanced Physiological Psych

Subject code	Course Number	Academic Level
PSYC	415	Undergraduate

Course Description
A systematic examination of the nervous and sensory systems and their regulation of human behavior. May not be used in place of PSYC 314, 315 or 316 to fulfill the advanced laboratory requirement. Offered Periodically. Prereq: PSYC 100 and one course in biology. Chemistry helpful. Junior or senior standing.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

Biology Course

Must have completed one course in biology.

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC417 - Tests and Measurements

Course Information

Course Title
Tests and Measurements

Subject code	Course Number	Academic Level
PSYC	417	Undergraduate

Course Description
An introduction to the basic principles of psychological testing and measurement. Focus is upon issues in test construction and design, evaluations of psychometric properties and applications of tests in various fields of psychology. Offered in fall or spring. Prereq: PSYC 211 or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 211

Complete ALL of the following Courses:
- PSYC211 - Principles of Statistics and Experimental Design 1

Or must have permission of instructor.

PSYC427 - Childhood Disorders

Course Information

Course Title
Childhood Disorders

Subject code	Course Number	Academic Level
PSYC	427	Undergraduate

Course Description
An in-depth look at major childhood psychological disorders. Diagnostic criteria, etiology and developmental progression presented. Introduction to diagnostic assessment techniques and commonly used interventions. Offered annually. Prereq: PSYC 100 and PSYC 227 or 228, junior/senior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H and PSYC 227 or PSYC 227H or PSYC 228

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
  OR PSYC228 - Life Span Human Development

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC427H - Hon: Childhood Disorders

Course Information

Course Title
Hon: Childhood Disorders

Subject code	Course Number	Academic Level
PSYC	427H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H and PSYC 227 or PSYC 227H or PSYC 228

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
  OR PSYC228 - Life Span Human Development

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC447 - Counseling Strategies

Course Information

Course Title
Counseling Strategies

Subject code	Course Number	Academic Level
PSYC	447	Undergraduate

Course Description
An introduction to the process and practice of counseling. Emphasis is placed on learning counseling theories and on counseling skills. Offered in fall, spring. Prereq: PSYC 100. Junior or Senior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC447H - Hon: Counseling Strategies

Course Information

Course Title
Hon: Counseling Strategies

Subject code	Course Number	Academic Level
PSYC	447H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

PSYC454 - History and Systems of Psych

Course Information

Course Title
History and Systems of Psych

Subject code	Course Number	Academic Level
PSYC	454	Undergraduate

Course Description
Study of the development of psychology from a branch of philosophy to a modern science. Offered periodically. Prereq: PSYC 100 and junior or senior standing. Must have earned 75 credits and be enrolled/have taken the advanced lab to count for capstone requirement.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 75 credits
Must be enrolled/have taken the advanced lab to count for capstone requirement.

PSYC455 - Seminar in Psychology

Course Information

Course Title
Seminar in Psychology

Subject code	Course Number	Academic Level
PSYC	455	Undergraduate

Course Description
An advanced course devoted to critical analysis of student and professional research using staff consultant leadership. Offered periodically. Prereq: junior/senior psychology majors only and permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Instructor Permission

Must have permission of instructor.

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Psychology Majors Only

Must be a pyschology major.

PSYC462 - Art, Music and Written Word

Course Information

Course Title
Art, Music and Written Word

Subject code	Course Number	Academic Level
PSYC	462	Undergraduate

Course Description
Study of psychological processes involved in the production and experience of music, art and literature coupled with a review of psychological theories of human creativity. Key principles within the domain of psychology will be illustrated and explored through the study of the works of artists, musicians and writers. Offered annually. Prereq: PSYC 100, COMM 100, ENGL 110 and junior status. PSYC 335 recommended.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
PSYC 335 recommended.

PSYC462H - Hon: Art, Music and Written Word

Course Information

Course Title
Hon: Art, Music and Written Word

Subject code	Course Number	Academic Level
PSYC	462H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
PSYC 335 recommended.

PSYC479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PSYC	479	Undergraduate

Course Description
Experimental

PSYC483 - Applied Ethology

Course Information

Course Title
Applied Ethology

Subject code	Course Number	Academic Level
PSYC	483	Undergraduate

Course Description
An introduction to applied animal behavior, including (1) the behavior of companion animals, animals in zoos & aquaria, animals in labs, and animals in agriculture/aquaculture; (2) animal welfare, (3) ethical issues in animal use, (4) methods of training captive animals, and (5) career options and certifications in animal behavior. 3 hrs lecture. Offered periodically. Prereq: PSYC 316 or BIOL 385; PSYC 300 or BIOL 300 or PSYC 495; Senior standing or permission of instructor. Students cannot also earn credit in BIOL 483.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC 316 or BIOL 385 or BIOL 385H and PSYC 300 or BIOL 300 or PSYC 495

Complete ALL of the following Courses:

- PSYC316 - Adv Lab Learn Beh Analysis
  OR BIOL385 - Principles of Animal Behavior
  OR BIOL385H - H: Principles of Animal Behavior
- PSYC300 - Co-Op Ed Experience in Psyc
  OR BIOL300 - Co-Op Ed Experience in Biol
  OR PSYC495 - Directed Projects in Psych

Credit Hours Completion (Senior Class Standing)

Earn at least 90 credits
Or must have permission of instructor.

PSYC489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
PSYC	489	Undergraduate

Course Description
For the definition of departmental honors and eligibility, refer to the Academic Policies section of this catalog.

PSYC490 - Honors Seminar

Course Information

Course Title
Honors Seminar

Subject code	Course Number	Academic Level
PSYC	490	Undergraduate

Course Description
Examination and discussion of current research issues in psychology. May be taken a maximum of three times. Enrollment limited to students with at least 45 s.h. who are applying to the psychology department honors program and to those already admitted to that program. Offered in fall, spring. Prereq: permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Instructor Permission

Must have permission of instructor.

PSYC495 - Directed Projects in Psych

Course Information

Course Title
Directed Projects in Psych

Subject code	Course Number	Academic Level
PSYC	495	Undergraduate

Course Description
Supervised field experience involving the application of psychological principles. Junior or senior standing. Offered in fall, spring. Prereq: permission of instructor. Insurance and recent clearances (Act 34/ Act 151/FBI clearances and TB test results) may be required depending on the setting.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Instructor Permission

Must have permission of instructor.
Insurance and recent clearances (Act 34/ Act 151/FBI clearances and TB test results) may be required depending on the setting.

PSYC496 - Topics In Psychology

Course Information

Course Title
Topics In Psychology

Subject code	Course Number	Academic Level
PSYC	496	Undergraduate

Course Description
Detailed investigation of a topic of current research interest. Topic to be announced each time course is offered. Credit and meeting hours variable, depending on topic offered. May be taken more than once for credit as topic varies. Offered periodically. Prereq: junior or senior standing and permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Instructor Permission

Must have permission of instructor.

PSYC498 - Independent Study in Psych

Course Information

Course Title
Independent Study in Psych

Subject code	Course Number	Academic Level
PSYC	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section of this catalog.

PSYC499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
PSYC	499	Undergraduate

Course Description
For the definition of departmental honors and eligibility, refer to the Academic Policies section of this catalog.

PSYC505 - Recent Developments in Psych

Course Information

Course Title
Recent Developments in Psych

Subject code	Course Number	Academic Level
PSYC	505	Graduate

Course Description
Contemporary issues in psychology examined through a critical review of current research, theory and practice. Designed to provide students with opportunities for independent study in areas where basic competencies are weak, or in areas of special interest. Offered periodically.

PSYC511 - Substance-Related Disorders

Course Information

Course Title
Substance-Related Disorders

Subject code	Course Number	Academic Level
PSYC	511	Graduate

Course Description
Focus on current treatment approaches to substance-related disorders. Following a review of specific psychoactive drugs and their impact on physical and psychological function, theoretical orientations and their application to clinical scenarios will be discussed. Diagnostic issues, assessment techniques and currently accepted intervention techniques will be covered. Special populations involving gender, ethnicity, sexual orientation and comorbidity will be highlighted. Offered periodically.

PSYC515 - Physiological Psychology

Course Information

Course Title
Physiological Psychology

Subject code	Course Number	Academic Level
PSYC	515	Graduate

Course Description
A systematic examination of the nervous and sensory systems and their regulation of human behavior. Basic knowledge of biology and chemistry is essential. Offered annually.

PSYC517 - Tests and Measurements

Course Information

Course Title
Tests and Measurements

Subject code	Course Number	Academic Level
PSYC	517	Graduate

Course Description
Introduction to basic principles of psychological testing and measurements. Issues in test construction and design, evaluation of psychometric properties, and applications of tests in various fields of psychology. Offered annually.

PSYC525 - Advanced Child Psychology

Course Information

Course Title
Advanced Child Psychology

Subject code	Course Number	Academic Level
PSYC	525	Graduate

Course Description
In-depth examination of human development, with emphasis on birth through adolescence. Presentation of current accounts characterizing development in various domains (physical, cognitive, social, moral, psychosexual) and critical reviews of theoretical attempts to explain the process of development. Offered annually.

PSYC526 - Advanced Adolescent Psychology

Course Information

Course Title
Advanced Adolescent Psychology

Subject code	Course Number	Academic Level
PSYC	526	Graduate

Course Description
Personal and environmental forces that are dynamic in the behavior of adolescents. Emphasis is given to the family, school and community aspects of adolescent behavior. Recent developments in adolescent psychology and adolescent development are emphasized. Offered annually.

PSYC527 - Childhood Disorders

Course Information

Course Title
Childhood Disorders

Subject code	Course Number	Academic Level
PSYC	527	Graduate

Course Description
Childhood Disorders provides an in-depth look at psychological disorders that occur in childhood. Students will learn the diagnostic criteria, etiology and developmental progression of childhood disorders. Students will also be exposed to assessment techniques that can be used to diagnose the disorders such as observation and data collection systems. An overview of interventions used in childhood will also be presented and students will learn how to identify empirically based interventions.

PSYC530 - Child Development within the Family System

Course Information

Course Title
Child Development within the Family System

Subject code	Course Number	Academic Level
PSYC	530	Graduate

Course Description
Theory and research on the development of cognitive, emotional, linguistic, psychosexual and moral systems in the child. Emphasis on the impact of family structure and dynamics on the developing child.

PSYC536 - Applications of Biopsychology

Course Information

Course Title
Applications of Biopsychology

Subject code	Course Number	Academic Level
PSYC	536	Graduate

Course Description
Survey of current topics. Includes psychotropic drugs, neuropsychological assessment and treatment. Emphasis on clinical applications and knowledge base to enable referrals/coordination with related psychiatry/neurology professionals.. Offered annually.

PSYC537 - Ethics and Professional Practice

Course Information

Course Title
Ethics and Professional Practice

Subject code	Course Number	Academic Level
PSYC	537	Graduate

Course Description
This course combines ethics education with an introduction to clinical psychology and counseling. Ethical standards of psychologists and counselors and an ethical decision-making model will be applied to moral ethical and legal dilemmas in clinical practice. The historical development of clinical psychology, its major theoretical perspectives and empirically supported treatments will be reviewed. Offered annually.

PSYC540 - Applied Behavior Analysis in a MTSS

Course Information

Course Title
Applied Behavior Analysis in a MTSS

Subject code	Course Number	Academic Level
PSYC	540	Graduate

Course Description
Student behavior, both behavioral and academic, is a function of school, classroom, and individual factors. This course will focus on the impact of behavioral interventions delivered using multi-tiered system of supports (MTSS) and positive behavioral interventions and supports (PBIS) frameworks. Applied behavioral analysis will be thoroughly covered. Students will conduct single subject design research to determine the effectiveness of empirically based interventions on a child's behavior. School-wide behavior supports, as well as classroom management strategies, which impact on student discipline, will also be reviewed. Classroom behaviors will be examined within the context of the culture of the school and the community in which the school resides.This course is geared towards educators who consult with school personnel to solve educational problems, e.g., school psychologists and school counselors. The content will be useful, however, for professionals who work to increase functional behaviors in their clients.Offered in fall.

PSYC546 - Learning Theory

Course Information

Course Title
Learning Theory

Subject code	Course Number	Academic Level
PSYC	546	Graduate

Course Description
Review of behavioral approaches to learning such as operant and classical conditioning, and observational learning. Cognitive and ethological challenges to behavioral theories will be considered. Includes information-processing models of learning.

PSYC547 - Applied Social Psychology

Course Information

Course Title
Applied Social Psychology

Subject code	Course Number	Academic Level
PSYC	547	Graduate

Course Description
Examines the effects of social psychological factors on various clinical issues, including racial-ethnic and cultural issues, the development and maintenance of maladaptive behaviors, clinical judgment, relationship between clinician/school psychologist and client, and the outcome of intervention. Offered in fall.

PSYC586 - Topics in Psychology

Course Information

Course Title
Topics in Psychology

Subject code	Course Number	Academic Level
PSYC	586	Graduate

Course Description
Investigate and develop one or more topics of current interest not normally covered in regular psychology courses. Special topics and methods used to investigate the topics will vary according to the needs of psychology students and faculty. Offered periodically.

PSYC587 - Topics in Psychology

Course Information

Course Title
Topics in Psychology

Subject code	Course Number	Academic Level
PSYC	587	Graduate

Course Description
Investigate and develop one or more topics of current interest not normally covered in regular psychology courses. Special topics and methods used to investigate the topics will vary according to the needs of psychology students and faculty. Offered periodically.

PSYC588 - Topics in Psychology

Course Information

Course Title
Topics in Psychology

Subject code	Course Number	Academic Level
PSYC	588	Graduate

Course Description
Investigate and develop one or more topics of current interest not normally covered in regular psychology courses. Special topics and methods used to investigate the topics will vary according to the needs of psychology students and faculty. Offered periodically.

PSYC589 - Topics in Psychology

Course Information

Course Title
Topics in Psychology

Subject code	Course Number	Academic Level
PSYC	589	Graduate

Course Description
Investigate and develop one or more topics of current interest not normally covered in regular psychology courses. Special topics and methods used to investigate the topics will vary according to the needs of psychology students and faculty. Offered periodically.

PSYC600 - Professional Seminar

Course Information

Course Title
Professional Seminar

Subject code	Course Number	Academic Level
PSYC	600	Graduate

Course Description
The philosophy, administrative arrangements, responsibilities and general functions of a school psychologist. Emphasis on research information relating to skills and techniques used by psychologists in the prevention and remediation process as they apply to schoolchildren. Firsthand experience in the functions of a school psychologist through field visitations and planned seminars. Schedule near the beginning of the program. Offered annually.

PSYC612 - Research Design & Statistical Analysis

Course Information

Course Title
Research Design & Statistical Analysis

Subject code	Course Number	Academic Level
PSYC	612	Graduate

Course Description
This course is designed to develop and extend skills in the interpretation of psychological research. Understanding the relationships between research methods, statistical procedures and interpretation is emphasized. Offered in fall and spring.

PSYC625 - Human Growth and Development

Course Information

Course Title
Human Growth and Development

Subject code	Course Number	Academic Level
PSYC	625	Graduate

Course Description
A comprehensive study of growth and development with a life-span perspective. Physical growth and maturation, social development, emotional and personal development, and cognitive development. Special projects in the field of students interest. Offered annually.

PSYC626 - Trauma Treatment

Course Information

Course Title
Trauma Treatment

Subject code	Course Number	Academic Level
PSYC	626	Graduate

Course Description
Provides an overview of the conceptual and empirical foundations of post-traumatic stress disorder (PTSD), the neurobiology of stress and an overview evidence-based trauma treatments. Protocols for trauma assessment, cognitive-behavioral and contextual case formulation and treatment methods will be reviewed. Strategies for psychoeducation, treatment engagement, emotional regulation, exposure and relapse prevention will be emphasized.

PSYC630 - Group Work: Theory & Intervention

Course Information

Course Title
Group Work: Theory & Intervention

Subject code	Course Number	Academic Level
PSYC	630	Graduate

Course Description
Reviews major theories of group therapy and concepts related to group formation and dynamics. Develops skills through role playing interventions from diverse schools of group therapy. Reviews current research on the effectiveness of support, counseling and therapy group treatment for various mental health and/or substance use disorders. (Offered fall and spring)

PSYC631 - Psychotherapy and Intervention Skills

Course Information

Course Title
Psychotherapy and Intervention Skills

Subject code	Course Number	Academic Level
PSYC	631	Graduate

Course Description
Intensive supervised training in effective helping skills, including listening and responding skills, relationship enhancement, interview skills and active interventions. Students receive supervision of videotaped counseling with clients.

PSYC632 - Group Cnslng and Psychotherapy

Course Information

Course Title
Group Cnslng and Psychotherapy

Subject code	Course Number	Academic Level
PSYC	632	Graduate

Course Description
Development of skills and awareness necessary for successful functioning as a facilitator of groups or as a group leader. Methods include participation in an encounter group, role playing, analyses of nonverbal communication, and reflective listening. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC631

Complete ALL of the following Courses:

- PSYC631 - Psychotherapy and Intervention Skills

PSYC633 - Systems of Psychotherapy

Course Information

Course Title
Systems of Psychotherapy

Subject code	Course Number	Academic Level
PSYC	633	Graduate

Course Description
Reviews the major paradigms in psychotherapy using a trans-theoretical model. Major paradigms include: psychoanalytic/psychodynamic; person-centered/existential; behavioral; cognitive; cognitive-behavioral; systems; gender sensitive, multicultural and third wave therapies. Application of theories through self-analysis and case studies will be emphasized along with the stages of change model and current research on the efficacy of these therapies.

PSYC634 - Child Psychopathology and Intervention

Course Information

Course Title
Child Psychopathology and Intervention

Subject code	Course Number	Academic Level
PSYC	634	Graduate

Course Description
Introduces students to child and adolescent psychopathology and therapeutic interventions used with children and adolescents. Play therapy techniques with clinical child populations, process groups with adolescents and preadolescents, behavioral group therapy, adjunct parent counseling and cognitive-behavioral procedures are emphasized. Offered in summer.

PSYC635 - Psychopathology

Course Information

Course Title
Psychopathology

Subject code	Course Number	Academic Level
PSYC	635	Graduate

Course Description
Develops the ability to diagnose in traditional nosological fashion and to be able to discriminate from one another the various mental disorders contained in the DSM-IV. In addition to requiring the ability to diagnose the mental disorders, students will also be required to write diagnostic reports using DSM-IV multiaxial system. Offered annually.

PSYC636 - Cognitive Therapy

Course Information

Course Title
Cognitive Therapy

Subject code	Course Number	Academic Level
PSYC	636	Graduate

Course Description
Basic principles and clinical applications of cognitive therapy. Use of role play, audiotapes and videotapes to help others identify and restructure thinking patterns and beliefs that contribute to personal and interpersonal conflicts and psychological disturbances. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC631

Complete ALL of the following Courses:

- PSYC631 - Psychotherapy and Intervention Skills

PSYC637 - Theories of Family Dynamics

Course Information

Course Title
Theories of Family Dynamics

Subject code	Course Number	Academic Level
PSYC	637	Graduate

Course Description
Reviews major systems of family therapy including structural, strategic, systems-based and other approaches and their application to a range of clinical and family development issues. Normal and dysfunctional family development, structure, roles, boundaries and functioning will also be reviewed. Prereq: Graduate program admission. Offered in summer.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Graduate Program Admission

Must be admitted into the graduate program.

PSYC638 - Cognitive Behavioral Therapies

Course Information

Course Title
Cognitive Behavioral Therapies

Subject code	Course Number	Academic Level
PSYC	638	Graduate

Course Description
Review models of common clinical problems and specific cognitive, behavioral and integrative techniques. Role play, videotape, in-class demonstrations and case materials will be used to provide hands-on experience. Students will incorporate cognitive-behavioral perspectives and interventions with clients. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC631

Complete ALL of the following Courses:

- PSYC631 - Psychotherapy and Intervention Skills

PSYC639 - Selected Therapies: Existential and Humanistic Therapies

Course Information

Course Title
Selected Therapies: Existential and Humanistic Therapies

Subject code	Course Number	Academic Level
PSYC	639	Graduate

Course Description
Surveys conceptual foundations and methods of classic and contemporary humanistic and existential psychotherapies and their practical application and implementation with a variety of clinical populations and presenting issues/needs. Students will employ this knowledge/perspective in case conceptualization and treatment planning, engage in case discussions and skills practice, explore supporting research and practical considerations, and critically examine implications for effective, sustainable, and contextually- and culturally-sensitive therapeutic practice. Prereq: Passed CCEs, PSYC 631 (for Clinical Psychology students) or instructor permission (for Social Work graduate students).

Simple Requirements

Course Prerequisites

Type
Prerequisite

CCEs

Must have passed CCEs (Core Compentency Exams).

Course Prerequisites for Clinical Psychology Students

Type
Prerequisite

PSYC 631

Complete ANY of the following Courses:

- PSYC631 - Psychotherapy and Intervention Skills

Course Prerequisites for Social Work Graduate Students

Type
Prerequisite

Instructor Permission

Must have permission of instructor.

PSYC646 - Consultation

Course Information

Course Title
Consultation

Subject code	Course Number	Academic Level
PSYC	646	Graduate

Course Description
Explores the theoretically and practically applied aspects of consultation. School, instructional, behavioral, conjoint-behavioral, mental-health/consultee-centered, multicultural, and organizational models of consultation and coaching, as well as teleconsultation strategies, will be covered. Students will develop and implement individual consultation projects. Offered in fall.

PSYC670 - Clinical Interviewing and Appraisal Skills

Course Information

Course Title
Clinical Interviewing and Appraisal Skills

Subject code	Course Number	Academic Level
PSYC	670	Graduate

Course Description
Development of competencies in evidence-based interviewing and observation skills and in administration, scoring, interpretation, and application of diagnostic measures, mental status exams, and risk assessments. Students also are introduced to selected cognitive, personality, and behavioral assessment instruments. Students receive supervision of recorded sessions with clients and report writing. Insurance required and must pass CCE to enroll.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Passed CCEs and Insurance Required

Must have passed CCEs (Core Compentency Exams) and have insurance to enroll.

PSYC671 - Cognitive Achve & Adapt Assess

Course Information

Course Title
Cognitive Achve & Adapt Assess

Subject code	Course Number	Academic Level
PSYC	671	Graduate

Course Description
Introductory course in individual psychological evaluation, stressing practical experience in administering and interpreting individual psychological test batteries. Standardized intelligence tests are emphasized. Introduces special-purpose tests such as adaptive behavior assessment and brief achievement tests. Students administer tests and write reports under supervision. Prereq: Pass Core Competency Exams (CCE) and Insurance required. Offered in fall and spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC530 and PSYC612

Complete ALL of the following Courses:

- PSYC530 - Child Development within the Family System
- PSYC612 - Research Design & Statistical Analysis

Passed CCEs and Insurance Required

Must have passed CCEs (Core Compentency Exams) and have insurance.

PSYC672 - Academic Assess & Intervention in MTSS

Course Information

Course Title
Academic Assess & Intervention in MTSS

Subject code	Course Number	Academic Level
PSYC	672	Graduate

Course Description
Prepare students to assist schools in the provision of appropriate academic programming for children within the context of current federal and state regulations. A multi-tiered system of academic service delivery will be used as a framework for developing appropriate assessments. Students will learn to conduct assessments that answer academic referral questions, inform intervention design, and measure intervention integrity and effectiveness. Ecological and direct assessments will be discussed in depth. Solution-focused report writing skills utilizing an RTI/MTSS approach will be introduced and developed. Offered annually.

PSYC673 - Personality Assessment

Course Information

Course Title
Personality Assessment

Subject code	Course Number	Academic Level
PSYC	673	Graduate

Course Description
An introduction to the administration, scoring, interpretation and application of personality-assessment instruments. Introduces objective tests, projective tests and behavioral assessment.

PSYC674 - Assessment of English Language Learners

Course Information

Course Title
Assessment of English Language Learners

Subject code	Course Number	Academic Level
PSYC	674	Graduate

Course Description
A multicultural-issues class with focus on assessment and classification of culturally and linguistically diverse children. Prepares school psychologists and practitioners in the mental-health field to work with English language learners, make educational recommendations and help determine the extent to which child learning difficulties are related to limited English proficiency, cultural/ecological factors or learning disabilities. Learn assessment techniques, skills and strategies to be used with English language learners.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC671

Complete ALL of the following Courses:
- PSYC671 - Cognitive Achve & Adapt Assess

PSYC675 - Behavioral Assessment Child/Adolescent

Course Information

Course Title
Behavioral Assessment Child/Adolescent

Subject code	Course Number	Academic Level
PSYC	675	Graduate

Course Description
This course is designed to develop skills in conducting assessments and developing treatment recommendations for students referred for behavioral/emotional difficulties. The purpose of this course is to provide training in the techniques of behavioral assessment including direct observation, interviews, checklists, rating scales, self-monitoring and other methods of assessment. A tiered model of service delivery will be used as a larger context for discussing assessment methods that may be used for universal screening and more individualized assessments.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC671 and PSYC540

Complete ALL of the following Courses:
- PSYC671 - Cognitive Achve & Adapt Assess
- PSYC540 - Applied Behavior Analysis in a MTSS

PSYC679 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
PSYC	679	Graduate

Course Description
Experimental

PSYC682 - Practicum/Internship in Clinical/Counseling Psychology

Course Information

Course Title
Practicum/Internship in Clinical/Counseling Psychology

Subject code	Course Number	Academic Level
PSYC	682	Graduate

Course Description
Supervised practicum and internship experience in a field agency, hospital or clinic. Designed to develop the student's skillset to point of entry-level skills in the areas of assessment, counseling and staff participation. Students meet regularly with departmental and site supervisor. Schedule near end of program. The Internship/Practicum course must include 700 hours of supervised clinical experience (100 hours of practicum, 600 hours of internship). Experience must meet the requirements outlined by the current licensure law.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Completion of Therapy and Assessment Courses

Must have one therapy and one assessment course completed.

Clinical Psychology Graduate Program Students

Reserved for students in the Clinical Psychology graduate program.

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Clinical Psychology Graduate Program Students

Reserved for students in the Clinical Psychology graduate program.

PSYC685 - Practicum and Seminar in School Psychology

Course Information

Course Title
Practicum and Seminar in School Psychology

Subject code	Course Number	Academic Level
PSYC	685	Graduate

Course Description
Sequential, supervised experiences in field settings working with children of preschool and school age. Students complete a comprehensive case study. Students meet regularly with University supervisor both individually and in seminars. Offered annually.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC671

Complete ALL of the following Courses:

- PSYC671 - Cognitive Achve & Adapt Assess

PSYC686 - Internship and Seminar in School Psychology

Course Information

Course Title
Internship and Seminar in School Psychology

Subject code	Course Number	Academic Level
PSYC	686	Graduate

Course Description
Yearlong, extensive supervised clinical and field experiences in all domains of school psychology. Students meet regularly with University supervisor both individually and in seminars. Schedule in last year of program. Offered annually. Pre-requisites: All other M.S., Psychology, School coursework and Ed.S. coursework must be completed before internship. Professional liability insurance required. Updated clearances (ACT 34/ACT114/ACT151 and TB test results), which must be valid for the entire semester, must be on record with Field Services by the deadline. Follow the submission procedure and deadlines outlined by Field Services or you will be dropped from the class.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC685 and PSYC646 and PSYC634 and PSYC675 and PSYC674 and PSYC672 and PSYC671 and EDUC671 and READ621 and SPED600 and PSYC540 and PSYC547 and PSYC536 and PSYC631 and PSYC600 and PSYC612 and PSYC530

Complete ALL of the following Courses:

- PSYC685 - Practicum and Seminar in School Psychology
- PSYC646 - Consultation
- PSYC634 - Child Psychopathology and Intervention
- PSYC675 - Behavioral Assessment Child/ Adolescent
- PSYC674 - Assessment of English Language Learners
- PSYC672 - Academic Assess & Intervention in MTSS
- PSYC671 - Cognitive Achve & Adapt Assess
- EDUC671 - Curriculum Development in the School
- READ621 - Foundations of Reading and Writing
- SPED600 - Introduction to Exceptional Education
- PSYC540 - Applied Behavior Analysis in a MTSS
- PSYC547 - Applied Social Psychology
- PSYC536 - Applications of Biopsychology
- PSYC631 - Psychotherapy and Intervention Skills
- PSYC600 - Professional Seminar
- PSYC612 - Research Design & Statistical Analysis
- PSYC530 - Child Development within the Family System

All other M.S., Psychology, School coursework and Ed.S. coursework must be completed before internship.

Updated Clearances

Must have updated clearances (ACT 34/ACT114/ ACT151 and TB test results), which must be valid for the entire semester and must be on record with Field Services by the deadline.

Professional Liability Insurance

Must have professional liability insurance.

PSYC691 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
PSYC	691	Graduate

PSYC696 - Research Methods in Psychology

Course Information

Course Title
Research Methods in Psychology

Subject code	Course Number	Academic Level
PSYC	696	Graduate

Course Description
Introduction to, and application of, advanced methods of psychological research. Emphasis placed upon the development and practice of research skills as preparation for conducting original research for a thesis.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC612

Complete ALL of the following Courses:
- PSYC612 - Research Design & Statistical Analysis

PSYC699 - Thesis:

Course Information

Course Title
Thesis:

Subject code	Course Number	Academic Level
PSYC	699	Graduate

Course Description
Student designs and conducts research in an appropriate area in psychology. The results and interpretation are presented in a written thesis. The entire process is guided by the research adviser.

Simple Requirements

Course Prerequisites

Type
Prerequisite

PSYC696

Complete ALL of the following Courses:
- PSYC696 - Research Methods in Psychology

PSYC799 - Pract Supervision

Course Information

Course Title
Pract Supervision

Subject code	Course Number	Academic Level
PSYC	799	Graduate

Course Description
Field experience in the various activities performed by supervisors of psychological services. The student plans a relevant program of practical experiences, based on the comprehensive role of the supervisor of psychological services, in conjunction with the University supervisor.

SCCO525 - Intro to Professional School Counseling

Course Information

Course Title
Intro to Professional School Counseling

Subject code	Course Number	Academic Level
SCCO	525	Graduate

Course Description
This course provides a broad introduction to the field of professional school counseling, covering such topics as the roles, responsibilities, functions and practices of a professional school counselor particularly in connection to the development, implementation and evaluation of a comprehensive school counseling program.

SCCO586 - Topics In Counselor Education

Course Information

Course Title
Topics In Counselor Education

Subject code	Course Number	Academic Level
SCCO	586	Graduate

Course Description
Offered infrequently.

SCCO587 - Topics In Counselor Education

Course Information

Course Title
Topics In Counselor Education

Subject code	Course Number	Academic Level
SCCO	587	Graduate

Course Description
Offered infrequently

SCCO612 - Study Of the Individual

Course Information

Course Title
Study Of the Individual

Subject code	Course Number	Academic Level
SCCO	612	Graduate

Course Description
A case study with self as subject provides the opportunity for students to increase their understanding of complex human behavior. Through synthesis and organization of a great deal of information about self comes the basis for study and understanding of others. Prereq: degree program admission. Offered in spring.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Degree Program Admission

Must be admitted into the degree program.

SCCO621 - Counseling Theory and Practice I

Course Information

Course Title
Counseling Theory and Practice I

Subject code	Course Number	Academic Level
SCCO	621	Graduate

Course Description
Presentation of basic counseling principles and theories. Through the use of role play, audiotapes and videotapes, students will develop skills basic to the helping process. Prereq: degree program admission. Offered in fall.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Degree Program Admission

Must be admitted into the degree program.

SCCO622 - Group Procedures in Counseling

Course Information

Course Title
Group Procedures in Counseling

Subject code	Course Number	Academic Level
SCCO	622	Graduate

Course Description
Principles and methods of group theory, process and leadership skills for planning and facilitating small couseling groups in schools. Participation in a psychoeducational group is required. Prereq: SCCO 621. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SCCO 621

Complete ALL of the following Courses:

- SCCO621 - Counseling Theory and Practice I

SCCO625 - Ethics School Counseling

Course Information

Course Title
Ethics School Counseling

Subject code	Course Number	Academic Level
SCCO	625	Graduate

Course Description
This course engages students with important Ethical Codes of the profession of School Counseling including the American Counseling Association (ACA) and the American School Counselor Association (ASCA), while orienting students to broad concepts of professionalism, bounds of practice, and ethical-decision making models. Students will explore Federal and State case law, ethical dilemmas, and case studies which help undergird the consideration and development of standards of best practice within the school counseling profession. Historical perspectives on legal and ethical practices in the field will be offered, and the development of standard of best practice and functioning will be initiated.

SCCO630 - Multicultural Counseling

Course Information

Course Title
Multicultural Counseling

Subject code	Course Number	Academic Level
SCCO	630	Graduate

Course Description
The problem of counseling for a culturally diverse population is examined within a broad conceptual framework of issues and concepts. Methods and implications for counseling clients of various global backgrounds are studied. Prereq: SCCO 621. Offered in fall and summer.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SCCO 621

Complete ALL of the following Courses:

- SCCO621 - Counseling Theory and Practice I

SCCO631 - Appraisal Techniques for Guidance Purposes

Course Information

Course Title
Appraisal Techniques for Guidance Purposes

Subject code	Course Number	Academic Level
SCCO	631	Graduate

Course Description
Development of competency in the effective administration, interpretation and communication of test results. Focus is on the theoretical, technical and practical aspects of individual and group tests, screening devices, interviews and observations. Emphasis is on the counselor as a consumer within the school guidance program. Prereq: SCCO 621. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SCCO 621

Complete ALL of the following Courses:

- SCCO621 - Counseling Theory and Practice I

SCCO641 - Internship: Higher Ed & Comm

Course Information

Course Title
Internship: Higher Ed & Comm

Subject code	Course Number	Academic Level
SCCO	641	Graduate

Course Description
Field experiences for students interested in higher education and community agencies (300 hours) and/or for students who are considering pursuing licensure as a Licensed Professional Counselor (LPC): individual supervision and seminar sessions. This course does not serve as a substitute for SCCO 675. Prereq: SCCO 674 and permission. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SCCO 665

Complete ALL of the following Courses:

- SCCO665 - School Counseling Practicum

Instructor Permission

Must have permission of instructor.

SCCO645 - Career Development

Course Information

Course Title
Career Development

Subject code	Course Number	Academic Level
SCCO	645	Graduate

Course Description
Historical and theoretical foundations of the evolution of vocational guidance into career guidance and counseling are studied. Models, materials and strategies basic to career guidance and counseling programs are emphasized. Offered in fall and summer.

SCCO651 - Theory and Practice 2

Course Information

Course Title
Theory and Practice 2

Subject code	Course Number	Academic Level
SCCO	651	Graduate

Course Description
This second-level skills course provides supervision of videotaped sessions with a child client. Prereq: SCCO 621. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SCCO 621

Complete ALL of the following Courses:
- SCCO621 - Counseling Theory and Practice I

SCCO657 - Brief Counseling

Course Information

Course Title
Brief Counseling

Subject code	Course Number	Academic Level
SCCO	657	Graduate

Course Description
This is a third-level skills course which includes brief solution-focused theory applied to ongoing counseling work with a child client and supervised using videotaped sessions. Strategy selection and implementation are emphasized. Conceptualization, general principles and applications in crisis counseling are included. Prereq: SCCO 651 and passing CCE. Offered in fall.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SCCO 651

Complete ALL of the following Courses:
- SCCO651 - Theory and Practice 2

Passing CCE

Must have a passing CCE (Core Compentency Exam).

SCCO665 - School Counseling Practicum

Course Information

Course Title
School Counseling Practicum

Subject code	Course Number	Academic Level
SCCO	665	Graduate

Course Description
Supervised field experience which familiarizes students with the practice of professional school counseling. Students will gain exposure to children at a variety of developmental levels, and will be required to log a minimum of 100 hours of direct experiences in a school counseling setting. Offered in fall or spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SCCO651

Complete ALL of the following Courses:
- SCCO651 - Theory and Practice 2

SCCO671 - Guidance Program Development

Course Information

Course Title
Guidance Program Development

Subject code	Course Number	Academic Level
SCCO	671	Graduate

Course Description
Guidance programs based on a developmental, comprehensive and team approach. Primary prevention is the focus of the model used to facilitate program implementation in the elementary and secondary schools. Offered in fall.

SCCO675 - Internship 1: School Counseling

Course Information

Course Title
Internship 1: School Counseling

Subject code	Course Number	Academic Level
SCCO	675	Graduate

Course Description
Guidance and counseling experiences in the school setting (420 hours): individual supervision and seminar sessions. Prereq: SCCO 674 and permission. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SCCO 665

Complete ALL of the following Courses:
- SCCO665 - School Counseling Practicum

Instructor Permission

Must have permission of instructor.

SCCO676 - Internship 2: School Counselng

Course Information

Course Title
Internship 2: School Counselng

Subject code	Course Number	Academic Level
SCCO	676	Graduate

Course Description
Counseling experiences in school and/or a community agency (300 hours) for students who are considering pursuing licensure as a Licensed Professional Counselor (LPC): individual supervision and seminar sessions. Prereq: SCCO 674 and permission. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SCCO 665

Complete ALL of the following Courses:
- SCCO665 - School Counseling Practicum

Instructor Permission

Must have permission of instructor.

SCCO691 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
SCCO	691	Graduate

Course Description
An in-depth approach to an individually structured problem. By permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Permission

Must have permission.

SCCO699 - Thesis

Course Information

Course Title
Thesis

Subject code	Course Number	Academic Level
SCCO	699	Graduate

Course Description
Each student writes and orally defends an individual thesis of some significance in the field of counselor education.

SCCO799 - App Supv: Sccn

Course Information

Course Title
App Supv: Sccn

Subject code	Course Number	Academic Level
SCCO	799	Graduate

Course Description
Provides prospective supervisors with actual field experience in auditing current comprehensive developmental guidance programs and initiating action plans for subsequent program improvement, including performance-based assessment of school counselors. The American School Counselor Association National Model provides guidelines for the supervision. (See Supervisory Certification Program section.)

Social Work Department

The social work program at Millersville University leads to a Bachelor of Arts degree in social work. Millersville's social work baccalaureate program is professionally accredited by the Council on Social Work Education. Based on the general education curriculum, the social work curriculum is designed to prepare students for beginning professional practice in social agencies and other settings where social workers are employed. The program educates the general practitioner; therefore, it is built on basic required courses. However, it also allows students to explore areas of interest through elective courses and field instruction assignments.

Affirming the mission of Millersville University, a public, liberal arts institution situated in South Central Pennsylvania, the baccalaureate social work program educates students to be competent, evidence-informed social work professionals who embrace core social work values; enhance human and community well-being; promote social, economic and environmental justice; and advance human rights through generalist social work practice. The University and the program provide a learning environment that prepares students to work in an increasingly diverse society and to meet contemporary social, cultural, economic, political and global challenges.

Social Work Program Goals

To meet the purpose of the social work profession and the mission of Millersville University and the social work baccalaureate program, faculty seek to prepare students/graduates to:

- Goal 1: Strengthen human connections and relationships
- Goal 2: Practice effectively and ethically
- Goal 3: Engage to promote justice and human rights
- Goal 4: Think globally; act locally

The curriculum is designed to help students integrate knowledge and theories from many academic disciplines with social work concepts, values and practice skills. Courses in the social work program attempt to develop an understanding of the human condition and human diversity. The social work major needs to understand biological, psychological and sociocultural aspects of human development; characteristics of human interaction with the social environment; the role, structure and function of social welfare policies and programs; social work intervention methods; and social work research findings and methods.

In addition to theoretical instruction, students are given ample opportunity for practical experience. The experiential requirements begin in the introductory courses and carry through to formal work in advanced courses. The culmination is 450 hours practicum during spring semester, wherein the student can integrate knowledge and skills in a social agency or other social service setting in the community.

A formal Professional Readiness Assessment process takes place for each student prior to placement in a social service setting for field instruction. Qualifications are based on academic performance, oral and written communication skills, and demonstrated ethical behavior, values and commitment to social work as a career. The social work faculty has the right to dismiss from the program, at any time, students found not qualified for social work practice.

Upon completion of the undergraduate social work degree, graduates will be able to:

1. Demonstrate ethical and professional behavior.
2. Engage diversity and difference in practice.
3. Advance human rights and social, economic and environmental justice.
4. Engage in practice-informed research and research-informed practice.
5. Engage in policy practice.
6. Engage with individuals, families, groups, organizations and communities.
7. Assess individuals, families, groups, organizations and communities.
8. Intervene with individuals, families, groups, organizations and communities.
9. Evaluate practice with individuals, families, groups, organizations and communities.

FACULTY LIST
Bethel, Joyous C., Assistant Professor of Social Work & Gerontology Minor Coordinator (At MU since 2011). B.A., Social Work, University of Oklahoma, 1981; M.S.W., University of Oklahoma, 1982; Ph.D., Barry University, 1997. **Interest Areas**: practice, HBSE, diversity, practicum internship instruction, spirituality; complicated mourning; **Major Teaching Areas**: Gerontology, Social Work and Aging, Encounters in Human Diversity, Human Behavior in the Social Environment, Practicum internship Instruction. Joyous.Bethel@millersville.edu
Felizzi, Marc, Associate Professor of Social Work & MSW/Med Sport Management Coordinator (At MU since 2011) B.A., Glassboro State College, 1978; M.S.W., Delaware State University, 1995; Ph.D., Widener University, 2010. **Interest Areas:** practice, policy, human behavior, and trauma; **Major Teaching Areas:** Social Work Practice, Micro/Mezzo SOWK Practice, Emergency Mental Health and Trauma, Family Violence, Sport Social Work. Marc.Felizzi@millersville.edu
Foels, Leonora E., Professor of Social Work, School Social Work Certificate Coordinator & Home and School Visitor Coordinator (At MU since 2009). B.S., Webber College, 1988; M.S.W.; Simmons College, School of Social Work, 1993; Ph.D., Barry University, School of Social Work, 2007. **Interest Areas:** school social work, diversity, social work education issues, graduate pedagogy; **Major Teaching Areas:** Micro/Mezzo Practice, Encounters in Human Diversity, School Social Work, Children and Youth at Risk, and Family Violence. Leonora.Foels@millersville.edu
Frank, Jennifer M., Associate Professor of Social Work, & BASW Program Coordinator (At MU since 2010). B.A., Millersville University, 1999; M.S.W., Millersville/Shippensburg University, 2009; PhD, Bryn Mawr College Graduate School of Social Work and Social Research, 2017. **Interest Areas:** housing and homelessness, poverty, social policy, program management/development, practicum internship education, micro/macro practice; **Major Teaching Areas:** Introduction to Social Welfare, Perspectives on Poverty, Policy, HBSE. Jennifer.Frank@millersville.edu
Girvin, Heather L., Associate Professor of Social Work, & Trauma-Informed Behavioral Health Certificate Coordinator (At MU since 2006) B.A., Dickinson College, 1992; M.S.S., Bryn Mawr College Graduate School of Social Work & Social Research, 1995; Ph.D., Bryn Mawr College Graduate School of Social Work & Social Research, 2002. **Interest Areas:** child welfare, research, diversity; **Major Teaching Areas:** Child Welfare, Human Behavior & the Social Environment, Diversity, Family Violence, Practicum internship Education. Heather.Girvin@millersvile.edu
Granruth, Laura Brierton, Associate Professor of Social Work, MSW Coordinator & Advanced Children Youth, and Families Certificate Coordinator (At MU since 2013). B.A., Fordham College, 1984; M.S.W., Virginia Commonwealth University, 2001; Ph.D. Catholic University, 2009. **Interest Areas:** social policy, advocacy, social justice; **Major Teaching Areas:** Health Care, Human Behavior & the Social Environment, Social Policy, Writing for Social Work Practice. Laura.Granruth@millersville.edu
Ogongi, Wanja, Associate Professor of Social Work (At MU since 2015). B.A., University of Nairobi, Kenya, 1999; M.S.W., West Chester University of PA, 2005; Ph.D., Widener University, Center for Social Work Education, 2012. **Interest Areas:** Women empowerment, International social work, Child welfare in the US and globally, and Issues affecting the African Diaspora in the United States; **Major Teaching Areas:** Macro Social Work Practice, Human Behavior & the Social Environment, Health Care, and Practicum internship Education. Wanja.Ogongi@millersville.edu
Proctor, Curtis, Assistant Professor of Social Work (At MU since 2014) B.S., University of Oklahoma, 1989. M.S.W., University of Iowa, 1992. Ph.D., Case Western Reserve University, 2005. **Interest Areas:** LGBT Youth, Indian Child Welfare Act, Attachment, Social Work, and the Arts; **Major Teaching Areas:** Cultural Competency, Research, Human Behavior in the Social Environment, Advanced Generalist Practice, Statistics. Curtis.Proctor@millersville.edu
Redcay, Alex, Associate Professor of Social Work, (At MU since 2016) B.A., Truman State University, 2001; M.S.W.; Southern Connecticut State University, 2008; Ph.D., Rutgers University, 2016. **Interest Areas:** Mental health, substance use disorders, child welfare, diversity, education, and management. **Major Teaching Areas:** Social Work Research and Statistics, Child Welfare, Macro Practice. Alexandra.Redcay@millersville.edu

FACULTY LIST
Rice, Karen M., Professor, Chair of School of Social Work, & Social Justice Minor Coordinator (At MU since 2006). B.A., Millersville University, 1991; M.S.W., Temple University, 2000; PhD. University of Maryland, School of Social Work, 2011. **Interest Areas**: child welfare, diversity/equity/inclusion, human rights, international social work, organizational and social change, transformative leadership, and expressive arts; **Major Teaching Areas**: Social Work & Child Welfare, Social Work Research, Advanced Research Methods, Implementation Science, Social Work Statistics, Encounters in Human Diversity, Global Perspectives in Social Work. Karen.Rice@millersville.edu
Saldaña DeJesus, Bertha, Assistant Professor of Social Work (At MU Since 2012): B.A. (in Social Work), Shippensburg University, 1998. M.S.W., Widener University, 2004; D.S.W. Millersville University, 2018. **Interest Areas:** practicum internship, aging, child welfare; **Major Teaching Areas:** Practicum internship, Micro, Mezzo, Macro Practice, Child Welfare. Bertha.DeJesus@millersville.edu
Walsh, Kathleen M., Associate Professor of Social Work, & MSW/MSEM Dual Degree Advisor (At MU since 2007). B.S.W., University of Maryland Baltimore, 1996; M.S.W., University of Maryland, 1997; Ph.D., University of Maryland, School of Social Work, 2006. **Interest Areas:** Salary in social work, workforce issues, social work ethics, social work administration. emergency and disaster mental health; **Major Teaching Areas:** Policy and Practice, Social Work Administration and Supervision, Gender, and Social Work. Kathleen.Walsh@millersville.edu

Programs

Social Work, D.S.W.

Overview

The doctorate in social work (DSW) of Millersville University educates future social work scholars who can transform both organizations and educational environments through innovative instruction and values of anti-oppression, diversity, equity, and inclusion.

MU DSW PROGRAM MISSION

The Millersville University (MU) Doctor of Social Work prepares graduates for innovation and leadership in social work theory, practice, and education.

Curriculum

Simple Requirements

Major in Social Work (DSW)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Year I - Required Courses (18 credits)

Complete ALL of the following Courses:

- SOWK700 - Social Work Leadership I
- SOWK704 - Social Work Teacher-Scholar I
- SOWK701 - Social Work Leadership II
- SOWK705 - Social Work Teacher-Scholar II
- SOWK710 - Research Methodology
- SOWK720 - Leadership/Teaching Praxis I

AND

Year II - Required Courses (18 credits)

Complete ALL of the following Courses:

- SOWK730 - Qualitative Analysis
- SOWK715 - Multivariate Stat Analysis
- SOWK721 - Leadership/Teaching Praxis II
- SOWK725 - Intervention Research
- SOWK774 - Comprehensive Seminar
- SOWK775 - Dissertation Seminar

AND

Year IIII - Required Courses

Fulfill ALL of the following requirements:

Doctoral Dissertation I (1-3 credits)

Complete ALL of the following Courses:

- SOWK776 - Dissertation I

AND

Doctoral Dissertation II (1-3 credits)

Complete ALL of the following Courses:

- SOWK777 - Dissertation II

2 Electives should be selected and taken during Year III. Please work with your advisor to select appropriate electives

AND

Electives

2 Electives should be selected and taken during Year III. Please work with your advisor to select appropriate electives.

Social Work, M.S.W.

Overview

Millersville and Shippensburg universities are jointly offering a Master of Social Work (MSW) degree program. It is designed for students who want to either further their education in social work or join the social work profession. The program was developed to support both the full-time student and the working professional. State-of-the-art technology permits students to complete the program through multiple educational methods. Because this is a joint program, students benefit from the quality faculty and resources of both universities.

The MSW permits graduates to work in a variety of human service programs and agencies in an advanced clinical and/or administrative capacity. The flexibilityof the social work degree provides graduates with many options as they pursue their careers in the helping fields.

The MSW program is available in-person and online. We offer full-time and part-time options. Online students complete their practicum requirements in their local geographic area.

Dual Degrees

MSW + MSEM

A dual-degree option is available for students in the MSW program who wish to also obtain a Master of Social Work and Master of Science in Emergency Management. Students seeking a dual degree in MSW/MSEM will need to complete the full curriculum in the MSW program (which is 36 or 60 credits).

This joint program allows students in the MSW and MSEM programs to pursue a joint graduate degree. Students will need to apply and be admitted to both programs in order to pursue this joint degree. It is not required that the student be admitted to both programs at the same time.

Benefits of the Joint Program

Social work offers research informed practice interventions in relation to emergency management planning, prevention and response, specifically in the fields of mental health and trauma, as well as trauma informed interventions.

Social work research in emergency management includes findings on: traumatic stress, vicarious trauma and burnout, disaster volunteers, vulnerable populations, organizations and interorganizational networks, environmental disasters, as well as human made disasters, and cross-cultural and interactional issues in disasters, and improved measurement and theory.

Emerging trends in social work research and practice point to this need as a result of the impact of traumatic events such as the COVID 19 Epidemic, earthquakes, mass shootings, hurricanes and war.

MSW + MEd in Sports Management

A dual-degree option in MSW/M.Ed. in sport management will need to complete the full curriculum in the MSW program (which is 36 or 60 credits).

This degree program will provide an understanding of the need of social workers in athletic settings, give students knowledge of the social factors affecting athletes of all levels, develop skills to administer and develop athletic programs or facilities and discuss current perceptions of student athletes. Graduates will also gain an increased awareness of the issues regarding athletes and sport management, provide an awareness of opportunities for policy adjustments and applications of research findings, and will highlight social work values and ethics in examining the issues of professional and amateur athletes as they relate to race, ethnicity, national origin, class, gender, physical or mental disability, mental illness, and age.

Students will learn emerging trends in working with athletes of all levels, in clinical and counseling settings and will gain knowledge and skills related to athletic programs, and/or venue management. Students will also have the opportunity to develop methodologies for working with athletes in a number of areas, such as career counseling, life skills development, substance abuse prevention, advocacy, recruitment and transitioning to a post athletic career.

Students will understand the emerging trends in social work and sports management that point to this need to include mental health awareness in athletics. Students will conduct and become aware of research related to the issues athletes face on and off the playing field, specifically in the fields of mental health and trauma. A program combined with Social Work and Sports Management will allow students to obtain a firm grounding in both disciplines, along with the ability to secure practicums or internships in either profession.

Certificates

MSW + School Social Worker certification

The School Social Work certification is designed to prepare social work students with the required knowledge, skills, and expertise to “support the academic, career and

personal-social development needs" of diverse, vulnerable, and at-risk PreK-12 students and their families. In the Commonwealth of Pennsylvania, the School Social Work certification is required by school districts.

MSW + Home and School Visitor

The Home and School Visitor Certification is designed to provide students with the required knowledge and skills to work collaboratively in a school setting at all systems levels.

MSW + Expressive Arts

The Expressive Arts certificate will provide students with the required knowledge and skills around the use of the arts (e.g., music, theater, art, dance/movement, storytelling) to apply to their practice with various groups and at all levels of practice. Additionally, upon completion of the certificate and then a subsequent 200-hour internship, students will be eligible to apply as a Registered Expressive Arts Therapist.

MSW + Advanced Children, Youth, and Families

The Advanced Children, Youth, and Families Certificate is for students enrolled in or who have completed a master's degree in Social Work to provide culturally competent services to vulnerable children and families through a range of public and private agencies at various levels of practice. The focused curriculum includes coursework on clinical skills to work effectively with children and their families to promote positive outcomes, and macro skills and strategies to develop productive change in service delivery systems.

Mission

The mission of the Millersville University and Shippensburg University Collaborative MSW Program is to promote human and community well-being by providing an advanced generalist social work education that prepares students to be contemporary practitioners and advocates for individuals, families, groups, communities, and organizations utilizing the person in environment perspective. We prepare students to be competent, globally responsive evidence-informed practitioners, committed to social, racial, economic, and environmental justice and human rights, which are rooted in the values of the social work profession.

Program Goals

The MU-SU program seeks to:

1. Prepare graduates for competent advanced generalist practice through the acquisition and demonstration of social work competencies and values consistent with Council on Social Work Education (CSWE) educational policy and accreditation standards and Pennsylvania State System of Higher Education.
2. Provide graduates with the advanced generalist knowledge values and skills for social work practice across micro, mezzo and macro systems to assess, plan and facilitate change with attention to the profession's commitment to interprofessional collaboration.
3. Develop graduates' commitment to continued evidence-informed professional development and prepare graduates to practice human rights-based social work that promotes social, racial, economic, and environmental justice.

Accreditation

The Millersville-Shippensburg MSW program is accredited by the Council on Social Work Education (CSWE). The program has continuously been accredited since its inception in 2006. The accreditation validates that the program meets national standards for social work education as determined by experts in the field. Practitioners must have graduated from a CSWE-accredited social work MSW program to be eligible to apply for licensure in Pennsylvania.

Admission Classifications

The program is designed both for students who have no previous social work education and for those who want to build upon their baccalaureate social work education. Students will be admitted full- or part-time. Students have the option to attend in-person or online.

Applicants may apply for regular-standing admission or for advanced-standing admission. Regular-standing admission is for students who completed a baccalaureate degree with a major from other than a CSWE-accredited social work, and for students who graduated from a CSWE-accredited social work program but do not meet the requirements for advanced standing. Applicants may apply for advanced standing admission if they have graduated from a CSWE-accredited social work program withinn the past 8 years and meet the requirements as described in the admission guidelines.

Admission Guidelines

Candidates may choose to apply through either Millersville or Shippensburg University. Applicants for regular-standing admission must have a minimum cumulative grade-point average of 2.8 on a 4.0 scale from a regionally accredited undergraduate institution. In exceptional cases, applicants who lack the required grade-point average should contact the MSW Program Director to discuss their options.

Applicants for advanced-standing admission must have earned a baccalaureate degree within the last eight years

from a CSWE-accredited social work program with an overall GPA of 2.8 and a major GPA of 3.25 or higher on a 4.0 scale.

Students who graduated with a baccalaureate degree from a CSWE-accredited social work program who are not eligible for advanced standing may be eligible for exemptions from first-year generalist courses in which they have earned a grade of B or higher within the past eight years. Exemptions will reduce the total number of credits a student must earn to graduate. The Admissions Committee will send a letter notifying the applicant of the exemptions.

Students who do not otherwise qualify for advanced-standing status may be exempted from certain generalist courses under strict guidelines as outlined in this section. Students may not be exempt from practice or field placement coursework. With the exception of practice and field instruction courses, students who earned a grade of B or higher within the past eight years in courses that were part of a CSWE-accredited social work program are eligible for exemptions from first-year generalist courses with similar content.

Applicants must evidence a combination of professional and personal experiences, qualities and values that are considered essential for the practice of social work. A current résumé is required. Three professional references are required, preferable with a minimum of one from a faculty member and one from a current or recent agency employer or supervisor. Applicants for advanced standing are required to submit an additional reference from the department chair of their undergraduate program. Applicants will complete a written personal statement. Application forms are available on the graduate studies website, www.millersville.edu/apply/graduate. The program may request a personal interview or additional information about an applicant when necessary to make a fully informed admissions decision.

Persons who have some criminal records may not be eligible to work in some human service fields. Applicants with criminal records should contact the MSW program director for additional information.

Students may receive or transfer credit for up to nine credit hours earned at other regionally accredited institutions prior to admission. Graduate credits earned more than five years prior to admission do not qualify for transfer. Students may only transfer credits if they are in good standing in those schools. Courses must be listed on an official transcript with a B or higher. Condensed one-week graduate courses do not qualify for transfer.

With advance permission of the faculty advisor, program director and Dean of Graduate Studies and Adult Learning, and as part of a planned program, a student may transfer credits from other graduate programs at Millersville University or Shippensburg University. Forms for the approval process of transfer of credits are available at www.millersville.edu/gps/studentlife. The program does not grant academic credit for life or work experience.

Degree Requirements

Students with regular-standing admission must complete 60 credits of graduate study, including 39 credit hours of required coursework, 12 credit hours of field practicum and 9 credit hours of electives. BSW graduates with regular admission status may receive exemption for some coursework, as per admission guidelines.

Students with advanced-standing admission must complete 36 credits of graduate study, including 18 credit hours of required coursework, including a “bridge” course, 6 credit hours of field practicum and 12 credit hours of electives.

All required courses must be taken in sequence. The 60-credit in-person program can be completed in two years full-time (four courses a semester) or four years part-time (two courses a semester) or in 3 years with either Generalization or Specialization Year completed on a full-time basis. The online 60-credit program can be completed in two, three or four years. The 36-credit in-person program can be completed in one year full-time or two years part-time. The online 36-credit program, can be competed in one or two years. Both programs are year-round, with each new cohort starting in the summer term.

Degree Candidacy

A formal admission to the degree candidacy process takes place after a minimum of 12 credits have been completed. Millersville-Shippensburg MSW faculty members evaluate students to determine if they have the potential for completing the requirements of the social work program. Qualifications are based on academic performance in line with University standards and demonstrated ethical behavior, values and commitment to social work as a career. The social work faculty has the right to dismiss from the program at any time students found not qualified for social work practice.

Curriculum

Simple Requirements

Major in Social Work (MSW)

Type
Completion Requirement

Foundation Year (Regular Standing, 30 credits)

Complete ALL of the following Courses:

- SOWK501 - Principles and Philosophies of Social Work
- SOWK505 - Understanding Social Work Practices w Diverse Pops
- SOWK510 - Human Behavior in the Social Environment I
- SOWK511 - Human Behavior in the Social Environment II
- SOWK515 - Social Welfare Policy
- SOWK520 - Micro/Mezzo Social Work Practices
- SOWK521 - Macro Social Work Practice
- SOWK525 - Research Methods
- SOWK530 - Field Practicum 1
- SOWK531 - Field Practicum 2

Integrrative Semniar (Advanced Standing, 3 credits)

Complete ALL of the following Courses:

- SOWK601 - Diversity, Dialogues, & Social Justice

Specialization Year Required Courses (All students, 21 credits)

Complete ALL of the following Courses:

- SOWK610 - Advanced Micro Practice and Assessment
- SOWK615 - Advanced Social Welfare Policy
- SOWK620 - Advanced Practice with Groups and Families
- SOWK621 - Advanced Macro Social Work Practices
- SOWK625 - Advanced Research Methods
- SOWK630 - Advanced Field Practicum 1
- SOWK631 - Advanced Field Practicum 2

Specialization Year Electives (3 Classes Regular Standing, 9 credits; 4 Classes Advanced Standing, 12 credits)

Complete at least 4 of the following courses:

- SOWK602 - Behavioral Health
- SOWK604 - Health Care
- SOWK605 - Child Welfare
- SOWK606 - School Social Work
- SOWK607 - Emergency Mental Health and Trauma
- SOWK608 - Administration and Supervision
- SOWK609 - Introduction to Art Therapy
- SOWK611 - Children and Youth At-Risk
- SOWK614 - Survey Devel & Measurement
- SOWK616 - Leadership Dynamics in SW Prac
- SOWK617 - Addictions in Field of SOWK
- SOWK619 - Global Perspectives in SOWK
- SOWK622 - Military Social Work Practice
- SOWK623 - Narrative Therapy
- SOWK624 - From Hobohemia to Housing First: A Critical Reflection of Homelessness in the United States
- SOWK626 - Traumatic Bereavement
- SOWK627 - SOWK, Sport & Mental Health
- SOWK628 - Introduction to Trauma-Informed Therapy
- SOWK632 - Core Components and Skills for Trauma-informed Practice
- SOWK640 - Sp Topics:
- SOWK641 - Sp Topics:
- SOWK642 - Sp Topics:
- SOWK643 - Sp Topics:
- SOWK691 - Independent Study
- WSSD601 - Organization and Administration of Sport Programs
- WSSD603 - Moral and Ethical Issues in Sports
- WSSD605 - Sport and the Law
- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment
- EDUC564 - Assessment, Policies & Practice in Teaching of English Language Learners
- EDLD620 - School Law and Public Policy
- EMGT607 - Emergency Mental Health and Trauma

Advanced Children, Youth & Families Certificate

Overview

The Advanced Children, Youth, and Families Certificate is for students enrolled in or who have completed a master's degree in Social Work to provide culturally competent services to vulnerable children and families through a range of public and private agencies at various levels of practice. The focused curriculum includes coursework on clinical skills to work effectively with children and their families to promote positive outcomes, and macro skills and strategies to develop productive change in service delivery systems. Students receive instruction in evidence-based practice and management strategies to develop competency in working with children and youth in a variety of contexts. Students complete 15 credits leading to the Advanced Children, Youth, and Families Certificate.

Curriculum

Simple Requirements

Adv Children, Youth and Families Certificate (15 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (9 credits)

Complete ALL of the following Courses:

- SOWK605 - Child Welfare
- SOWK608 - Administration and Supervision
- SOWK611 - Children and Youth At-Risk

AND

Electives for ACYF Certificate (6 credits)

Complete at least 2 of the following courses:

- SOWK602 - Behavioral Health
- SOWK603 - Gender Issues (Inactive)
- SOWK604 - Health Care
- SOWK607 - Emergency Mental Health and Trauma
- SOWK617 - Addictions in Field of SOWK
- SOWK619 - Global Perspectives in SOWK

Home and School Visitor Post-Baccalaureate Certificate

Overview

In the Commonwealth of Pennsylvania, the Home and School Visitor is recognized and required by school districts. The School of Social Work at Millersville University is approved by the Pennsylvania Department of Education (PDE) to offer the Home School Visitor Certification. The Home and School Visitor certification is designed to provide students with the required knowledge and skills to work collaboratively with interdisciplinary client systems to meet the needs of PK-12 students to foster academic success.

Upon completion of the required coursework, the Certification Office at Millersville University will assist eligible candidates with the Pennsylvania certification process and provide recommendations for Home and School visitor certification.

Admissions

Prospective students seeking the HSV Certification may start at any time. Student must first submit a formal application to the Office of Graduate Studies and Adult Learning at www.millersville.edu/admissions/graduate/admissions/apply/post-baccalaureate-certification.php.

The HSV Certification program requires field placement/ practicum experiences in a school setting. As the Pennsylvania Department of Education (PDE) requires current clearances before starting field experience, students must also apply for three clearances: Pennsylvania Child Abuse History Clearance, Criminal Records Check (FBI Fingerprint background check), and Federal Criminal History Record Information (CHRI).

Flexible Program Options

Applicants can earn their HSV Certification while enrolled in the MSW program, part or full time. Applicants who hold an MSW are able to apply to have prior credits counted toward the HSV Certification. Non-MSW applicants are able to apply to earn HSV Certification.

Coordinator: Dr. Leonora Foels, leonora.foels@millersville.edu

Curriculum

Simple Requirements

Home and School Visitor Certificate (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- SOWK606 - School Social Work
- SPED600 - Introduction to Exceptional Education
- EDLD620 - School Law and Public Policy
- SOWK628 - Introduction to Trauma-Informed Therapy

AND

Advanced Field Practicum I (in a school setting) (3 credits)

Complete ALL of the following Courses:

- SOWK530 - Field Practicum 1

AND

Advanced Field Practicum II (in a school setting) (3 credits)

Complete ALL of the following Courses:

- SOWK531 - Field Practicum 2

AND

Diagnostic and Assessment Strategies for Students with Disabilities (3 credits)

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities

AND

Second Language Acquisition: Theory, Prograns and Assessment or Assessment, Policies, and Practices in Teaching English Language Learners (3 credits)

Complete at least 1 of the following courses:

- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment

- EDUC564 - Assessment, Policies & Practice in Teaching of English Language Learners

Certificate in Trauma-Informed Behavioral Health

Overview

The TIBH Certificate responds to the need for innovative practices in behavioral health services. Qualified students will have a master's degree or be enrolled in a master's degree program in one of the following disciplines: Social Work, Psychology (all concentrations), Educational Psychology, Counseling, Marriage and Family Therapy, Fine Arts, or a related mental health discipline. Students enrolled in the certificate program will have previously completed coursework in psychopathology, ethics/professional practice, theory, and child and adult development, with knowledge gained as a result of the master's program in which they are enrolled.

The TIBH Certificate comprises two tracks. The first track is the Expressive Arts (EA), which provides students with the required knowledge and skills to use arts (e.g., music, theater, art, dance/movement, storytelling) to apply to their practice with various groups and at all levels (micro, mezzo, macro) of practice. Students will complete coursework and 250 hours of applied learning in a practicum coordinated by our Practicum Coordinator and Certificate Coordinator.

The second track is Equine-Assisted Therapeutic and Educational Learning (EATL), which provides students with the required knowledge and skills to partner with horses (and other animals) and use nature-based strategies to apply their therapeutic and/or education practice with diverse populations across all levels of intervention. Students will complete practicum hours in an Equine-Assisted Therapy & Learning internship at programs or facilities approved by our Practicum Coordinator and Certificate Coordinator.

Curriculum

Simple Requirements

Trauma-informed & Expressive Arts - Post-Bacc Cert (15 credits)

Type
Completion Requirement

Trauma-Informed Care or Core Components and Skills for Trauma-Informed Practice (3 credits)

Complete ANY of the following Courses:

- SOWK628 - Introduction to Trauma-Informed Therapy
- SOWK632 - Core Components and Skills for Trauma-informed Practice

Trauma-Informed Expressive Arts (3 credits)

Complete ALL of the following Courses:

- SOWK633 - Trauma-Informed Expressive Arts

Expressive Arts Elective (6 credits)

Complete at least 2 of the following courses:

Required Courses (6 credits)

Complete ALL of the following Courses:

- ART584 - Intro Studio Art:
- ART585 - Intro Studio Art:
- ENGL641 - Poetry
- ENGL642 - Drama
- ENGL643 - Fiction
- ENGL645 - The Short Story
- ENGL678 - The Teacher as Writer
- WRIT682 - Genres in Nonfiction Writing
- SOWK640 - Sp Topics:
- SOWK641 - Sp Topics:
- SOWK642 - Sp Topics:

- SOWK609 - Introduction to Art Therapy
- SOWK623 - Narrative Therapy
- ART584 - Intro Studio Art:
- ART585 - Intro Studio Art:
- ENGL641 - Poetry
- ENGL643 - Fiction
- ENGL645 - The Short Story
- ENGL678 - The Teacher as Writer
- WRIT682 - Genres in Nonfiction Writing

Equine Assisted Therapy and Learning Electives (6 credits)

Complete at least 2 of the following courses:

- SOWK640 - Sp Topics:
- SOWK641 - Sp Topics:

Select 2 classes in SOWK 640 or 641 with topics titled Equine Therapy and Intro to Animal Assisted Therapy

Internship (3 credits)

Complete ANY of the following Courses:

- SOWK630 - Advanced Field Practicum 1
- SOWK530 - Field Practicum 1

In consultation with advisor, complete an eligible practicum either SOWK 630 or 530.

School Social Work Post-Master's Certification

Overview

The School of Social Work at Millersville University is approved by the Pennsylvania Department of Education (PDE) to offer the Post-Master's School Social Work certification. The School Social Work certification is designed to prepare social work students with the required knowledge, skills, and expertise to support the academic, career and personal-social development needs"of diverse and vulnerable PK-12 students and their families.

In the Commonwealth of Pennsylvania, the School Social Work certification is required by school districts. In accordance with PDE Chapter 49, the MU school social curriculum includes the content and ethical requirements unique to the role of school social workers in promoting students academic, social, career, and socio-emotional development.

Upon completion of the required coursework, the Certification Office at Millersville University will assist eligible candidates with the Pennsylvania certification process and provide recommendations for the Post Master's School Social Work certification.

School Social Work Certification

Curriculum includes successful completion of: • MSW plus required program courses, including practicum experiences in a school setting that prepare candidates to be certified as a School Social Worker Educational Specialist • Pennsylvania certification process and recommendations for School Social Work through the MU Certification Office at https://www.millersville.edu/cert/index.php

Flexible Program Options

Applicants can earn their School Social Work certification while enrolled in the MSW program, part-time or full-time. Those applicants who hold a MSW from a CSWE accredited program may apply. Admissions Prospective student must submit a formal application to the Office of Graduate Studies and Adult Learning at https://www.millersville.edu/admissions/graduate/admissions/apply/. At time of application, students must include a resume detailing relevant experiences in a school setting, a well-written and focused goal statement, and ensure that references provide sufficient information about their relationship with the applicant, and evaluation of your experiences related to school social work practice.

Contact Information

Leonora Foels School Social Work Certification Program Coordinator Stayer Hall, Room 315 717-871-4732, Leonora.foels@millersville.edu

Curriculum

Simple Requirements

School Social Work Certification (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- SOWK606 - School Social Work
- SOWK631 - Advanced Field Practicum 2
- EDLD620 - School Law and Public Policy
- SOWK632 - Core Components and Skills for Trauma-informed Practice

AND

Diagnostic and Assessment Strategies for Students with Disabilities (3 credits)

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities

AND

Second Language Acquisition: Theory, Programs and Assessment or Assessment, Policies and Practices in Teaching English Language Learners (3 credits)

Complete at least 1 of the following courses:

- EDUC561 - Second Language Acquisition: Theory, Programs & Assessment
- EDUC564 - Assessment, Policies & Practice in Teaching of English Language Learners

Gerontology Minor

Overview

Millersville University has an interdisciplinary minor in gerontology. The program's objectives include increasing knowledge, examining values and improving skills to help students with their own aging, to live with aging people and to prepare them for careers helping the elderly. The program is also designed to improve the understanding and competence of students already working within this specialized area. Students must complete 18 credits to complete the minor.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Gerontology (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- GERT100 - Introduction to Gerontology
- SOWK306 - Social Work and Aging
- SOWK315 - Grief and Bereavement
- SOWK207 - Personal & Community Wellness: A Healthcare Policy Approach
- SOCI210 - Sociology of the Family

AND

Electives (3 credits)

Complete at least 1 of the following courses:

- NURS316 - Women, Health, and Health Care
  OR NURS316H - H: Women, Health, and Health Care
- PSYC229 - Psychology of Aging
- WSSD395 - Senior Living and Active Aging
- PHIL280 - Thanatopsis:Viewing Death

A topics course approved by the Program Coordinator may be used as an elective.

Social Justice Minor

Overview

Social justice is the core for all social work practice. The primary goals for the minor in social justice are to enhance sensitivity to vulnerable and at-risk populations, provide opportunity for critical review of social policies and the allocation of societal resources, and stimulate interest in advocacy and planned social change. This minor is intended to provide students with the knowledge and skills necessary to advocate from a social, economic and environmental justice framework.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Social Justice

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- SOWK102 - Modern Social Welfare Dilemmas
- SOWK201 - Social Welfare and the Economics of Inequality
- SOWK303 - Social Welfare and the Law: Current Issues
  OR SOWK303H - Hon: Social Welfare and the Law: Current Issues
- SOWK323 - Human Behavior and the Social Environment 2
- SOWK350 - Encounters in Human Diversity
  OR SOWK350H - H:Encounters in Human Diversity

AND

Social Work Electives

Complete at least 1 of the following courses:

- SOWK304 - Sowk, Corrections & Alt Trmnt
- SOWK205 - Child Welfare in Today's Society
- SOWK306 - Social Work and Aging
- SOWK207 - Personal & Community Wellness: A Healthcare Policy Approach
- SOWK208 - Substance Use Disorders: Effective Interventions
- SOWK209 - Assessment & Intervention in Behavioral & Mental Health Issues
- SOWK312 - SOWK & Wmn: Strgth, Need & Opp
- SOWK313 - Family Violence
  OR SOWK313H - H: Family Violence
- SOWK314 - Global Citizenship
  OR SOWK314H - HON:Global Citizenship
- SOWK315 - Grief and Bereavement
- SOWK316 - Mediation
- SOWK475 - Special Topics in Social Work

Social Work, B.A.

Overview

The social work program at Millersville University leads to a Bachelor of Arts degree in social work. Millersville's social work baccalaureate program is professionally accredited by the Council on Social Work Education. Based on the general education curriculum, the social work curriculum is designed to prepare students for beginning professional practice in social agencies and other settings where social workers are employed. The program educates the general practitioner; therefore, it is built on basic required courses. However, it also allows students to explore areas of interest through elective courses and practicum instruction assignments.

Social Work Program Mission

The mission of the Millersville University Baccalaureate Social Work Program is to promote human and community well-being by providing a generalist social work education rooted in the values of the social work profession. This education prepares students to be competent social workers who advocate and practice with individuals, families, groups, communities, and organizations utilizing the person-in-environment framework. Our graduates will be contemporary social workers committed to social, racial, economic, and environmental justice, human rights, the elimination of poverty, and globally responsive scientific inquiry.

Social Work Program Goals

To meet the purpose of the social work profession and the mission of Millersville University and the Social Work Baccalaureate Program, faculty seek to prepare students/graduates to:

Goal 1: Promote human and community well-being
Goal 2: Advance justice and human rights
Goal 3: Think globally; act locally

The curriculum is designed to help students integrate knowledge and theories from many academic disciplines with social work concepts, values and practice skills. Courses in the social work program attempt to develop an understanding of the human condition and human diversity. The social work major needs to understand biological, psychological and sociocultural aspects of human development; characteristics of human interaction with the social environment; the role, structure and function of social welfare policies and programs; social work intervention methods; and social work research findings and methods.

In addition to theoretical instruction, students are given ample opportunity for practical experience. The experiential requirements begin in the introductory courses and carry through to formal work in advanced courses. The culmination is 400 hours of supervised practicum during the student's final semester, wherein the student can integrate knowledge and skills in a social agency or other social service setting in the community.

A formal Professional Readiness Assessment process takes place for each student prior to placement in a social service setting for field instruction. Qualifications are based on academic performance, oral and written communication skills, and demonstrated ethical behavior, values and commitment to social work as a career. The social work faculty has the right to dismiss from the program, at any time, students found not qualified for social work practice. Overall, the purpose of the Professional Readiness process is to enhance the growth and development of students, to assist them in self-evaluation and correction, and to prepare them for practice in professional social work settings. In the event that a student's professional performance warrants a formal review and the potential outcome of termination from the major, the College of Education and Human Services Professionalism Policy and Process will be followed.

Curriculum

Simple Requirements

Major in Social Work (BA) (60 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Social Work Courses (24 credits)

Earn a minimum grade of C in the following:

- SOWK102 - Modern Social Welfare Dilemmas
- SOWK201 - Social Welfare and the Economics of Inequality
- SOWK203 - Human Behavior and the Social Environment 1
- SOWK303 - Social Welfare and the Law: Current Issues
- SOWK322 - Evidence-Informed Lit SOWK
- SOWK323 - Human Behavior and the

Social Environment 2
- SOWK350 - Encounters in Human Diversity
- SOWK430 - Social Work Research

AND

Practice I and II and III (9 credits)

Earn a minimum grade of C in the following:
- SOWK301 - Social Work Practice 1
- SOWK302 - Social Work Practice 2
  OR SOWK302H - H:Social Work Practice 2
- SOWK403 - Social Work Practice 3

SOWK301 Social Work Practice 1, SOWK302 Social Work Practice 2 and SOWK403 Social Work Practice 3 must be taken in sequence after pre-requisites have been met.

AND

Senior Block (15 credits)

Earn a minimum grade of C in the following:
- SOWK401 - Professionalism Seminar
  OR SOWK401H - Hon: Field Instruction 1
- SOWK402 - Social Work Practicum
- SOWK431 - Social Work Statistics

SOWK401 Professionalism Seminar and SOWK402 Social Work Practicum and SOWK431 Social Work Statistics are co-requisite courses (taken together in the same term).

AND

Social Work Electives (12 credits)

Complete at least 4 of the following courses:

No selection provided

Students should take 4 social work electives.

Req Related for Social Work (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

AND

Sociology Course (3 credits)

Complete at least 1 of the following courses:
- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology
- SOCI210 - Sociology of the Family
- SOCI211 - Social Problems
  OR SOCI211H - H:Social Problems

Courses

FYEX100N - Be the Change! Exploring Social Justice in the US

Course Information

Course Title
Be the Change! Exploring Social Justice in the US

Subject code	Course Number	Academic Level
FYEX	100N	Undergraduate

Course Description
Each First Year Seminar (FYEX) section features an academic centerpiece (a question, topic, or theme) that will ground the process of intellectual inquiry through a free exchange of ideas during and outside of class. FYEX instructors mentor and assist students in developing meaningful and purposeful goals. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Specific to this FYEX 100 Course Description:

Do you want to be the change you wish to see in the world? Your journey of exploring social justice and finding inspiration to make positive social change starts here! Utilizing a social justice perspective and a human rights framework, we will explore social problems, social justice heroes of the past, and current ways to make the world a better place. In this class, you will learn about campus resources –both academic and social –to help you thrive. This course will culminate with your production of a scholarly electronic research poster delineating a social justice warrior of pure inspiration.

In this course, students will begin to explore the topic of social justice as a motivating influence to inspire social change. Utilizing a social justice perspective and a human rights framework, this course will explore a variety of social problems, social justice heroes of the past, and current ways to make the world a better place for everyone. This course will culminate with your production of a scholarly electronic research poster delineating a social justice warrior of inspiration. As a FYEX 100 course, students will be provided with an open and supportive atmosphere to engage as budding scholars. Additional resources relating to orientation to campus and the academic environment will be provided. As we explore social justice, we will be examining the construct of self-sufficiency and how this relates to living on one’s own for the first time.

Cornerstone Stage Labels
First-Year Experience (FYEX)

GERT100 - Introduction to Gerontology

Course Information

Course Title
Introduction to Gerontology

Subject code	Course Number	Academic Level
GERT	100	Undergraduate

Course Description
An introduction to the field of aging and examination of the physiological, sociological, psychological and economic perspectives. This course also focuses on problems of the aged at levels of self, interactions with others and the broader societal context. Offered in spring of even years.

GERT179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GERT	179	Undergraduate

Course Description
Experimental

GERT210 - Aging and the Law

Course Information

Course Title
Aging and the Law

Subject code	Course Number	Academic Level
GERT	210	Undergraduate

Course Description
Introduction to legal concepts and thinking. Study of the laws, regulations, social policies and psychological factors that affect delivery of service to the elderly in the areas of economic security, employment, health care, wills, mental health, housing, criminal justice, consumer protection. Offered periodically. Prereq: ENGL 110.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

GERT279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GERT	279	Undergraduate

Course Description
Experimental

GERT300 - Co-Op Ed Experience in Gert

Course Information

Course Title
Co-Op Ed Experience in Gert

Subject code	Course Number	Academic Level
GERT	300	Undergraduate

Course Description
Supervised practicum at cooperating agencies and organizations active in serving the elderly, for a minimum of 150 hours (10 hrs./week). Involvement in meeting physiological and/or psychological and/or social needs of the elderly. Prereq: GERT 100 and at least 30 s.h. of general education and gerontology courses. Faculty involvement in and approval of practicum plan. Malpractice liability insurance required.

Simple Requirements

Course Prerequisites

Type
Prerequisite

GERT 100

Complete ALL of the following Courses:
- GERT100 - Introduction to Gerontology

Minimum General Education and Gerontology Courses Credits

Earn at least 30 credits

GERT379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GERT	379	Undergraduate

Course Description
Experimental

GERT400 - Co-Op Ed Experience in Gert

Course Information

Course Title
Co-Op Ed Experience in Gert

Subject code	Course Number	Academic Level
GERT	400	Undergraduate

Course Description
Co-Op Ed Experience in Gert

GERT479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GERT	479	Undergraduate

Course Description
Experimental

GERT500 - Co-Op Ed Experience in Gert

Course Information

Course Title
Co-Op Ed Experience in Gert

Subject code	Course Number	Academic Level
GERT	500	Graduate

Course Description
Co-Op Ed Experience in Gert

SOWK102 - Modern Social Welfare Dilemmas

Course Information

Course Title
Modern Social Welfare Dilemmas

Subject code	Course Number	Academic Level
SOWK	102	Undergraduate

Course Description
Introduction to social works approach to social problems, including how public-policy decisions affect individuals and families; overview of competing public-policy agendas in social welfare and alternative strategies for problem resolution, societal values and trends affecting service delivery; understanding social work in action; examining core concepts, values and ethics.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

SOWK179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SOWK	179	Undergraduate

Course Description
Experimental

SOWK201 - Social Welfare and the Economics of Inequality

Course Information

Course Title
Social Welfare and the Economics of Inequality

Subject code	Course Number	Academic Level
SOWK	201	Undergraduate

Course Description
This course offers a general understanding of economic theory as it applies to both microeconomic and macroeconomic decision making. The course comprises two major foci: 1) practical applications of decision-making paradigms for practice with individuals and families in the social work context; and 2) understanding the effects of economic conditions on social welfare policy, those who make policy and those who advocate for changes in the policy arena.

Gateway Stage Labels
Problem Solving (PS)

SOWK203 - Human Behavior and the Social Environment 1

Course Information

Course Title
Human Behavior and the Social Environment 1

Subject code	Course Number	Academic Level
SOWK	203	Undergraduate

Course Description
Examines the life span approach to human development, with focus on interaction between the individuals biopsychosocial functioning and the social environment. Analyzes the impact of human diversity on behavior in social situations, with particular emphasis on populations at risk. Studies how factors of human diversity affect social policy. Prereq: SOWK C or higher in 102 and sophomore status or permission of instructor. Prereq or coreq: PSYC 100, SOCI 210.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 102

Earn a minimum grade of C in the following:
- SOWK102 - Modern Social Welfare Dilemmas

Credit Hours Completion (Sophomore or Junior or Senior Class Standing)

Earn at least 30 credits
Or must have permission of instructor.

Course Prerequisites or Corequisites

Type
Prerequisite

PSYC100 Or PSYC100H and BIOL204 and SOCI101 or SOCI101H or SOCI210 or SOCI211 or SOCI211H

Complete ALL of the following Courses:
- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology
- SOCI101 - Introduction to Sociology
  OR SOCI101H - Introduction to Sociology

OR SOCI210 - Sociology of the Family
OR SOCI211 - Social Problems
OR SOCI211H - H:Social Problems

SOWK205 - Child Welfare in Today's Society

Course Information

Course Title
Child Welfare in Today's Society

Subject code	Course Number	Academic Level
SOWK	205	Undergraduate

Course Description
Concepts, policies and practices in child welfare services as a response to the needs of children and their families; focus on services designed to support, supplement or substitute for the care usually given by biological parents; social work practices and public-policy issues in foster care, adoption, day care, institutional care, protective services, teenage pregnancy and juvenile delinquency.

Gateway Stage Labels
Information Literacies (IL)

SOWK207 - Personal & Community Wellness: A Healthcare Policy Approach

Course Information

Course Title
Personal & Community Wellness: A Healthcare Policy Approach

Subject code	Course Number	Academic Level
SOWK	207	Undergraduate

Course Description
This undergraduate course explores the multifaceted dimensions of health and health care, emphasizing the importance of both physical and emotional well-being from a social work perspective. Students will specifically examine the principles of the Americans with Disabilities Act (ADA) accessibility, ensuring equitable access to health services for individuals with disabilities. Additionally, the course will delve into the complexities of health insurance, providing insights into how coverage impacts access to care. Through a combination of lectures, case studies, and interactive discussions, students will gain a comprehensive understanding of the interconnectedness of health, accessibility, and insurance in shaping health outcomes. By the end of the course, students will be equipped with the knowledge and skills to foster positive health outcomes for themselves and their communities using an evidence-based framework.

Gateway Stage Labels
Personal Wellness (PWEL)

SOWK208 - Substance Use Disorders: Effective Interventions

Course Information

Course Title
Substance Use Disorders: Effective Interventions

Subject code	Course Number	Academic Level
SOWK	208	Undergraduate

Course Description
This elective course examines effective interventions for substance use disorders including alternative treatments. Students will review research, policies, trends, theories, legal, and other empirically supported strategies for addressing issues. Students will collect, evaluate and analyze the empirical evidence to determine the most effective interventions for substance use disorders.

Gateway Stage Labels
Problem Solving (PS)

SOWK209 - Assessment & Intervention in Behavioral & Mental Health Issues

Course Information

Course Title
Assessment & Intervention in Behavioral & Mental Health Issues

Subject code	Course Number	Academic Level
SOWK	209	Undergraduate

Course Description
Course Description: SOWK 209 will discuss policies, research, and theory associated with behavioral and emotional health. Exploration of case studies, research literature, and other active learning strategies will expose students to behavioral and mental health diagnoses and identify effective interventions that treat those conditions. Students will apply research, theory and social work values to practice with individuals and their families with behavioral or mental health diagnosis within social, economic, educational, legal and political systems.

Gateway Stage Labels
Information Literacies (IL)

SOWK279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SOWK	279	Undergraduate

Course Description
Experimental

SOWK300 - Co-Op Ed Experience in Sowk

Course Information

Course Title
Co-Op Ed Experience in Sowk

Subject code	Course Number	Academic Level
SOWK	300	Undergraduate

Course Description
Co-Op Ed Experience in Sowk

SOWK301 - Social Work Practice 1

Course Information

Course Title
Social Work Practice 1

Subject code	Course Number	Academic Level
SOWK	301	Undergraduate

Course Description
Study of the wide range of activities that constitute the generalist social work approach. Designed to assist students to develop basic entry-level professional social work competencies within a systems framework. Prereq: ENGL 110. Prereq or coreq: SOWK 203, junior standing. Corequisite: SOWK 322. SOWK majors only.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Course Prerequisites or Corequisites

Type
Prerequisite

SOWK 230

Complete ALL of the following Courses:
- SOWK203 - Human Behavior and the Social Environment 1

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Course Corequisites

Type
Corequisite

SOWK 322

Enroll in the following Courses:
- SOWK322 - Evidence-Informed Lit SOWK

Degree/Major/Field of Study Restrictions

Type
Prerequisite

SOWK Majors Only

Must be a SOWK major.

SOWK302 - Social Work Practice 2

Course Information

Course Title
Social Work Practice 2

Subject code	Course Number	Academic Level
SOWK	302	Undergraduate

Course Description
: In-depth examination of the knowledge, values and skills that form the base of social work practice; method selection and skill development in social work intervention; practice with social work communication skills. Emphasis on practice with groups and vulnerable populations. Prereq: C or higher in SOWK 301. Corequisite: SOWK 430. SOWK majors only.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 301

Earn a minimum grade of C in the following:
- SOWK301 - Social Work Practice 1

Course Corequisites

Type
Corequisite

SOWK 430

Enroll in the following Courses:
- SOWK430 - Social Work Research

Degree/Major/Field of Study Restrictions

Type
Prerequisite

SOWK Majors Only

Must be a SOWK major.

SOWK302H - H:Social Work Practice 2

Course Information

Course Title
H:Social Work Practice 2

Subject code	Course Number	Academic Level
SOWK	302H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 301

Earn a minimum grade of C in the following:
- SOWK301 - Social Work Practice 1

Course Corequisites

Type
Corequisite

SOWK 430

Enroll in the following Courses:
- SOWK430 - Social Work Research

Degree/Major/Field of Study Restrictions

Type
Prerequisite

SOWK Majors Only

Must be a SOWK major.

SOWK303 - Social Welfare and the Law: Current Issues

Course Information

Course Title
Social Welfare and the Law: Current Issues

Subject code	Course Number	Academic Level
SOWK	303	Undergraduate

Course Description
SOWK 303 Social Welfare & the Law: Current Issues provides a comprehensive exploration of how policies and laws are developed, enacted, and implemented across all levels of government. SOWK 303 emphasizes both the mechanics of policymaking and the power of advocacy to demystify the policy change process and equips students with the orienting knowledge, skills, and strategies needed to influence policy at multiple levels. Students will learn about the policy change process and strategies for how change is enacted on all levels of government including local, state, and national laws. Additionally, this course will review several landmark Supreme Court cases, with an emphasis on those most pertinent to social work and social justice issues. A comprehensive introduction to political advocacy and the political process, this course will use an historical lens to better understand contemporary social issues such as healthcare, mental health, housing, child welfare, civil rights, and others.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

SOWK303H - Hon: Social Welfare and the Law: Current Issues

Course Information

Course Title
Hon: Social Welfare and the Law: Current Issues

Subject code	Course Number	Academic Level
SOWK	303H	Undergraduate

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

SOWK304 - Sowk, Corrections & Alt Trmnt

Course Information

Course Title
Sowk, Corrections & Alt Trmnt

Subject code	Course Number	Academic Level
SOWK	304	Undergraduate

Course Description
A general introduction to the study of the juvenile correctional system in the United States and assessment and treatment of youth who may be at risk for interacting with the system. A historical perspective of juvenile, as well as adult,corrections will be offered, along with discussions and examinations of the etiology and extent of juvenile crime as well as antecedents of violence, environmental and ecological factors for the causes of criminality, along with assessment of at risk youth and their families. A historical perspective, rehabilitation approaches, de-institutionalization, community based programs and alternatives to incarceration will be reviewed.

SOWK306 - Social Work and Aging

Course Information

Course Title
Social Work and Aging

Subject code	Course Number	Academic Level
SOWK	306	Undergraduate

Course Description
A developmental approach to the aging process as one phase of the life cycle; biological, psychological, social and economic needs of the elderly; analysis of societal provision for these needs; public-policy issues and pertinent social legislation; community-based programs of social and health services; techniques of generic social work with older persons; advocacy and policy planning for the aging. Lectures and discussion supplemented with audiovisual material, speakers and field visits as available. Volunteer experience with an older person or persons required.

SOWK312 - SOWK & Wmn: Strgth, Need & Opp

Course Information

Course Title
SOWK & Wmn: Strgth, Need & Opp

Subject code	Course Number	Academic Level
SOWK	312	Undergraduate

Course Description
Scope and contribution of professional social work in regard to womens issues and concerns in contemporary society. Emphasis on the analysis of individual and community womens needs, the social and behavioral aspects of womens concerns, the essential practice components and skills required of social workers, social welfare policy and women, issues and trends, alternative womens programs and research needs. Prereq: ENGL 110

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

SOWK313 - Family Violence

Course Information

Course Title
Family Violence

Subject code	Course Number	Academic Level
SOWK	313	Undergraduate

Course Description
Professionals and society at large have recognized violence in the family against children, spouses and the elderly as a social problem. Other emerging related issues include cross-cultural violence, partner violence in gay/lesbian relationships, courtship violence and date rape. Focus will also include theories of abuse with various populations as well as treatment approaches to the various forms of family violence. Prereq: COMM 100, ENGL 110 and junior status.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

SOWK313H - H: Family Violence

Course Information

Course Title
H: Family Violence

Subject code	Course Number	Academic Level
SOWK	313H	Undergraduate

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

SOWK314 - Global Citizenship

Course Information

Course Title
Global Citizenship

Subject code	Course Number	Academic Level
SOWK	314	Undergraduate

Course Description
This course is interdisciplinary and intercultural in nature. It is designed prepare all students whose anticipated careers are primarily oriented to direct work with the global community, both domestically and internationally. There will be an emphasis on developing interpersonal communication skills for interacting with people whose way of life differs from one's own; developing insights into the multi-faceted issues impacting our world; and understanding global interconnection with oppression to foster social justice. Prerequisites: COMM 100, ENG 110 and 54 earned credits.

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

54 credits earned to register for a Keystone course

Earn at least 54 credits

SOWK314H - HON:Global Citizenship

Course Information

Course Title
HON:Global Citizenship

Subject code	Course Number	Academic Level
SOWK	314H	Undergraduate

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

54 credits earned to register for a Keystone course

Earn at least 54 credits

SOWK315 - Grief and Bereavement

Course Information

Course Title
Grief and Bereavement

Subject code	Course Number	Academic Level
SOWK	315	Undergraduate

Course Description
Provide a framework for critical analysis of the dynamics of grief and bereavement. Combining a general social systems perspective, an ecological perspective, and the problem-solving approach, this course will assist students to integrate knowledge about grief and bereavement into their knowledge of practice theory and human behavior at the micro, mezzo, and macro levels. Students will appreciate the diversity of grieving practices and rituals among cultural, religious, and ethnic groups. Bereavement dynamics across the life span are addressed. The impact of death and disaster at the community level will be understood, including assessment tools and intervention strategies. Prereq: ENGL 110 and COMM 100

Gateway Stage Labels
Problem Solving (PS)

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM100 or COMM100H or ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

SOWK316 - Mediation

Course Information

Course Title
Mediation

Subject code	Course Number	Academic Level
SOWK	316	Undergraduate

Course Description
Mediation as an alternate form of dispute resolution is continuing to rise and is being used in corporate, labor, consumer, and family issues widely across the United States. Students in the Mediation class will focus on practical and theoretical aspects of mediation and its place in the larger framework of alternate dispute resolution. Skills in helping parties find common ground, creating a climate for reaching agreement, aspects of confidentiality, and both directive and non-directive mediation techniques will be explored. Each student will have the opportunity to role play at least one brief session in the role of mediator.

SOWK317 - Perspectives on Poverty in the United States

Course Information

Course Title
Perspectives on Poverty in the United States

Subject code	Course Number	Academic Level
SOWK	317	Undergraduate

Course Description
Perspectives on Poverty in the United States will provide students with an opportunity to explore the dynamics of and cultural attitudes surrounding poverty in the United States. This course will provide an atmosphere conducive to critical thinking, personal reflection, and social action. The essential inquiry of the course is to task students with critical interrogation of the question “what is poverty all about?” using multiple perspectives and diverse frameworks. To do this, students will explore diverse disciplinary viewpoints, including those of sociology, social work, economics, history, and media. This course will use an historical lens to investigate cultural constructions of the problem of poverty from colonial times to present. Modern conceptualizations of poverty from the perspective of popular culture and our own families and experiences will likewise be interrogated. The primary lens of the course will be the use of personal narratives that people in poverty have written about their own experience to help students develop social empathy. Additionally, the course will task students to also explore both cultural and personal assumptions associated with poverty, a pedagogical strategy that will help poise them to begin a journey as community leaders in advancing social justice. Throughout this critical inquiry, students from all disciplines will explore the complexities of poverty and economic vulnerability, developing empathy, knowledge, and skills that will help them to become thoughtful and productive citizens in any field. Prereq: ENGL 110 and COMM 100

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

COMM100 or COMM100H or ENGL 110 or ENGL 110H

Complete ANY of the following Courses:

- COMM100 - Fundamentals of Speech
- COMM100H - Hnrs:Fundamentals of Speech
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

SOWK322 - Evidence-Informed Lit SOWK

Course Information

Course Title
Evidence-Informed Lit SOWK

Subject code	Course Number	Academic Level
SOWK	322	Undergraduate

Course Description
Aiming to strengthen students' foundational and professional research and writing skills in preparation for professional social work practice, a combination of peer review processes and iterative instructor feedback is utilized to support students as they produce the course's primary product--a comprehensive literature review. Students receive instruction related to foundational writing skills and complete assignments related to writing forms required of social work professionals to increase their writing competency. Prerequisites: ENGL 110 and SOWK 102. Coreq: SOWK 301

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and SOWK 102

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- SOWK102 - Modern Social Welfare Dilemmas

Course Corequisites

Type
Corequisite

SOWK 301

Enroll in the following Courses:

- SOWK301 - Social Work Practice 1

SOWK323 - Human Behavior and the Social Environment 2

Course Information

Course Title
Human Behavior and the Social Environment 2

Subject code	Course Number	Academic Level
SOWK	323	Undergraduate

Course Description
The second of two courses in human behavior and the social environment, emphasizing 1) the interaction of social and economic forces with individuals and social systems; 2) traditional and alternative theories about systems as they interact with people, promoting and impeding health, welfare and well-being, in the context of human culture and diversity; and 3) knowledge about opportunity structures and how they promote and deter human development and meeting needs. Prereq: C or higher in SOWK 203. SOWK majors or Social Justice minors only.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 203

Earn a minimum grade of C in the following:
- SOWK203 - Human Behavior and the Social Environment 1

Degree/Major/Field of Study Restrictions

Type
Prerequisite

SOWK Majors & Social Justice Minors Only

Must be a SOWK major or Social Justice minor.

SOWK350 - Encounters in Human Diversity

Course Information

Course Title
Encounters in Human Diversity

Subject code	Course Number	Academic Level
SOWK	350	Undergraduate

Course Description
An upper-level, multicultural, interdisciplinary, interactive course designed to enhance students knowledge, skills and values relative to working with people in professional situations within a diversity-embracing atmosphere. Focuses on the various differences in communication styles brought about by gender and culture. Designed for students whose anticipated careers are primarily oriented to direct work with people. Prereq: COMM 100, ENGL 110 and junior status.

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

SOWK350H - H:Encounters in Human Diversity

Course Information

Course Title
H:Encounters in Human Diversity

Subject code	Course Number	Academic Level
SOWK	350H	Undergraduate

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:

- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

SOWK379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SOWK	379	Undergraduate

Course Description
Experimental

SOWK400 - Co-Op Ed Experience in Sowk

Course Information

Course Title
Co-Op Ed Experience in Sowk

Subject code	Course Number	Academic Level
SOWK	400	Undergraduate

Course Description
Co-Op Ed Experience in Sowk

SOWK401 - Professionalism Seminar

Course Information

Course Title
Professionalism Seminar

Subject code	Course Number	Academic Level
SOWK	401	Undergraduate

Course Description
SOWK 401: Professional development course taken as a co-requisite with SOWK 402 and SOWK 431. Students will practice professional skill building related to practicum placements and complete self-assessments to enhance their skills in professional practice. Prerequisites: 24 credit hours of social work professional courses; C or higher in SOWK 403.
Co-requisite: SOWK 431 and SOWK 402. SOWK majors only.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 403

Earn a minimum grade of C in the following:
- SOWK403 - Social Work Practice 3

Course Corequisites

Type
Corequisite

SOWK 431

Enroll in the following Courses:
- SOWK431 - Social Work Statistics
  AND SOWK402 - Social Work Practicum

Degree/Major/Field of Study Restrictions

Type
Corequisite

SOWK Majors Only

Must be a SOWK major.

SOWK401H - Hon: Field Instruction 1

Course Information

Course Title
Hon: Field Instruction 1

Subject code	Course Number	Academic Level
SOWK	401H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 403

Earn a minimum grade of C in the following:
- SOWK403 - Social Work Practice 3

Course Corequisites

Type
Corequisite

SOWK 431

Enroll in the following Courses:
- SOWK431 - Social Work Statistics

Degree/Major/Field of Study Restrictions

Type
Corequisite

SOWK Majors Only

Must be a SOWK major.

SOWK402 - Social Work Practicum

Course Information

Course Title
Social Work Practicum

Subject code	Course Number	Academic Level
SOWK	402	Undergraduate

Course Description
Supervised placement in social service setting for 400 hours of social work practice. The placement experience is supervised by a BSW or MSW site supervisor who meets practice requirements and the practicum liaison. Practicum allows for students to experience the integration of theory and practice. Practicum allows for practice across all levels of social work practice including individuals, families, groups, organizations, and communities. Students will apply a global human rights framework to advance social, racial, economic, and environmental justice. Malpractice liability insurance required. State record check, FBI, and child abuse clearances required. Prerequisites: 24 credit hours of social work professional courses; C or higher in SOWK 403. Co-requisite: SOWK 401 and SOWK 431. SOWK majors only.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK403

Earn a minimum grade of C in the following:
- SOWK403 - Social Work Practice 3

Course Corequisites

Type
Corequisite

SOWK 431

Enroll in the following Courses:
- SOWK431 - Social Work Statistics
  AND SOWK401 - Professionalism Seminar

Degree/Major/Field of Study Restrictions

Type
Corequisite

SOWK Majors Only

Must be a SOWK major.

SOWK403 - Social Work Practice 3

Course Information

Course Title
Social Work Practice 3

Subject code	Course Number	Academic Level
SOWK	403	Undergraduate

Course Description
Theoretical aspects of the skills, knowledge and values in social work practice at the macro level involving organizations and communities. Integration of abstract knowledge with concrete experience in the field. Prereq: C or higher in SOWK 302. SOWK majors only.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 302 or SOWK 302H

Earn a minimum grade of C in the following:
- SOWK302 - Social Work Practice 2
  OR SOWK302H - H:Social Work Practice 2

Degree/Major/Field of Study Restrictions

Type
Prerequisite

SOWK Majors Only

Must be a SOWK major.

SOWK430 - Social Work Research

Course Information

Course Title
Social Work Research

Subject code	Course Number	Academic Level
SOWK	430	Undergraduate

Course Description
Emphasis on the scientific method in development of beginning evaluative skills that contribute to practice competence. Knowledge to evaluate critically the research findings of others; use of research methods to improve practice. Students are required to participate in a research study. Prereq: ENGL 110, SOWK 102, 322. Coreq: SOWK 302. SOWK majors only.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and SOWK 102 and SOWK 322

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- SOWK102 - Modern Social Welfare Dilemmas
- SOWK322 - Evidence-Informed Lit SOWK

Corequisite

Type
Corequisite

SOWK 302

Enroll in the following Courses:

- SOWK302 - Social Work Practice 2

Degree/Major/Field of Study Restrictions

Type
Prerequisite

SOWK Majors Only

Must be a SOWK major.

SOWK431 - Social Work Statistics

Course Information

Course Title
Social Work Statistics

Subject code	Course Number	Academic Level
SOWK	431	Undergraduate

Course Description
Social work research skills values and knowledge. Research design, statistical usage and data analysis in social work practice and research. Students develop a research proposal. Prereq: ENGL 110, MATH 100 or Gen. Ed. MATH, SOWK 430, SOWK majors only. Co-requisites SOWK 401/ 402.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and SOWK 430 and MATH 100 (or Gen Ed MATH)

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- SOWK430 - Social Work Research
- MATH100 - Survey of Mathematical Ideas

Course Corequisites

Type
Corequisite

SOWK 401 or SOWK 401H and SOWK 402

Enroll in the following Courses:

- SOWK401 - Professionalism Seminar **OR** SOWK401H - Hon: Field Instruction 1
- SOWK402 - Social Work Practicum

Degree/Major/Field of Study Restrictions

Type
Prerequisite

SOWK Majors Only

Must be a SOWK major.

SOWK475 - Special Topics in Social Work

Course Information

Course Title
Special Topics in Social Work

Subject code	Course Number	Academic Level
SOWK	475	Undergraduate

Course Description
Advanced study of a social work practice issue. The course may be taken for credit more than one semester as topics vary. Topics may include youth violence, human trafficking, poverty and homelessness, immigration and refugee care, military social work, and rural social work issues. Offered annually with different topics.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK102

Complete ALL of the following Courses:

- SOWK102 - Modern Social Welfare Dilemmas

SOWK479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SOWK	479	Undergraduate

Course Description
Experimental Course Number. Content Varies.

SOWK489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
SOWK	489	Undergraduate

Course Description
For the definition of honors courses/thesis and eligibility, refer to the Special Academic Opportunities section of this catalog.

SOWK498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
SOWK	498	Undergraduate

Course Description
For further information on independent study, see the Special Academic Opportunities section.

SOWK499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
SOWK	499	Undergraduate

Course Description
For the definition of honors courses/thesis and eligibility, refer to the Special Academic Opportunities section of this catalog.

SOWK500 - Co-Op Ed Experience in Sowk

Course Information

Course Title
Co-Op Ed Experience in Sowk

Subject code	Course Number	Academic Level
SOWK	500	Graduate

Course Description
Co-Op Ed Experience in Sowk

SOWK501 - Principles and Philosophies of Social Work

Course Information

Course Title
Principles and Philosophies of Social Work

Subject code	Course Number	Academic Level
SOWK	501	Graduate

Course Description
An introduction to social work's approach to social problems, including how public policy decisions affect individuals and families; overview of competing public- policy agendas in social welfare and alternative strategies for problem resolution; societal values and trends affecting service delivery; understanding social work in action; examining core concepts, values and ethics.

Simple Requirements

Graduate Level

Type
Prerequisite

SOWK505 - Understanding Social Work Practices w Diverse Pops

Course Information

Course Title
Understanding Social Work Practices w Diverse Pops

Subject code	Course Number	Academic Level
SOWK	505	Graduate

Course Description
An introduction to social work's approach to social problems, including how public policy decisions affect individuals and families; overview of competing public- policy agendas in social welfare and alternative strategies for problem resolution; societal values and trends affecting service delivery; understanding social work in action; examining core concepts, values and ethics.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 501

Complete ALL of the following Courses:
- SOWK501 - Principles and Philosophies of Social Work

SOWK510 - Human Behavior in the Social Environment I

Course Information

Course Title
Human Behavior in the Social Environment I

Subject code	Course Number	Academic Level
SOWK	510	Graduate

Course Description
Examines the life-span approach to human development, with a focus on the interaction between the individuals biopsychosocial functioning and the social environment. It considers the impact of micro and mezzo (i.e., families and small groups) systems on behavior, with particular emphasis given to populations considered to be at risk.This course may be offered in multiple modalities.Prereq or Coreq: SWK/SOWK 501.

Simple Requirements

Completed Course Prerequisite or Corequisite

Type
Prerequisite

SOWK 501

Complete ALL of the following Courses:
- SOWK501 - Principles and Philosophies of Social Work

SOWK511 - Human Behavior in the Social Environment II

Course Information

Course Title
Human Behavior in the Social Environment II

Subject code	Course Number	Academic Level
SOWK	511	Graduate

Course Description
Explores theories for understanding the behavior of individuals, social systems and communities. It examines traditional and alternative perspectives on the political, economic and institutional environments, and critically considers opportunity structures and how they deter and promote human. Students evaluate theory and apply it to social work practice situations.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 510

Complete ALL of the following Courses:
- SOWK510 - Human Behavior in the Social Environment I

Course Co-Requisite

Type
Corequisite

Enroll in the following Courses:
- SOWK510 - Human Behavior in the Social Environment I

SOWK515 - Social Welfare Policy

Course Information

Course Title
Social Welfare Policy

Subject code	Course Number	Academic Level
SOWK	515	Graduate

Course Description
Furnishes students with the orienting knowledge and skills needed to examine social welfare policies and to understand their relevance to social service delivery and social work practice.This course may be offered in multiple modalities.Prereq: SWK/SOWK 501

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 501

Complete ALL of the following Courses:
- SOWK501 - Principles and Philosophies of Social Work

SOWK520 - Micro/Mezzo Social Work Practices

Course Information

Course Title
Micro/Mezzo Social Work Practices

Subject code	Course Number	Academic Level
SOWK	520	Graduate

Course Description
Offers opportunities for applying and studying advanced generalist practice with individuals, families and groups. Students will learn and apply skills to their specific areas of interest, which enable development of individuals, families and groups in environment processes for improving social functioning.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 501

Complete ALL of the following Courses:
- SOWK501 - Principles and Philosophies of Social Work

Course Corequisites

Type
Corequisite

SOWK 530

Enroll in the following Courses:
- SOWK530 - Field Practicum 1

Corequisite Requirement

Type
Corequisite

Enroll in the following Courses:
- SOWK501 - Principles and Philosophies of Social Work

SOWK521 - Macro Social Work Practice

Course Information

Course Title
Macro Social Work Practice

Subject code	Course Number	Academic Level
SOWK	521	Graduate

Course Description
Conceptualizes macro social work as the profession that brings about social change. The course extends from understanding theories about communities and organizations to assessment and practice. Students will focus on analysis of the community as a social system, common strategies for producing change in community work, the nature of formal organizations as environments through which social services are provided in the community, and the knowledge and skills necessary to effect change within organizations. Students will examine the role of a macro social worker as program developer, program administrator and organization developer.This course may be offered in multiple modalities.Prereq: SWK/SOWK 520; Coreq: SOWK 531.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 520

Complete ALL of the following Courses:
- SOWK520 - Micro/Mezzo Social Work Practices

Course Corequisites

Type
Corequisite

SOWK 531

Enroll in the following Courses:
- SOWK531 - Field Practicum 2

SOWK525 - Research Methods

Course Information

Course Title
Research Methods

Subject code	Course Number	Academic Level
SOWK	525	Graduate

Course Description
Introduces research concepts, procedures for conducting research and their application to social work practice. Advanced knowledge of scientific inquiry, the ethics that guide research and the roles of social workers as researchers are also covered. Both qualitative and quantitative methods of collecting and analyzing data are given major attention. Students learn the procedure for developing a research proposal. This course may be offered in multiple modalities. Pre- or co-req: SWK/SOWK 501

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 501

Complete ALL of the following Courses:
- SOWK501 - Principles and Philosophies of Social Work

Corequsite

Type
Corequisite

Corequisite 501

Enroll in the following Courses:
- SOWK501 - Principles and Philosophies of Social Work

SOWK530 - Field Practicum 1

Course Information

Course Title
Field Practicum 1

Subject code	Course Number	Academic Level
SOWK	530	Graduate

Course Description
Provides students with practical experience (200 hours) in supervised direct-service activities across all client systems, from the individuals level to that of the community. This initial field experience allows the student to apply theory and skills acquired in the generalist foundation areas while simultaneously fostering the development of a professionally reflective, ethical, knowledgeable and self-evaluating social worker. The course also includes a seminar where students discuss and process the field experience with faculty.Coreq: SWK/SOWK 520

Simple Requirements

Course Corequisites

Type
Corequisite

SOWK 520

Enroll in the following Courses:
- SOWK520 - Micro/Mezzo Social Work Practices

SOWK531 - Field Practicum 2

Course Information

Course Title
Field Practicum 2

Subject code	Course Number	Academic Level
SOWK	531	Graduate

Course Description
Provides students with practical experience (200 hours) in supervised direct-service activities across all client systems, from the individuals level to that of the community. This initial field experience allows the student to apply theory and skills acquired in the generalist foundation areas while simultaneously fostering the development of a professionally reflective, ethical, knowledgeable and self-evaluating social worker. The course also includes a seminar where students discuss and process the field experience with faculty.Prereq: SWK/SOWK 530 Coreq: SWK/SOWK 521

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 530

Complete ALL of the following Courses:
- SOWK530 - Field Practicum 1

Course Corequisites

Type
Corequisite

SOWK 521

Enroll in the following Courses:
- SOWK521 - Macro Social Work Practice

SOWK601 - Diversity, Dialogues, & Social Justice

Course Information

Course Title
Diversity, Dialogues, & Social Justice

Subject code	Course Number	Academic Level
SOWK	601	Graduate

Course Description
This course is designed to increase students' awareness, knowledge, and understanding of issues related to diversity and social justice, including but not limited to race, ethnicity, class, gender, gender identity, religion, sexual orientation, age, ability status, and the intersections between these social identity groups. Additionally, students will gain an understanding of dialogue as a method for peacefully resolving conflict that may emerge due to cultural misunderstandings or oppressive dynamics, as well as skills for effectively engaging in dialogue. The topics of this course include social identity development; difference and dominance and the nature of social oppression; our personal and interpersonal connections to power, privilege, and oppression; understanding and resolving conflicts or resistance; the process of dialogue and coalition building across differences; and its applications in multicultural social work settings.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Completion of SOWK 531 OR Enrollment in Specialization Year or Advanced Standing Status

Fulfill ANY of the following requirements:

SOWK602 - Behavioral Health

Course Information

Course Title
Behavioral Health

Subject code	Course Number	Academic Level
SOWK	602	Graduate

Course Description
Extends and elaborates the advanced generalist approach to social work practice to a special field of practice. The purpose of this course is to introduce the students to the social worker's role in behavioral health care and the policy issues that impact on practice. The course will focus on four content areas: 1) what the social worker's role is in adult and child behavioral health care settings; 2) historic and current policies that affect behavioral health care services; 3) current research in behavioral health care related issues and 4) international models of care. Social workers are frequently involved in the delivery of services to people and families troubled by mental disorders in settings designed to deal specifically with those problems, as well as in other practice areas such as corrections, schools, child welfare, and gerontology

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 601

Complete ALL of the following Courses:
- SOWK601 - Diversity, Dialogues, & Social Justice

Or completion of foundation year.

SOWK604 - Health Care

Course Information

Course Title
Health Care

Subject code	Course Number	Academic Level
SOWK	604	Graduate

Course Description
SOWK 604 introduces students to the social worker's role in health care and the policy issues that impact practice. This course will provide a detailed exploration of social work practice across the continuum of healthcare services including health promotion, disease prevention and community based, acute, tertiary and end of life care. Particular attention is devoted to the opioid epidemic in Pennsylvania and opportunities for social workers. Social work practice is explored within the context of the psychosocial consequences of illness, the structure of the healthcare delivery system, technological advances, changing economic and regulatory practices, as well as ethical, political and legal considerations. Reserved for MSW students and BASW ACCL students.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Reserved for MSW students and BASW ACCL students.

Fulfill ANY of the following requirements:
Reserved for MSW students and BASW ACCL students.

SOWK605 - Child Welfare

Course Information

Course Title
Child Welfare

Subject code	Course Number	Academic Level
SOWK	605	Graduate

Course Description
Provides an in-depth study of the concepts, policies, practices and research in the field of child welfare and family and children services. This course will provide an introduction to the child welfare field, an overview of the development of services for children, a detailed examination of the provision of services and an exploration of the ethical implications of child welfare practice. This course will be offered in a blended distance education format. Reserved for MSW students and BASWACCL students

Simple Requirements

Course Prerequisites

Type
Prerequisite

Reserved for MSW students and BASW ACCL students.

Fulfill ANY of the following requirements:
Reserved for MSW students and BASW ACCL students.

SOWK606 - School Social Work

Course Information

Course Title
School Social Work

Subject code	Course Number	Academic Level
SOWK	606	Graduate

Course Description
Provides an in-depth study of the concepts, policies, practices and research in the field of school social work, examining policy, research, practice and human behavior content. This course will be offered in a blended distance education format. Prereq:SOWK 601 or SOWK 531. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 601 or SOWK 531

Complete ANY of the following Courses:
- SOWK601 - Diversity, Dialogues, & Social Justice
- SOWK531 - Field Practicum 2

SOWK607 - Emergency Mental Health and Trauma

Course Information

Course Title
Emergency Mental Health and Trauma

Subject code	Course Number	Academic Level
SOWK	607	Graduate

Course Description
Provides an in-depth study of the concepts, policies, practices and research in crisis intervention during disasters. This course will provide an introduction to the disaster field, a detailed examination of the human service delivery systems and guidelines for attending to the emotional and mental-health needs of both disaster survivors and responders, using the Critical Incident Stress Management model.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Reserved for MSW students and BASW ACCL students.

Fulfill ANY of the following requirements:
Reserved for MSW students and BASW ACCL students.

SOWK608 - Administration and Supervision

Course Information

Course Title
Administration and Supervision

Subject code	Course Number	Academic Level
SOWK	608	Graduate

Course Description
This course is designed to expand students knowledge of and skills in effective program management of human services organizations and to provide approaches for managing service programs effectively. Organizational and management theories and principles are applied to a range of human services. This course will provide students with an introduction to the knowledge and skills necessary to perform managerial and supervisory functions in public and private human service organizations, including those that have historically served populations at risk. It will examine the structure and processes of human service organizations, the process of management, and organization building. The course will also cover different supervisory approaches and techniques and consider supervisory challenges that arise in various practice settings. During this course, students will be provided with opportunities to build competencies.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete SOWK 531 or AS Status

Fulfill ANY of the following requirements:
Or must have permission of instructor.

SOWK609 - Introduction to Art Therapy

Course Information

Course Title
Introduction to Art Therapy

Subject code	Course Number	Academic Level
SOWK	609	Graduate

Course Description
This advanced elective course explores the principles and the techniques of art therapy and considers the usefulness of art therapy in providing alternatives and supplements to the customary verbal methods of intervention. Ways of working with clients at various stages of the life cycle, childhood through later adulthood, and with clients who are on different levels of psychosocial functioning are examined. Issues in art therapy are explored both cognitively and experientially. Previous training in the visual arts and artistic ability are not required. This course will meet 2/3 online and 1/3 in the classroom. Offered periodically. Prereq or Coreq: SOWK 601 or SOWK 531.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 601

Complete ALL of the following Courses:
- SOWK601 - Diversity, Dialogues, & Social Justice

Prereq or Coreq. Or must have permission of instructor.

SOWK610 - Advanced Micro Practice and Assessment

Course Information

Course Title
Advanced Micro Practice and Assessment

Subject code	Course Number	Academic Level
SOWK	610	Graduate

Course Description
This advanced practice course, with heavy focus on clinical assessment, provides students with a conceptual framework for clinical social work practice with individuals. The course will emphasize assessing clients' systems at the micro level, with a particular focus on diagnoses, assessment and treatment of individuals. The course maintains a multicultural, strengths perspective and a focus on diversity, rural populations, and social and economic justice.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 531

Complete ALL of the following Courses:
- SOWK531 - Field Practicum 2

Standing Prerequisite

Type
Prerequisite

Standing in Program

Requires Specialization Year or Advanced Standing

SOWK611 - Children and Youth At-Risk

Course Information

Course Title
Children and Youth At-Risk

Subject code	Course Number	Academic Level
SOWK	611	Graduate

Course Description
This course is an in-depth study of the concepts, policies, practices and research in the field of child services, including school social work and child welfare. In addition, this course will provide a detailed exploration and understanding of a range of at-risk children and youth populations and their families. This comprehensive understanding will assist practitioners to effectively conduct an assessment and develop a treatment plan listing evidence-based intervention strategies and/or prevention programs that will effectively meet the complex needs of at-risk populations and their families. The challenges and ethical dilemmas confronting social work practitioners working with at-risk populations and their families will also be addressed.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Reserved for MSW students and BASW ACCL students.

Fulfill ANY of the following requirements:
Reserved for MSW students and BASWACCL students.

Or must have permission of instructor.

SOWK614 - Survey Devel & Measurement

Course Information

Course Title
Survey Devel & Measurement

Subject code	Course Number	Academic Level
SOWK	614	Graduate

Course Description
This advanced course prepares students with the skills to be critical users of a variety of types of measurement instruments, as well as gain experience in the intricacies of scale development, including psychometrics. Students will examine and determine scale reliability and validity.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Reserved for MSW students and BASW ACCL students.

Fulfill ANY of the following requirements:
Reserved for MSW students and BASW ACCL students.

SOWK615 - Advanced Social Welfare Policy

Course Information

Course Title
Advanced Social Welfare Policy

Subject code	Course Number	Academic Level
SOWK	615	Graduate

Course Description
Course introduces conceptual approaches to policy analysis and assesses selected social policies, programs, and services in the areas of income maintenance, health care and personal social services in accordance with these approaches and with specific reference to their impact on special populations.This course may be offered in multiple modalities .Prerequisite(s): SWK/SOWK 531 or SWK/SOWK 601

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 531 or SOWK 601

Complete ANY of the following Courses:

- SOWK531 - Field Practicum 2
- SOWK601 - Diversity, Dialogues, & Social Justice

SOWK616 - Leadership Dynamics in SW Prac

Course Information

Course Title
Leadership Dynamics in SW Prac

Subject code	Course Number	Academic Level
SOWK	616	Graduate

Course Description
Leadership theories and practices that are relevant to professional social work. The course prepares students for effective leadership practice in both formal leadership positions (i.e. administrative positions) and informal leadership (i.e. amongst colleagues). Students will be able to apply the course concepts to their work as advanced generalist practitioners at micro, mezzo and macro levels. Leadership issues and challenges within a multicultural context and variety of settings including nonprofit, public, for-profit, community-based, political, national and intemational organizations will be explored. Students will assess their own and others' leadership styles in order to build competence as leaders. Students will create an individual leadership development plan based on key leadership theories and models. Special emphasis will be placed on the need for evidence-based leadership practice and leadership for social and economic justice.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 601

Complete ALL of the following Courses:

- SOWK601 - Diversity, Dialogues, & Social Justice

Or must have permission of instructor.

SOWK617 - Addictions in Field of SOWK

Course Information

Course Title
Addictions in Field of SOWK

Subject code	Course Number	Academic Level
SOWK	617	Graduate

Course Description
This course will focus on the topic of addictions, preparing students to recognize and intervene when clients and their families demonstrate addictions problems in a wide range of social service agencies and host settings, such as child welfare, mental health, aging, schools, health care, corrections, and drug and alcohol programs. The course will examine the evolving models of alcohol and chemical dependency to the present day understanding of the disease model, including an examination of the neurobiology of addiction and basic pharmacology including medication assisted therapies. The concept of harm reduction is introduced. Using a case studies approach, students will develop assessment and intervention skills. The course will address professional issues including credentialing, confidentiality and ethics.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Reserved for MSW students, BASW ACCL students, or permission of instructor

SOWK619 - Global Perspectives in SOWK

Course Information

Course Title
Global Perspectives in SOWK

Subject code	Course Number	Academic Level
SOWK	619	Graduate

Course Description
Students will be exposed to global issues and understand how the institution of social welfare has developed in different regions of the world. The course examines globalization and its effect on social welfare and human need. As a way of understanding how different regions and countries have responded to human need, the course explores the specific areas of women in developing countries, street children and child labor, HIV in the developing world, and the plight of refugees. The role of international organizations, such as the World Bank, the International Monetary Fund, the agencies of the United Nations, and nongovernmental organizations (NGOs) in shaping international welfare policy and services will be examined.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Reserved for MSW students and BASW ACCL students.

Fulfill ANY of the following requirements:
Reserved for MSW students and BASW ACCL students.

SOWK620 - Advanced Practice with Groups and Families

Course Information

Course Title
Advanced Practice with Groups and Families

Subject code	Course Number	Academic Level
SOWK	620	Graduate

Course Description
Course builds on the practice concepts learned during the generalist year, particularly in the SWK/SOWK 520: Micro/ Mezzo Social Work Practice course. This course focuses on social work with groups and with families from a systems and ecological perspective. Emphasis is on strengths- and evidence-based family and group assessment and intervention strategies with diverse, complex families and groups. This course may be offered in multiple modalities. Prerequisite(s): SWK/SOWK 531 or Specialization Year or Advanced Standing; Corequisite(s): SWK/SOWK 630

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 531

Complete ANY of the following Courses:
- SOWK531 - Field Practicum 2

Standing Prerequiste

Type
Prerequisite

Standing in Program

Standing in Program
Requires SpecializationYear or Advanced Standing

SOWK621 - Advanced Macro Social Work Practices

Course Information

Course Title
Advanced Macro Social Work Practices

Subject code	Course Number	Academic Level
SOWK	621	Graduate

Course Description
Assists students in developing knowledge of administration supervision, grant writing, fundraising and budgeting. The macro social work practice course will provide models for developing programs that promote social and economic justice for the underserved, the poor and oppressed populations. This course will be offered in a blended-learning format. Prereq: SOWK 521 or 601; Coreq: SOWK 631. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 521 or SOWK 601

Complete ANY of the following Courses:
- SOWK521 - Macro Social Work Practice
  OR SOWK601 - Diversity, Dialogues, & Social Justice

Course Corequisites

Type
Corequisite

SOWK 631

Enroll in the following Courses:
- SOWK631 - Advanced Field Practicum 2

SOWK622 - Military Social Work Practice

Course Information

Course Title
Military Social Work Practice

Subject code	Course Number	Academic Level
SOWK	622	Graduate

Course Description
This elective course provides students with specialized knowledge of working with military personnel, veterans and their families. Military social work is a unique service and intervention focus designed to help social workers enhance their overall knowledge and skill set in support of service women and men as well as their family and supportive care givers. Students will have opportunities to learn the history, theoretical underpinnings, and foundation and practical applications to specific client populations.

SOWK623 - Narrative Therapy

Course Information

Course Title
Narrative Therapy

Subject code	Course Number	Academic Level
SOWK	623	Graduate

Course Description
This elective course provides students with specialized knowledge of narrative therapy in clinical social work practice. Narrative therapy is a unique intervention designed to help clients express and re-author their life stories. This course focuses on narrative therapeutic techniques applied to working with individuals, families, and groups. Students will have opportunities to learn the history, theoretical underpinnings, and foundations of narrative therapy as well as the clinical applications to specific client populations. Through interactive practice activities, including the use of case studies, film, and roleplays, students will develop an understanding of narrative therapy as an empowering approach in working with diverse populations.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 601

Complete ALL of the following Courses:

- SOWK601 - Diversity, Dialogues, & Social Justice

Or must have permission of instructor.

SOWK624 - From Hobohemia to Housing First: A Critical Reflection of Homelessness in the United States

Course Information

Course Title
From Hobohemia to Housing First: A Critical Reflection of Homelessness in the United States

Subject code	Course Number	Academic Level
SOWK	624	Graduate

Course Description
Provides students with an historical overview of homelessness as a social problem in the United States. Students will examine the disparate conceptualizations of homelessness over time and the individual, community, and policy approaches intended to address it. Emphasis will be placed on contemporary issues in homelessness service delivery. This course may be offered in face/face, blended, or 100% online formats (with asynchronous and/or synchronous components).

Simple Requirements

Course Prerequisites

Type
Prerequisite

Reserved for MSW students and BASW ACCL students.

Fulfill ANY of the following requirements:
Reserved for MSW students and BASW ACCL students.

SOWK625 - Advanced Research Methods

Course Information

Course Title
Advanced Research Methods

Subject code	Course Number	Academic Level
SOWK	625	Graduate

Course Description
The focus of this course is on social work practice research paradigms, models and methods. Particular attention is given to the conduct of evaluation and assessments projects. This course also gives the student a more in-depth exploration of computer-assisted, qualitative and quantitative data analysis. This course may be offered in multiple modalities. Prereq: SWK/SOWK 531 or Specialization Year or Advanced Standing

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 531

Complete ANY of the following Courses:
- SOWK531 - Field Practicum 2

Standing Requirement

Type
Prerequisite

Standing in Program

Standing in Program
Requires SpecializationYear or Advanced Standing

SOWK626 - Traumatic Bereavement

Course Information

Course Title
Traumatic Bereavement

Subject code	Course Number	Academic Level
SOWK	626	Graduate

Course Description
Content includes a framework for critical analysis of the dynamics of complicated mourning and traumatic loss. Students will recognize the manifestations of grief that has become complicated, and assess capacities for healthy resolution at the micro, mezzo and macro levels. Students will develop intervention strategies that are supported by research as well as recognize and identify theoretical underpinnings. Prereq: Enrollment in the MSW Program , or the Trauma-Informed Behavioral Health Certificate, or permission of instructor.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Enrollment in MSW Program
Or must have permission of instructor.

SOWK627 - SOWK, Sport & Mental Health

Course Information

Course Title
SOWK, Sport & Mental Health

Subject code	Course Number	Academic Level
SOWK	627	Graduate

Course Description
Explore the connection between mental health and sport, as well as the role of social workers in intervening with athletes of all levels to address mental health issues clients may encounter or have developed as a result of athletic participation. Additionally, the course will review, critique and address current interventions with athletes, and will seek to focus on new and emergent evidence-based modalities of treatment for athletes.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Reserved for MSW students and BASW ACCL students.

Fulfill ANY of the following requirements:
Reserved for MSW students and BASW ACCL students.

SOWK628 - Introduction to Trauma-Informed Therapy

Course Information

Course Title
Introduction to Trauma-Informed Therapy

Subject code	Course Number	Academic Level
SOWK	628	Graduate

Course Description
This 3-credit advanced elective course will provide specialized knowledge to help empower students to address the needs of the diverse range of clients who have been traumatized. This course offers an overview of the history of trauma treatment, current research on the effects of trauma, theoretical perspectives, and cutting edge therapeutic modalities. In addition, experiential learning through interviews, group work, role-playing, and personal introspective work will be employed. Students who have been traumatized themselves will need to be mindful that this class may be triggering for them.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Must be admitted to MSW Program or with permission of Instructor

SOWK629 - Resource Development for Nonprofit Social Work

Course Information

Course Title
Resource Development for Nonprofit Social Work

Subject code	Course Number	Academic Level
SOWK	629	Graduate

Course Description
Nonprofit social services organizations exist in an increasingly difficult environment for financial sustainability and learning more about how to develop and maintain resources is critical. This elective will focus on identifying and acquiring resources, including fundraising, grants, and volunteers. The course will deepen students' knowledge of how to find, develop, and obtain ongoing support, focusing on not just products, but also the process.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Must be admitted to MSW Program or with permission of Instructor

SOWK630 - Advanced Field Practicum 1

Course Information

Course Title
Advanced Field Practicum 1

Subject code	Course Number	Academic Level
SOWK	630	Graduate

Course Description
Provides students with practical experience (250 hours) in supervised direct-service activities across all client systems, from the individuals level to that of the community. This advanced field experience allows students to apply theory and skills acquired in the generalist concentration areas while simultaneously fostering the development of a professionally reflective, ethical, knowledgeable and self-evaluating social worker. The course also includes a seminar where students discuss and process the field experience with faculty. Coreq: SOWK 620.

Simple Requirements

Course Corequisites

Type
Corequisite

SOWK 620

Enroll in the following Courses:
- SOWK620 - Advanced Practice with Groups and Families

SOWK631 - Advanced Field Practicum 2

Course Information

Course Title
Advanced Field Practicum 2

Subject code	Course Number	Academic Level
SOWK	631	Graduate

Course Description
Provides students with practical experience (250 hours) in supervised direct-service activities across all client systems, from the individuals level to that of the community. This advanced field experience allows students to apply theory and skills acquired in the generalist concentration areas while simultaneously fostering the development of a professionally reflective, ethical, knowledgeable and self-evaluating social worker. The course also includes a seminar where students discuss and process the field experience with faculty. Prereq: Coreq: SOWK 621.

Simple Requirements

Course Corequisites

Type
Corequisite

SOWK 621

Enroll in the following Courses:
- SOWK621 - Advanced Macro Social Work Practices

SOWK632 - Core Components and Skills for Trauma-informed Practice

Course Information

Course Title
Core Components and Skills for Trauma-informed Practice

Subject code	Course Number	Academic Level
SOWK	632	Graduate

Course Description
This course facilitates students' acquisition of the knowledge, skills, and attitudes necessary to effectively use 12 common trauma-informed practice elements in interventions for and the treatment of traumatized children and their families. The course highlights consideration of the impact of trauma, intervention objectives, and the practice elements needed to accomplish the intervention objectives. This course is taught using an inquiry-based learning (IBL) pedagogy to enhance students' engagement and learning using full-length cases that exemplify the diverse clients a clinician might encounter in practice.

Simple Requirements

Must be admitted to MSW or with permission of Instructor

Type
Prerequisite

SOWK633 - Trauma-Informed Expressive Arts

Course Information

Course Title
Trauma-Informed Expressive Arts

Subject code	Course Number	Academic Level
SOWK	633	Graduate

Course Description
This three credit advanced practice course introduces the use of expressive arts in practice with individuals, groups, families, organizations, and communities to respond to trauma and build resiliency and post-traumatic growth. Expressive arts frameworks will be introduced and illuminated through the examination of case studies. Local and global examples of trauma-informed expressive arts approaches will also be introduced.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Must be admitted to MSW Program or with permission of Instructor

SOWK640 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
SOWK	640	Graduate

Course Description
This course provides the opportunity for a range of topics to explore issues and concerns for the social work profession. Coreq or Prereq: SOWK 601 or SOWK 531.

Simple Requirements

Completed Course Prerequisites or Corequisites

Type
Prerequisite

SOWK 601 or SOWK 531

Complete ANY of the following Courses:

- SOWK601 - Diversity, Dialogues, & Social Justice
- SOWK531 - Field Practicum 2

SOWK641 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
SOWK	641	Graduate

Course Description
This course provides the opportunity for a range of topics to explore issues and concerns for the social work profession. Coreq or Prereq: SOWK 601 or SOWK 531.

Simple Requirements

Completed Course Prerequisites or Corequisites

Type
Prerequisite

SOWK 601 or SOWK 531

Complete ANY of the following Courses:

- SOWK601 - Diversity, Dialogues, & Social Justice
- SOWK531 - Field Practicum 2

SOWK642 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
SOWK	642	Graduate

Course Description
This course provides the opportunity for a range of topics to explore issues and concerns for the social work profession. Coreq or Prereq: SOWK 601 or SOWK 531.

Simple Requirements

Completed Course Prerequisites or Corequisites

Type
Prerequisite

SOWK 601 or SOWK 531

Complete ANY of the following Courses:

- SOWK601 - Diversity, Dialogues, & Social Justice
- SOWK531 - Field Practicum 2

SOWK643 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
SOWK	643	Graduate

Course Description
This course provides the opportunity for a range of topics to explore issues and concerns for the social work profession. Coreq or Prereq: SOWK 601 or SOWK 531.

Simple Requirements

Completed Course Prerequisites or Corequisites

Type
Prerequisite

SOWK 601 or SOWK 531

Complete ANY of the following Courses:

- SOWK601 - Diversity, Dialogues, & Social Justice
- SOWK531 - Field Practicum 2

SOWK679 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SOWK	679	Graduate

Course Description
Experimental

SOWK691 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
SOWK	691	Graduate

Course Description
An in-depth approach to an individually structured problem. Registration by permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Registration by Permission

May register only with permission.

SOWK700 - Social Work Leadership I

Course Information

Course Title
Social Work Leadership I

Subject code	Course Number	Academic Level
SOWK	700	Graduate

Course Description
This is the first of a sequence of two courses on advanced leadership and management for Doctor of Social Work students. Students will glean a theoretical orientation to the study of organizations and leadership within organizations. This examination of theories will reflect the values of the social work profession and their application to social service systems, structures, and processes. Also explored will be theories of organizational change, organizational challenges, and organizational effectiveness. Within the context of social service organizations, leadership approaches and theories are also examined.

SOWK701 - Social Work Leadership II

Course Information

Course Title
Social Work Leadership II

Subject code	Course Number	Academic Level
SOWK	701	Graduate

Course Description
This is the second course in the advanced leadership and management sequence. The focus of this course is on development of knowledge and skills for social work managers within the public and private social service sector. Additional attention will be given to leading in times of fiscal constraint, political changes, and workforce challenges.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 700

Complete ALL of the following Courses:

- SOWK700 - Social Work Leadership I

SOWK704 - Social Work Teacher-Scholar I

Course Information

Course Title
Social Work Teacher-Scholar I

Subject code	Course Number	Academic Level
SOWK	704	Graduate

Course Description
This is the first of a sequence of two courses on social work teaching and scholarship for Doctor of Social Work students. The course will enable the students to critically examine seminal and contemporary works in pedagogy. The connection of these theories to social work teaching and learning will be a central component of this course, including particular emphasis on the historical evolution of social work education. The course provides students with an opportunity to explore seminal works from a historical perspective and critically evaluate contemporary theories of teaching and learning in social work. It is required preparation for the second course in the sequence in which students develop a unique and personal conceptual framework for their own teaching.

SOWK705 - Social Work Teacher-Scholar II

Course Information

Course Title
Social Work Teacher-Scholar II

Subject code	Course Number	Academic Level
SOWK	705	Graduate

Course Description
This is the second in a sequence of two courses about social work teaching and scholarship for Doctor of Social Work students. The course provides students with an opportunity to critically evaluate theories of teaching and learning, particularly in contemporary settings in social work. Students will craft a conceptual framework to guide their own career as instructors in a variety of social work settings, including undergraduate and graduate professional social work education. They will practice course planning and delivery along with program development and student/course/program assessment with attention to accreditation requirements. In addition, they will develop understanding of the roles of the social work teacher-scholar in academe and other settings.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 704

Complete ALL of the following Courses:

- SOWK704 - Social Work Teacher-Scholar I

SOWK710 - Research Methodology

Course Information

Course Title
Research Methodology

Subject code	Course Number	Academic Level
SOWK	710	Graduate

SOWK715 - Multivariate Stat Analysis

Course Information

Course Title
Multivariate Stat Analysis

Subject code	Course Number	Academic Level
SOWK	715	Graduate

Course Description
Students will be able to apply univariate, bivariate, and multivariate statistics, analysis of variance and simple linear regression to the analysis of a social science data set. They will learn how to choose appropriate statistical analyses that answer research questions and hypotheses, conduct these analyses using SPSS, interpret their findings, and communicate their results clearly and effectively. Reserved for students in the DSW program.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK710

Complete ALL of the following Courses:
- SOWK710 - Research Methodology

Degree/Major/Field of Study Restrictions

Type
Prerequisite

DSW Program Students Only

Reserved for students in the DSW program.

SOWK720 - Leadership/Teaching Praxis I

Course Information

Course Title
Leadership/Teaching Praxis I

Subject code	Course Number	Academic Level
SOWK	720	Graduate

Course Description
Experiential two semester course designed to provide students with an opportunity to demonstrate mastery of the course content from the program's first year's courses. Students will participate in supervisory leadership and/or teaching activities that provide experiential learning and application and integration of theory and skills acquired in earlier coursework. Weekly meetings are a required component of this course and the meetings will be facilitated by the faculty mentor to instruct, guide, and assess student's progress related to the leadership and/or teaching praxis.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 701 and SOWK 705

Complete ALL of the following Courses:
- SOWK701 - Social Work Leadership II
- SOWK705 - Social Work Teacher-Scholar II

SOWK721 - Leadership/Teaching Praxis II

Course Information

Course Title
Leadership/Teaching Praxis II

Subject code	Course Number	Academic Level
SOWK	721	Graduate

Course Description
Experiential two semester course designed to provide students with an opportunity to demonstrate mastery of the course content from the program's first year's courses. Students will participate in supervisory leadership and/or teaching activities that provide experiential learning and application and integration of theory and skills acquired in earlier coursework. Weekly meetings are a required component of this course and the meetings will be facilitated by the faculty mentor to instruct, guide, and assess student's progress related to the leadership and/or teaching praxis.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 701 and SOWK 705

Complete ALL of the following Courses:

- SOWK701 - Social Work Leadership II
- SOWK705 - Social Work Teacher-Scholar II

SOWK725 - Intervention Research

Course Information

Course Title
Intervention Research

Subject code	Course Number	Academic Level
SOWK	725	Graduate

Course Description
Advanced research course introduces students to the five steps of intervention development, testing, and dissemination. Students will be given the opportunity to practice elements of these stages to master the strategies of implementing, documenting, and evaluating interventions that respond to social problems affecting systems of all sizes (e.g., individual, family, group, community).

SOWK730 - Qualitative Analysis

Course Information

Course Title
Qualitative Analysis

Subject code	Course Number	Academic Level
SOWK	730	Graduate

SOWK774 - Comprehensive Seminar

Course Information

Course Title
Comprehensive Seminar

Subject code	Course Number	Academic Level
SOWK	774	Graduate

Course Description
Students will engage in a collaborative learning experience in which they assess whether as doctoral students they have acquired the knowledge and skills necessary for proceeding with the development of a Doctoral Dissertation. Utilizing a phenomenon of interest, students will demonstrate their ability to conceptualize a clear and compelling research topic by organizing, presenting, and critiquing both theoretical and empirical knowledge related to the phenomenon. Further, students will identify areas needing further exploration as well as possible research methods to conduct the proposed research. The Preliminary Paper must demonstrate that the student has acquired a sufficiently broad understanding of the phenomenon of interest and indicate that the student is prepared to add to knowledge in the field through an independent in-depth study of a topic relevant to best practices in social work related to leadership, teaching, or both. Students will orally defend their comprehensive paper at Residency. The defense will include an overview of the phenomenon as well as a summary of the research question that could be employed should students continue with the same topic for their dissertation.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK 701 and SOWK 705 and SOWK 725

Complete ALL of the following Courses:

- SOWK701 - Social Work Leadership II
- SOWK705 - Social Work Teacher-Scholar II
- SOWK725 - Intervention Research

SOWK775 - Dissertation Seminar

Course Information

Course Title
Dissertation Seminar

Subject code	Course Number	Academic Level
SOWK	775	Graduate

Course Description
Students will engage in a collaborative learning experience in which they explore different ways of knowing in social sciences. They will become familiar with a variety of theoretical perspectives and will practice integrating those theories with their professional social work practice as they work toward formulating a research question and identifying a relevant theoretical perspective from which to examine it in the upcoming dissertation. Ethical considerations in research will be examined, and students will become familiar with their institution's IRB process. Students will consider deeply the relationship between their education and their future roles as leaders and educators.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK721

Complete ALL of the following Courses:

- SOWK721 - Leadership/Teaching Praxis II

SOWK776 - Dissertation I

Course Information

Course Title
Dissertation I

Subject code	Course Number	Academic Level
SOWK	776	Graduate

Course Description
Over two semesters, students will work in close consultation with a faculty member to build upon the research question crafted in the Dissertation Seminar. They will gain institutional approval to conduct their independent research and will conduct the research under the supervision of the faculty member. A focus will be placed on the completion of a traditional dissertation in the context of the development of applied knowledge that will be relevant to the social work profession; as such, the student will develop components of the dissertation that may be published or presented in refereed venues. Pre-requisite: SOWK/SWK 775: Dissertation Seminar

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK775

Complete ALL of the following Courses:
- SOWK775 - Dissertation Seminar

SOWK777 - Dissertation II

Course Information

Course Title
Dissertation II

Subject code	Course Number	Academic Level
SOWK	777	Graduate

Course Description
Over two semesters, students will work in close consultation with a faculty member to build upon the research question crafted in the Dissertation Seminar. They will gain institutional approval to conduct their independent research and will conduct the research under the supervision of the faculty member. A focus will be placed on the completion of a traditional dissertation in the context of the development of applied knowledge that will be relevant to the social work profession; as such, the student will develop components of the dissertation that may be published or presented in refereed venues. Pre-requisite: SOWK/SWK 776: Dissertation I

Simple Requirements

Course Prerequisites

Type
Prerequisite

SOWK776

Complete ALL of the following Courses:
- SOWK776 - Dissertation I

Special Education Department

Millersville University’s PK-12 Special Education is taught by knowledgeable faculty with extensive expertise in the range of exceptionalities and ages.

PK-12 schools nationwide experience an ongoing need for qualified special educators. Students enrolled in Millersville University's PK-12 Special Education program will acquire the skills to fulfill and thoroughly address the needs of students with disabilities in multiple settings.

This program also offers unique educational experiences beyond the classroom including internships with local organizations and extensive and diverse field study opportunities.

Graduates receive their Bachelor of Science in Education (B.S.E.) and are eligible for Pennsylvania teaching certification in Special Education, Grades PK-12.

Millersville University is accredited by the Middle States Association of Colleges and Schools and approved by the American Association of University Women.

What Will You Learn?

Millersville University's experienced professors create an inclusive learning environment that models best practices for teaching through respect, collaboration, mutuality and the realization of each individual gift.

The PK-12 Special Education Certification program will equip you with the knowledge and skills to support students with varying strengths, needs, and disabilities from Pre-K to 12th grade.

All MU education programs involve a Foundations Block which explores the structure and function of contemporary public schools and recent and historical themes in the psychology of teaching and learning. Professional Blocks which focus on instructional technology and positive learning environments, and a semester of student teaching.

As a special education major, you will progress through Professional Blocks in Early Childhood or Secondary Education in addition to Professional Blocks in Special Education. You will also participate in two student teaching experiences at the elementary and secondary levels to direct your career aspirations after graduation.

Career Opportunities:

- Special Education Teacher
- Special Education Advocate
- Special Education Consultant
- Establish a foundation for focused Masters studies in related areas
- Early Childhood Education Teacher
- Secondary Education Teacher

FACULTY LIST		
Bertoni, Janet Professor B.S., New York University; M.S.Ed., Hunter College; Ph.D., University of Delaware College of Education and Human Services Special Education		
Boyle, Susannah Associate Professor B.A., Louisiana State University; B.S., Ibid.; M.Ed., University of New Orleans College of Education and Human Services Special Education		
Davis, Jason Department Chairperson, Associate Professor B.S., Radford University; M.S.E., Old Dominion University; M.Ed. George Mason University; Ed.D., University of San Francisco College of Education and Human Services Special Education		
Herr, Ojoma Edeh Professor BSE, MED, West Chester University; M.Phil., Ph.D., Columbia University - College of Education and Human Services Special Education		
Mehrenberg, Richard Associate Professor B.S., Slippery Rock University; M.Ed., University of Virginia; Ph.D., George Mason University College of Education and Human Services Special Education		
Tamakloe, Deborah Professor B.Ed., University of Education; M.Ed., University of Ghana; Ph.D., Washington State University College of Education and Human Services Special Education		

Programs

Special Education Post-Baccalaureate K-12 Certification

Overview

Level 1 Post-Baccalaureate Teacher Certification Program - Pre-K- 12 Preparation

The department of special education offers a flexible hybrid or online program leading to Pennsylvania Level Certification, granted by the Pennsylvania Department of Education: Certification in PK-12. This program is designed for candidates who (a) have completed a B.A or B.S. degree in an area other than education, or (b) hold a teaching certificate in another content area or grade range.

Curriculum

Simple Requirements

Major in Special Education, PREK-12 Certification (39 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations (6 credits)

Complete ALL of the following Courses:

- EDFN545 - Advanced Educational Psychology
- SPED600 - Introduction to Exceptional Education

AND

Subject Matter and Pedagogies (18 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Complete ALL of the following Courses:

- SPED618 - Advanced Topics in Early Intervention
- SPED642 - Teaching Mild and Moderate Disabilities
- SPED671 - Behavior Management
- EDUC651 - Math in the School Program

AND

Reading and Writing in the Content Areas or Current Practices in Literacy Education (3 credits)

Complete at least 1 of the following courses:

- READ622 - Reading and Writing in the Content Areas
- READ620 - Current Practices in Literacy Education

AND

Curriculum Trends in Social Studies or Science in the School Program (3 credits)

Complete at least 1 of the following courses:

- EDUC643 - Curriculum Trends in Social Studies
- EDUC661 - Science in the School Program

READ622 Reading and Writing in Content/READ620 Curr Practices in Literacy Ed and EDUC651 Math in the School Program and EDUC643 Curriclm Trends in Soc Studies/EDUC661 Science in the School Program will be waived for applicants with current Early Childhood or Middle Level Certification.

AND

Planning and Assessment (6 credits)

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- SPED667 - Individualized Education and Transition Planning

AND

Diagnostic and Assessment Strategies for Students with Disabilities (3 credits)

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities

AND

English Language and Diverse Learners (3 credits)

Complete ALL of the following Courses:

- EDUC580 - Methods for Teaching English Language Learners

AND

Supervised Field Experience: Clinical Practicum or Post-Bacc Student Teaching (6 credits)

Earn at least 6 credits from the following:

- SPED690 - Clinical Practicum
- EDSP562 - Post-Bacc Student Teaching

Advanced Professional Studies - Post-Bacc Cert

Type
Completion Requirement

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Special Education, M.Ed. with Certification

Overview

The Master of Education in special education provides experienced educators an opportunity to advance their careers in knowledge and skills needed to be teacher-leaders. This program that recognizes experience has been designed to improve the practice of educators through a robust program of study designed to emphasize evidence-based practice, advocacy, collaboration, and reflection. This M.Ed. in special education includes a concentration in certification which leads to the PDE special education certification credential.

Curriculum

Simple Requirements

MED Professional Core Requirements

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Requirement

PROFESSIONAL CORE
EDFN601 Research Methods is required. Choose 2 courses from two of the three Core Option areas.

AND

Option 1. Psychological Core - Choose 3 hours from:

Earn at least 3 credits from the following:

- EDFN601 - Research Methods
- PSYC540 - Applied Behavior Analysis in a MTSS
- PSYC526 - Advanced Adolescent Psychology
- EDFN545 - Advanced Educational Psychology

AND

Option 2. Social Foundations Core - Choose 3 hours from:

Earn at least 3 credits from the following:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education

AND

Option 3. Specialty Area Core - Choose 3 hours from:

Earn at least 3 credits from the following:

- ACTE630 - Current Technology for Online Instruction
- EDTE690 - Integrtve Lrning Exprntl Strgy
- EDSU701 - Administrative Supervision
- EDLD610 - Theory and Organizatnl Behavr
- EDUC563 - Linguistic and Cultural Diversity in the Classroom

Major in Special Education

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

SPED FOUNDATIONS: Serving Individuals in an Inclusive Setting (3 credits)

Complete ALL of the following Courses:

- SPED618 - Advanced Topics in Early Intervention

AND

SPED FOUNDATIONS: Psychology of Students with Disabilities 3 hours

Complete ALL of the following Courses:

- SPED601 - Psyc of Stdnts w/ Disabilities

AND

SPED FOUNDATIONS: Diagnostic and Assessment Strategies for Students with Disabilities 3 hours

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities

AND

SPED CORE: Ind. Ed. and Transition Planning 3 hours

Complete ALL of the following Courses:

- SPED667 - Individualized Education and Transition Planning

AND

SUPERVISED FIELD EXPERIENCE: Choose 6 hours from

Earn at least 6 credits from the following:

- SPED690 - Clinical Practicum

Special Education Post-Master's Supervisory Certification

Overview

MU’s Special Education Post-Master’s in School Supervision is designed for instructional II teachers or specialists with a 5-year appropriate experience to develop supervisory skills in special education.

Admission Requirements

1. Instructional II Teaching Certificate
2. Applicant must have earned a master’s degree (or be pursuing one concurrently)
3. Applicant must have five years of appropriate experience

Curriculum

Simple Requirements

Special Education Post-Master's Supervisory Certification

Type
Completion Requirement

Required Courses

Complete ALL of the following Courses:

- EDSU700 - Functions Supervision
- EDSU701 - Administrative Supervision
- EDSU703 - Curriculum and Supervision
- SPED681 - Admin and Supervision of Sped
- EDSU799 - Applied Practicum

For EDSU799: Applied supervision in the applicable content subject area

Special Education Minor

Overview

Millersville University offers undergraduate students the opportunity to add a Special Education minor to their degree. The scope of this minor is to provide interested students with a background in effective teaching strategies, awareness of issues of accessibility and inclusion, and laws and policies in teaching learners with exceptionalities in PK-12.

Curriculum

Simple Requirements

REGULATIONS GOVERNING MINOR COURSE WORK

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Special Education M.Ed. (18 credits)

Type
Completion Requirement

Required Courses (3 credits)

Complete ALL of the following Courses:

- SPED101 - Orientation to Special Educ

Exceptional Education Electives (15 credits)

Earn at least 15 credits from the following:

- SPED237 - Applied Foundations of Contemporary Special Education
- EDFN336 - Assistive Technology & Online Learning
- GFED370 - Teaching Gifted Learners
- SPED321 - Serving Individuals in Inclusive Settings
- SPED341 - Early Inervention to Kindergarten
- SPED351 - Managing Challenging Behaviors
- SPED361 - Formal Assessment for Students with Disabilities
- SPED444 - Transition Planning and Secondary Programming for Individuals with Disabilities
- EDUC324 - Diagnosis of Reading and Writing Disabilities

Special Education, BS.Ed.

Overview

Learn how to best meet the academic, social-emotional, and behavioral needs of students with disabilities through Millersville University's PK-12 certification Special Education program in the Department of Special Education.

PK-12 schools nationwide experience an ongoing need for qualified special educators. Students enrolled in Millersville University's PK-12 Special Education program will acquire the skills to fulfill and thoroughly address the needs of students with disabilities in multiple settings.

This program also offers unique educational experiences beyond the classroom including internships with local organizations and extensive and diverse field study opportunities.

Graduates receive their Bachelor of Science in Education (B.S.E.) and are eligible for Pennsylvania teaching certification in Special Education, Grades PK-12.

Curriculum

Simple Requirements

Major in Special Education, BSE (48 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Prerequisite Education Courses (3 credits)

Earn a minimum grade of C- in the following:

- SPED101 - Orientation to Special Educ

AND

Required Education Courses (15 credits)

Fulfill ALL of the following requirements:

Diagnostic Reading (3 credits)

Complete ALL of the following Courses:

- EDUC324 - Diagnosis of Reading and Writing Disabilities

AND

Required Courses (12 credits)

Complete ALL of the following Courses:

- SPED311 - Assessment for Designing & Implementing Instruction
- SPED331 - Positive Learning Environments for all Students
- EDUC425 - The Teaching of Literacy: Processes, Skills, & Strategies
- EDFN336 - Assistive Technology & Online Learning

AND

Professional Bloc I (15 credits)

Fulfill ALL of the following requirements:

Required Courses (12 credits)

Earn a minimum grade of C in the following:

- SPED351 - Managing Challenging Behaviors
- SPED361 - Formal Assessment for Students with Disabilities
- SPED321 - Serving Individuals in Inclusive Settings
- EDUC487 - Teaching English Learners

AND

Early Intervention to Kindergarten (3 credits)

Earn a minimum grade of C in the following:

- SPED341 - Early Inervention to Kindergarten

Professional Education- Special Education (24 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc (12 credits)

Earn a minimum grade of C- in the following:

- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading
- SPED237 - Applied Foundations of Contemporary Special Education

The 'Foundations Bloc' must be completed after the 'Pre-requisite Education Courses' and before the 'Required Education Courses'.

AND

Student Teaching: Special Education (12 credits)

Fulfill ALL of the following requirements:

Evidence-Based Practices for Math, Literacy and Content Areas for Exceptional Learners (3 credits)

Earn a minimum grade of C in the following:

- SPED463 - EBPs for Math, Lit, Cntnt Area

AND

Elementary Student Teaching (4.5 credits)

Earn a minimum grade of C in the following:

- EDSP461 - Stu Tch: Sped, 1st

AND

Secondary Student Teaching (4.5 credits)

Earn a minimum grade of C in the following:

- EDSP462 - Stu Tch: Sped, 2nd

Req Related for Special Education, BSE (21 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Earn a minimum grade of C in the following:

- ART128 - Art Integration
- MATH104 - Fundamentals of Math 1
- MATH105 - Fundamentals of Math 2

AND

English Literature Course (3 credits)

Earn a minimum grade of C in the following:

- ENGL230 - Introduction to Literature
  OR ENGL231 - World Literature 1
  OR ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
  OR ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
  OR ENGL234 - Later British Literature
  OR ENGL235 - American Literary Tradition I
  OR ENGL230 - Introduction to Literature
  OR ENGL241H - H:Explorations in World Lit
  OR ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
  OR ENGL333 - African-American Literature 1
  OR ENGL333H - Hnrs:African-American Literature 1
  OR ENGL334 - African American Literature 2
  OR ENGL334H - Hnrs:African American Literature 2
  OR ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
  OR ENGL401 - Old Eng Lang and Literature

AND

Required Courses (3 credits)

Complete ALL of the following Courses:

- PSYC100 - General Psychology
  OR PSYC100H - Hnrs:General Psychology

AND

Development of the Child & Adolescent or Life Span Human Development (3 credits)

Earn a minimum grade of C in the following:

- PSYC227 - Development of the Child and Adolescent
  OR PSYC227H - Hnrs:Development of the Child and Adolescent
  OR PSYC228 - Life Span Human Development

AND

Health, Safety & Nutrition for the Developing Child (3 credits)

Earn a minimum grade of C in the following:

- WELL240 - Health, Safety, Nutr for Child

Advanced Professional Studies, BSE

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete at least 1 of the following courses:

- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

AND

English Literature (3 credits)

Complete at least 1 of the following courses:

- ENGL230 - Introduction to Literature
- ENGL231 - World Literature 1
- ENGL232 - World Literature 2
  OR ENGL232H - Hnrs: World Literature 2
- ENGL233 - Early British Literature: Dragons, Knights & Faerie Queens
- ENGL234 - Later British Literature
- ENGL235 - American Literary Tradition I
- ENGL236 - American Literary Tradition II
- ENGL241H - H:Explorations in World Lit
- ENGL242 - Reading Our World:

OR ENGL242H - Hnrs: Reading Our World:
- ENGL292 - Science Fiction
  OR ENGL292H - Hon: Science Fiction
- ENGL333 - African-American Literature 1
- ENGL333H - Hnrs:African-American Literature 1
- ENGL334 - African American Literature 2
- ENGL334H - Hnrs:African American Literature 2
- ENGL336 - New Dimensions to World Lit
- ENGL338 - Folklore and Literature
  OR ENGL338H - H:Folklore and Literature
- ENGL401 - Old Eng Lang and Literature
- ENGL402 - Middle Eng Lang and Literature

AND

Mathematics

Two Mathematics courses are required for BSE students. It is preferable to take two courses designated as G2. Search for MATH courses on the current web schedule.

BIOL375 Biometry will fulfill one Mathematics course for BSE BIOL students.

AND

Required Courses (6 credits)

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Courses

SPED101 - Orientation to Special Educ

Course Information

Course Title
Orientation to Special Educ

Subject code	Course Number	Academic Level
SPED	101	Undergraduate

Course Description
This introductory course is designed to prepare future special educators with the knowledge base for the identification, placement and instruction of learners with disabilities who are eligible to receive special education services across the continuum of educational environments. Included are historical considerations, educational and developmental needs of individuals with disabilities, special education programs, services, resourses, and materials. In addition, practical exposure to individuals with disabilities will be emphasized.

SPED179 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SPED	179	Undergraduate

Course Description
Experimental

SPED237 - Applied Foundations of Contemporary Special Education

Course Information

Course Title
Applied Foundations of Contemporary Special Education

Subject code	Course Number	Academic Level
SPED	237	Undergraduate

Course Description
This course identifies the complex sociocultural history that has brought us to where we are in special education practice today. It presents the contemporary and historical influences of the American school system and how special education is integrated into the modern classroom. The overrepresentation of economically disadvantaged, and culturally and linguistically diverse populations in special education is explored through careful consideration of cultural collaboration, current sociological variables and analysis of causes and prevention strategies. Individual learning differences and the development of academic and functional performance needs of students with disabilities are considered historically, legally, educationally, culturally and socially. Prereq: requires submission of satisfactory FBI, Act 34/151 clearances. Offered in fall, spring. Coreq: must be taken simultaneously with EDFN 211, 241, ECPK 225.

Simple Requirements

Course Prerequisites

Type
Prerequisite

FBI and Act 34/151 Clearances

Submission of satisfactory FBI, Act 34/151 clearances required.

Course Corequisites

Type
Corequisite

EDFN 211 and EDFN 241 and ECPK 225

Enroll in the following Courses:

- EDFN211 - Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching

SPED279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SPED	279	Undergraduate

Course Description
Experimental

SPED300 - Co-Op Ed Experience in Sped

Course Information

Course Title
Co-Op Ed Experience in Sped

Subject code	Course Number	Academic Level
SPED	300	Undergraduate

Course Description
Co-Op Ed Experience in Sped

SPED311 - Assessment for Designing & Implementing Instruction

Course Information

Course Title
Assessment for Designing & Implementing Instruction

Subject code	Course Number	Academic Level
SPED	311	Undergraduate

Course Description
This course enables teacher candidates to develop competencies for assessing students in an inclusive classroom setting, design instruction and make instructional decisions to enhance students learning. Teacher candidates learn how to assess, analyze and interpret data from formal (standardized) and informal (traditional and alternative) testing sources and measurement. Teacher candidates learn how to interpret reports as relevant to students from diverse learning backgrounds and use these interpretive results along with behavioral observation, task analysis and other types of measurement to design instruction. Offered in fall, spring, summer. Prereq: Act 34, 151, 114 clearances, ENGL 110, SPED 101, and Foundation Block.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing **OR** ENGL110H - Hnrs:Introduction to College Writing
- SPED101 - Orientation to Special Educ

Completion of the Foundations Block

See the relevant requisite block below for the courses required based on major.

Foundations Block for SPED Majors

Type
Prerequisite

SPED 237 and EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H and ECPK 225

Complete ALL of the following Courses:
- SPED237 - Applied Foundations of Contemporary Special Education
- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading

Foundations Block for ECPK Majors

Type
Prerequisite

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H and ECPK 225

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading

Foundations Block for MDED Majors

Type
Completion Requirement

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education **OR** EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching **OR** EDFN241H - Hon:Psychological Foundations of Teaching

SPED311H - Hon: Assessment for Designing & Implementing Instruction

Course Information

Course Title
Hon: Assessment for Designing & Implementing Instruction

Subject code	Course Number	Academic Level
SPED	311H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- SPED101 - Orientation to Special Educ

Completion of the Foundations Block

See the relevant requisite block below for the courses required based on major.

Foundations Block for SPED Majors

Type
Prerequisite

SPED 237 and EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H and ECPK 225

Complete ALL of the following Courses:
- SPED237 - Applied Foundations of Contemporary Special Education
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading

Foundations Block for ECPK Majors

Type
Prerequisite

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H and ECPK 225

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading

Foundations Block for MDED Majors

Type
Completion Requirement

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

SPED321 - Serving Individuals in Inclusive Settings

Course Information

Course Title
Serving Individuals in Inclusive Settings

Subject code	Course Number	Academic Level
SPED	321	Undergraduate

Course Description
This course prepares teacher candidates to effectively teach students with severe and multiple disabilities within an inclusive educational system. By incorporating theory with aspects for identification, specialized support services, instruction and relevant special education law, teacher candidates become knowledgeable of their responsibilities as teachers of students with severe and multiple disabilities. Teacher candidates learn to differentiate and individualize instruction for the developmental and chronological requirements of their students. Teacher candidates become practiced in referencing alternate learning standards and general education curricula to facilitate the achievement of their students with severe and multiple disabilities in a variety of learning environments. Offered in spring. Prereq: ENGL 110; Act 34, 151, 114 clearances and admission to Advanced Professional Studies (APS). Coreq: ECPK 421, SPED 341.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110H or ENGL 110

Complete ANY of the following Courses:
- ENGL110H - Hnrs:Introduction to College Writing
- ENGL110 - Introduction to College Writing

Act 34, 151 and 114 Clearances

Act 34, 151 and 114 clearances required.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

ECPK421 and SPED341

Enroll in the following Courses:
- ECPK421 - Language Development & Emergent Literacy
- SPED341 - Early Inervention to Kindergarten

SPED330 - Discrimination and Oppression of People with Disabilities

Course Information

Course Title
Discrimination and Oppression of People with Disabilities

Subject code	Course Number	Academic Level
SPED	330	Undergraduate

Course Description
Examines social discrimination through consideration of the policies and practices of societies. Creates an understanding of the social, political and cultural, rather than the physical or psychological, determinants of the experience of disability. Disentangles impairments from the myths, ideology and stigma that influence social interaction and social policy. Through course content and activities, students will challenge the idea that the economic and social statuses and the assigned roles of people with disabilities are the inevitable outcomes of their condition. Offered in fall, spring, summer. Prereq: COMM 100, ENGL 110 and junior status.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

SPED330H - H:Discrimination and Oppression of People with Disabilities

Course Information

Course Title
H:Discrimination and Oppression of People with Disabilities

Subject code	Course Number	Academic Level
SPED	330H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and COMM 100 or COMM 100H

Complete ALL of the following Course Sets:
- ENGL 110 and COMM 100

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

SPED331 - Positive Learning Environments for all Students

Course Information

Course Title
Positive Learning Environments for all Students

Subject code	Course Number	Academic Level
SPED	331	Undergraduate

Course Description
Students will develop the ability to effectively analyze and design inclusive educational environments to optimize the achievement of every student, and will receive the knowledge and skills to modify their teaching methods to motivate and support positive social skills in diverse students. Through the use of appropriate assessments and data collection techniques for individual student behaviors, students will develop the ability to conduct functional behavior assessments and apply behavior-intervention plans and positive techniques as needed using the Response to Intervention framework. Offered in fall, spring. Required submission of satisfactory FBI, Act 34/151 clearances; admission to Advanced Professional Studies (APS).

Simple Requirements

Course Prerequisites

Type
Prerequisite

FBI and Act 34/151 Clearances

Must have FBI and Act 34/151 clearances.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

SPED331H - Hon: Positive Learning Environments for all Students

Course Information

Course Title
Hon: Positive Learning Environments for all Students

Subject code	Course Number	Academic Level
SPED	331H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

FBI and Act 34/151 Clearances

Must have FBI and Act 34/151 clearances.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

SPED341 - Early Inervention to Kindergarten

Course Information

Course Title
Early Inervention to Kindergarten

Subject code	Course Number	Academic Level
SPED	341	Undergraduate

Course Description
This course examines the implications of federal mandates for providing educational and supportive services for infants/toddlers/preschoolers with disabilities and their families. The teacher candidates gain knowledge in interpreting data from formal and informal sources to be utilized in developing Individualized Family Service Plans (IFSP). The teacher candidates use case study and field experience data to recommend appropriate school-based programs for young children with disabilities. They also implement effective teaching strategies to meet the family, academic, social, emotional and behavioral needs of young children with disabilities in inclusionary environments. These strategies will be applied in field placements during the semester. Offered in spring. Prereq: EDFN 211, 241, ECPK 225 or EDUC 220; SPED 237; Act 34, 151, 114 clearances and admission to Advanced Professional Studies (APS). Coreq: ECPK 421, SPED 321.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN211 or EDFN211H and EDFN241 or EDFN241H and ECPK225 and SPED237

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading
- SPED237 - Applied Foundations of Contemporary Special Education

FBI and Act 34/151 Clearances

FBI and Act 34/151 clearances required.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

ECPK 421 or ECPK 421H and SPED 321

Enroll in the following Courses:

- ECPK421 - Language Development & Emergent Literacy
  AND ECPK421H - H:Language Development & Emergent Literacy
- SPED321 - Serving Individuals in Inclusive Settings

SPED346 - Secondary Students w/ Disabilities in Inclusive Settings

Course Information

Course Title
Secondary Students w/Disabilities in Inclusive Settings

Subject code	Course Number	Academic Level
SPED	346	Undergraduate

Course Description
This course is designated to prepare secondary education majors to effectively teach students with disabilities in inclusive classrooms. Participants will learn legal mandates, secondary general educators role in the special education process, and the academic and social implications of inclusion. Participants also will learn to facilitate academic achievement for students with mild and moderate disabilities in inclusive secondary education by planning, adapting and implementing effective instruction. Offered in fall, spring. Prereq: required submission of satisfactory FBI, Act 34/151 clearances; EDFN 211, 241. Cross-listed with SPED 546, credit may not be received for both.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN 211 or EDFN 211H and EDFN 241 or EDFN 241H

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

FBI and Act 34/151 Clearances

Required submission of satisfactory FBI and Act 34/151 clearances.

SPED351 - Managing Challenging Behaviors

Course Information

Course Title
Managing Challenging Behaviors

Subject code	Course Number	Academic Level
SPED	351	Undergraduate

Course Description
Provides various strategies to support students with challenging behaviors. Candidates will conduct Functional Behavior Assessment and prepare Behavior Intervention Plan focusing on decrease negative behaviors while increasing positive behaviors. Candidates will develop their ability to effectively analyze behaviors and design inclusive educational and community environments to optimize the achievement of every student. Candidates will demonstrate the knowledge and skills to modify teaching methods and learning environments to promote positive social skills in students with disabilities. Admission to Advanced Professional Studies required.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED331 Or SPED331H

Complete ANY of the following Courses:

- SPED331 - Positive Learning Environments for all Students
- SPED331H - Hon: Positive Learning Environments for all Students

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

SPED361 - Formal Assessment for Students with Disabilities

Course Information

Course Title
Formal Assessment for Students with Disabilities

Subject code	Course Number	Academic Level
SPED	361	Undergraduate

Course Description
Designed to prepare Special Education teacher candidates to effectively develop competencies for assessing PK-12 students with disabilities according to IDEA (Individuals with Disabilities Education Act). Teacher candidates will acquire knowledge for administration, scoring, and interpretation of formal assessment devices typically used in educational evaluations. Furthermore, teacher candidates will learn how to properly select formal assessment tools in terms of reliability, validity and norm populations and learn about integrated systems of assessment and data collection for identification of students struggling to meet academic and behavioral expectations. Teacher candidates will learn the role of educational evaluations in developing Individual Education Programs (IEP) for students in need of support in the general education curriculum. Teacher candidates will learn professional ways to collaborate with parents and include them as equal partners in the assessment process.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN211 or EDFN211H and EDFN241 or EDFN241H and SPED237

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
- SPED237 - Applied Foundations of Contemporary Special Education

SPED400 - Co-Op Ed Experience in Sped

Course Information

Course Title
Co-Op Ed Experience in Sped

Subject code	Course Number	Academic Level
SPED	400	Undergraduate

Course Description
Co-Op Ed Experience in Sped

SPED412 - Assessmnt for Mild/Mod Disablt

Course Information

Course Title
Assessmnt for Mild/Mod Disablt

Subject code	Course Number	Academic Level
SPED	412	Undergraduate

Course Description
This course prepares teacher candidates to develop competencies for administration, scoring and interpretation of formal assessment devices typically used in educational evaluations. Teacher candidates acquire knowledge of the process of how to select formal assessment tools in terms of reliability, validity and norm populations, and learn about integrated systems of assessment and data collection for identification of students struggling to meet academic and behavioral expectations. Teacher candidates will learn the role of educational evaluations in developing Individual Education Programs (IEP) for students in need of support in the general education curriculum. Teacher candidates learn how to collaborate with parents and include them as equal partners in the assessment process. Prereq: Act 34, 151, 114 clearances; admission to Advanced Professional Studies; Professional Bloc I courses of ECPK 421, SPED 321, SPED 341. Coreq: Strand II: SPED 442, SPED 452, SPED 453, SPED 454. Offered in fall, spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Professional Bloc I courses: ECPK 421 and SPED 321 and SPED 341

Complete ALL of the following Courses:

- ECPK421 - Language Development & Emergent Literacy
  AND SPED321 - Serving Individuals in Inclusive Settings
  AND SPED341 - Early Inervention to Kindergarten

Act 34, 151 and 114 Clearances

Act 34, 151 and 114 clearances required.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

Strand II: SPED 442 and SPED 452

Enroll in the following Courses:

- SPED442 - Eff Instr for Stdnts w Disabil
- SPED452 - Individualized Educ Planning (Inactive)

SPED441 - Support for Specialized Curriculum

Course Information

Course Title
Support for Specialized Curriculum

Subject code	Course Number	Academic Level
SPED	441	Undergraduate

Course Description
This course provides teacher candidates with research-based methods and special techniques to effectively instruct students with severe/profound and multiple disabilities within a variety of educational settings. Teacher candidates develop the teaching skills required to plan for and institute positive intervention strategies in relevant curricular areas, including perceptual, motor, daily living, communication, leisure and socialization. The emphasis of this course will be upon implementing the Individualized Education Programs (IEP). Focus will be upon lesson plans, task analyses and accommodating students who require extensive or pervasive instructional supports and adapting specialized curricula to meet their learning needs. Prereq: Act 34, 151, 114 clearances; admission to Advanced Professional Studies; Professional Bloc I courses of ECPK 421, SPED 321, SPED 341. Coreq: Strand I: SPED 411, SPED 451, SPED 453, SPED 454. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Professional Bloc I courses: ECPK 421 and SPED 321 and SPED 341

Complete ALL of the following Courses:

- ECPK421 - Language Development & Emergent Literacy
  AND SPED321 - Serving Individuals in Inclusive Settings
  AND SPED341 - Early Inervention to Kindergarten

Act 34, 151 and 114 Clearances

Act 34, 151 and 114 clearances required.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

Strand I: SPED 411 and SPED 451

Enroll in the following Courses:

- SPED411 - Assmt/Devl of Indiv Ed Prgram (Inactive)
- SPED451 - Indiv Ed Plnng for Svr Disablt (Inactive)

SPED441H - H: Support for Specialized Curriculum

Course Information

Course Title
H: Support for Specialized Curriculum

Subject code	Course Number	Academic Level
SPED	441H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

Professional Bloc I courses: ECPK 421 and SPED 321 and SPED 341

Complete ALL of the following Courses:

- ECPK421 - Language Development & Emergent Literacy
  AND SPED321 - Serving Individuals in Inclusive Settings
  AND SPED341 - Early Inervention to Kindergarten

Act 34, 151 and 114 Clearances

Act 34, 151 and 114 clearances required.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

Course Corequisites

Type
Corequisite

Strand I: SPED 411 and SPED 451

Enroll in the following Courses:

- SPED411 - Assmt/Devl of Indiv Ed Prgram (Inactive)
- SPED451 - Indiv Ed Plnng for Svr Disablt (Inactive)

SPED442 - Eff Instr for Stdnts w Disabil

Course Information

Course Title
Eff Instr for Stdnts w Disabil

Subject code	Course Number	Academic Level
SPED	442	Undergraduate

Course Description
This course is designed to prepare teacher candidates to provide effective instruction to children with mild disabilities. The course will focus on developing skills for high-quality instruction based on research-based practices used to design and adapt curriculum to provide high-quality, standard-based instruction for students with mild disabilities, with an emphasis on the inclusive classroom. Course participants will learn to plan, implement and assess the results of effective instruction aligned with students academic, social, emotional and behavioral needs to facilitate academic achievement, with an emphasis in development of literacy skills for students in need of supports in general education. Prereq: Act 34, 151, 114 clearances; admission to Advanced Professional Studies; Professional Bloc I courses of ECPK 421, SPED 321, SPED 341. Coreq: Strand II: SPED 412, SPED 452, SPED 453, SPED 454. Offered in fall, spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

Professional Bloc I courses: ECPK 421 and SPED 321 and SPED 341

Complete ALL of the following Courses:

- ECPK421 - Language Development & Emergent Literacy
  AND SPED321 - Serving Individuals in Inclusive Settings
  AND SPED341 - Early Inervention to Kindergarten

Act 34, 151 and 114 Clearances

Act 34, 151 and 114 clearances required.

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional

Studies.

Course Corequisites

Type
Corequisite

Strand II: SPED 412 and SPED 452

Enroll in the following Courses:

- SPED412 - Assessmnt for Mild/Mod Disablt
- SPED452 - Individualized Educ Planning (Inactive)

SPED443 - Reflective Practices

Course Information

Course Title
Reflective Practices

Subject code	Course Number	Academic Level
SPED	443	Undergraduate

Course Description
This course prepares teacher candidates with the necessary skills to develop cultural sensitivity to work effectively with diverse families and their students with disabilities (mild/moderate disabilities). Teacher candidates explore culture and diversity as they apply to families, educators, and influences on daily activities, identity development, and systems of power and privilege in the educational system. Teacher candidates develop their ability to be culturally responsive, open, and respectful educators. Teacher candidates develop their professional dispositions consistent with family and student centered educational planning, program implementation and community collaboration centered on students with disabilities (mild/moderate; severe/multiple disabilities) and their diverse families.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ECPK421 and ECPK485 and SPED311 or SPED311H and SPED321 and SPED341

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- ECPK421 - Language Development & Emergent Literacy
- ECPK485 - Teaching Young English Language Learners
- SPED311 - Assessment for Designing & Implementing Instruction
  OR SPED311H - Hon: Assessment for Designing & Implementing Instruction
- SPED321 - Serving Individuals in Inclusive Settings

SPED443H - Hon: Reflective Practices

Course Information

Course Title
Hon: Reflective Practices

Subject code	Course Number	Academic Level
SPED	443H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H and ECPK421 and ECPK485 and SPED311 or SPED311H and SPED321 and SPED341

Complete ALL of the following Courses:

- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing
- ECPK421 - Language Development & Emergent Literacy
- ECPK485 - Teaching Young English Language Learners
- SPED311 - Assessment for Designing & Implementing Instruction
  OR SPED311H - Hon: Assessment for Designing & Implementing Instruction
- SPED321 - Serving Individuals in Inclusive Settings
- SPED341 - Early Inervention to Kindergarten

SPED444 - Transition Planning and Secondary Programming for Individuals with Disabilities

Course Information

Course Title
Transition Planning and Secondary Programming for Individuals with Disabilities

Subject code	Course Number	Academic Level
SPED	444	Undergraduate

Course Description
This course is intended to develop competencies for individual program planning and instructional management. It prepares students to develop strategies to deliver curriculum in inclusive environments through the Individualized Education Program (IEP). The transition components of the IEP will be emphasized to prepare secondary teachers to understand their role in developing goals, planning and selecting options for postsecondary education, employment, and independent living goals for yourh with disabilities.

SPED445 - Individualized Educational Planning

Course Information

Course Title
Individualized Educational Planning

Subject code	Course Number	Academic Level
SPED	445	Undergraduate

Course Description
This course prepares teacher candidates will identify students strengths, needs, preferences, and interests to incorporate into Individualized Education Programs. Teacher candidates will compile the necessary data with the intent of facilitating success in current and future experiences, planning instruction, and implementing supports focused on an inclusive lifespan perspective of students with disabilities. Teacher candidates will learn to develop effective strategies for grade to grade transition practices to support services in the least restrictive environment. Teacher candidates will develop their knowledge of the variety of appropriate K-12 educational environments and supports for students and plan for these based upon current special education laws and regulations and the most effective research-based practices. This course must be taken as a co-requisite with other Professional Bloc II courses. Prerequisite: Admission to Advanced Professional Studies Status, successful completion of Professional Block I.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN211 or EDFN211H and EDFN241 or EDFN241H and ECPK225 and SPED237

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching
- ECPK225 - Foundations of Reading
- SPED237 - Applied Foundations of Contemporary Special Education

Admission to Advanced Professional Studies (APS)

Must be admitted to Advanced Professional Studies.

SPED463 - EBPs for Math, Lit, Cntnt Area

Course Information

Course Title
EBPs for Math, Lit, Cntnt Area

Subject code	Course Number	Academic Level
SPED	463	Undergraduate

Course Description
This seminar, taken in conjunction with Student Teaching, is for all teacher candidates in the PK-12 Special Education Certification program. This seminar provides teacher candidates the opportunity to refine their knowledge of evidence-based practices in literacy, mathematics, and the core content areas for students with exceptionalities in grades PK-12 (for example peer-assisted learning strategies, self-regulated strategy instruction, etc.). Teacher candidates will select, implement, and evaluate the success of evidence-based practices through the collection and analysis of student data.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED441 or SPED441H and SPED442 and SPED443 or SPED443H and SPED444 and SPED445 and EDSP461 and EDSP462

Complete ALL of the following Courses:

- SPED441 - Support for Specialized Curriculum
  OR SPED441H - H: Support for Specialized Curriculum
- SPED442 - Eff Instr for Stdnts w Disabil
- SPED443 - Reflective Practices
  OR SPED443H - Hon: Reflective Practices
- SPED444 - Transition Planning and Secondary Programming for Individuals with Disabilities
- SPED445 - Individualized Educational Planning
- EDSP461 - Stu Tch: Sped, 1st
- EDSP462 - Stu Tch: Sped, 2nd

SPED479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
SPED	479	Undergraduate

Course Description
Experimental

SPED489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
SPED	489	Undergraduate

Course Description
For the definition of departmental honors and eligibility, refer to the Special Academic Opportunities section of this catalog.

SPED498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
SPED	498	Undergraduate

Course Description
For further information, see the Special Academic Opportunities section.

SPED499 - Departmental Honors

Course Information

Course Title
Departmental Honors

Subject code	Course Number	Academic Level
SPED	499	Undergraduate

Course Description
For the definition of departmental honors and eligibility, refer to the Special Academic Opportunities section of this catalog.

SPED546 - Sec Stdnts w Disab Inclu Sttgs

Course Information

Course Title
Sec Stdnts w Disab Inclu Sttgs

Subject code	Course Number	Academic Level
SPED	546	Graduate

Course Description
This course is designed to prepare secondary education majors to effectively teach students with disabilities in inclusive classrooms. Participants will learn legal mandates, secondary general educators role in the special education process, and the academic and social implications of inclusion. Participants also will learn to facilitate academic achievement for students with mild and moderate disabilities in inclusive secondary education by planning, adapting, and implementing effective instruction. Cross-listed with SPED 346, credit may not be received for both.

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN211 or EDFN211H and EDFN241 or EDFN241H

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

SPED578 - Special Education Law

Course Information

Course Title
Special Education Law

Subject code	Course Number	Academic Level
SPED	578	Graduate

Course Description
The purpose of the course is to learn about the legal background of special education from its historical experience through its rapid development in the 1970s and 1980s to its current and future impact. Students will become familiar and conversant in the Pennsylvania and Federal Regulations and Standards, appropriate case law, and how Section 504 of the Rehabilitation Act of 1973 impacts and interacts with special education law and the due process hearing system. Federal statutes governing special education will be reviewed. Offered periodically.

SPED586 - Topics in Special Education

Course Information

Course Title
Topics in Special Education

Subject code	Course Number	Academic Level
SPED	586	Graduate

Course Description
Specific topics are chosen that may serve as a change agent for special education programs in which students with disabilities are the prime responsibility.

SPED600 - Introduction to Exceptional Education

Course Information

Course Title
Introduction to Exceptional Education

Subject code	Course Number	Academic Level
SPED	600	Graduate

Course Description
The Introduction to Exceptional Education course is designed to provide an historical and contemporary overview of the special education process while focusing on various types of learners with special needs including students with disabilities, twice exceptional learners, and children at risk. Topics include legal requirements and laws, partnering with parents/families, categories of exceptionality, identification and intervention, collaboration, and research-based best practices, including Response to Intervention (RTI) and Universal Design for Learning (UDL).

SPED601 - Psyc of Stdnts w/ Disabilities

Course Information

Course Title
Psyc of Stdnts w/ Disabilities

Subject code	Course Number	Academic Level
SPED	601	Graduate

Course Description
A survey course of physical, psychological and social aspects of individuals with disabilities. Special attention is paid to disability as a socially constructed experience for people with disabilities as it pertains to learning processes, educational systems and social roles. The historical development of education and human service programs for individuals with disabilities is given consideration. Current terminologies and trends are emphasized. Multicultural aspects are included as they pertain to special education.

SPED611 - Seminar in Learning Disabled

Course Information

Course Title
Seminar in Learning Disabled

Subject code	Course Number	Academic Level
SPED	611	Graduate

Course Description
Advanced study and research concerning the mind, mental processes, feelings, desires, actions, traits, attitudes and thoughts of children with neurological impairments and/or learning disabilities, as well as an investigation of major educational theories and approaches. The student will investigate the consistencies of the basic premises and issues of the field as well as establish the current state of the art. Emphasis will be on definition, identification, characteristics, education and research of students with learning disabilities. Offered in summer.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED580 and SPED600 and SPED601

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities

SPED618 - Advanced Topics in Early Intervention

Course Information

Course Title
Advanced Topics in Early Intervention

Subject code	Course Number	Academic Level
SPED	618	Graduate

Course Description
For practicing teachers or master-level students who will be called upon to develop, implement and evaluate early-intervention programs for students with developmental delays and students who are at risk for school delays. Includes examination of areas that interfere with normal development, assessment of the needs of young children and the design of programs to facilitate growth. Includes the importance of family involvement and evaluates instructional strategies intended to enhance the child’s success. Covers skills in accordance with family-centered services and participation in interagency, collaborative efforts. - Course focuses on the role of the reading specialist as a literacy leader. Topics will include theoretical orientations, the observation and supervision of reading, principles of staff development, principles of coaching and leadership practices.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED580 and SPED600 and SPED601

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities

SPED621 - Multicultural Aspects

Course Information

Course Title
Multicultural Aspects

Subject code	Course Number	Academic Level
SPED	621	Graduate

Course Description
Covers desirable changes in attitudes, perceptions, understandings and practices when working with children and youth who are educationally disadvantaged and whose disadvantage is caused by lower socioeconomic status or other demographic considerations, including race and ethnicity. Multicultural groups may include African Americans, Native Americans, Latin Americans and Appalachians. Remedial programs are evaluated and recommendations are made. Offered in spring.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED580 and SPED600 and SPED601

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities

SPED642 - Teaching Mild and Moderate Disabilities

Course Information

Course Title
Teaching Mild and Moderate Disabilities

Subject code	Course Number	Academic Level
SPED	642	Graduate

Course Description
Provides education intervention and management model for the accurate assessment of, and systematic intervention with, mentally and/or physically handicapped school-age students. Emphasis is placed on selecting and applying specific evaluation tools, programs, materials, techniques and psychological principles to the learning of identified populations. Offered in summer.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED580 and SPED600 and SPED601

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities

SPED651 - Advocacy and Leadership in Special Education

Course Information

Course Title
Advocacy and Leadership in Special Education

Subject code	Course Number	Academic Level
SPED	651	Graduate

Course Description
This course orientates the student with advanced opportunities, roles, and skills available to the educator. Students will learn how to be effective advocates for students and their families, as well as how to develop leadership skills in the special education classroom and beyond. Emphasis will be placed on relevant professional organizations and careers that highlight special education advocacy and leadership. Regular access to a special education classroom is highly recommended.

SPED652 - Issues of Diversity in Special Education

Course Information

Course Title
Issues of Diversity in Special Education

Subject code	Course Number	Academic Level
SPED	652	Graduate

Course Description
Allows the student to examine and reflect upon a variety of social constructs, intercultural issues, and curriculum development through the lenses of special education history, disability studies and social justice. The implications for future research and practice will be explored in respect to the development of local, national and international policies for diverse children, adults and families impacted by disabilities. This course requires both in-class instruction and out of class application. Regula access to a special education classroom is highly recommended.

SPED653 - Consultation & Collaboration

Course Information

Course Title
Consultation & Collaboration

Subject code	Course Number	Academic Level
SPED	653	Graduate

Course Description
Designed to prepare educators to effectively collaborate and problem-solve with students, families, and other professionals. A major emphasis in this course will include co-planning, co-instruction, and co-reflection through demonstration lessons. Additional content in this course will address the legal requirements associated with referral and procedural safeguards for parents and youth with disabilities. Emphasis will be placed on consultation and communication strategies to facilitate collaboration within schools and the surrounding community. (3 credits) . Regular access to a special education classroom is highly recommended.

SPED654 - Advance Pedagogy in Special Education

Course Information

Course Title
Advance Pedagogy in Special Education

Subject code	Course Number	Academic Level
SPED	654	Graduate

Course Description
Familiarizes experienced educators with an in-depth examination of research based pedagogical methods used to improve academic, social, behavioral, and transitional outcomes for Pre K-12 students with disabilities. Current instructional and assistive technologies will be explored. Specific topics and strategies explored in course will be aligned to the strengths and preferences of each student. Selection, implementation, and assessment of appropriate teaching strategies with an authentic audience or through case studies will be expected. out of class application. Regular access to a special education classroom is highly recommended.

SPED665 - Transition and Supportive Employment for Adults with Disabilities

Course Information

Course Title
Transition and Supportive Employment for Adults with Disabilities

Subject code	Course Number	Academic Level
SPED	665	Graduate

Course Description
Transition planning for secondary students with disabilities, with specific emphasis on making appropriate job-placement decisions. Job categories will also be examined to assist in making meaningful matches between the worker and job. Programs that facilitate development of a congruence between job and employee are included, as well as agencies and other resources that might assist in job placement. Offered infrequently.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED580 and SPED600 and SPED601

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities

SPED667 - Individualized Education and Transition Planning

Course Information

Course Title
Individualized Education and Transition Planning

Subject code	Course Number	Academic Level
SPED	667	Graduate

Course Description
This course will prepare the pre-service special educator for the creation, implementation, and assessment of the Individualized Education Program (IEP) and related documents. This course will prepare the pre-service special educator to plan for transition of youth with disabilities to postsecondary environments. The role of person-centered planning and legal guidelines, as they guide the planning and implementation of special education services will be integrated throughout the course.

Simple Requirements

Completed Course Prerequisites

Type
Prerequisite

SPED 600

Complete ALL of the following Courses:

- SPED600 - Introduction to Exceptional Education

SPED671 - Behavior Management

Course Information

Course Title
Behavior Management

Subject code	Course Number	Academic Level
SPED	671	Graduate

Course Description
Intervention strategies for dealing with appropriate and inappropriate behaviors in individuals with disabilities. Opportunities to research and practice relevant classroom teaching and management skills, including the analysis of student behaviors, techniques for modifying targeted skill areas and methods for analyzing possible causes of behavior. Discussions of systematic procedures for evaluating the efficacy of certain management and intervention systems. Also emphasizes investigation and development of pragmatic solutions to students current placement questions. Offered in fall.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED580 and SPED600 and SPED601

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities

SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities

Course Information

Course Title
Diagnostic and Assessment Strategies for Students with Disabilities

Subject code	Course Number	Academic Level
SPED	680	Graduate

Course Description
Specifically acquaints students with diagnostic and prescriptive methods for the accurate assessment of, and the systematic intervention with, learning or behavior problems of school-age students with mental/physical disabilities. Emphasis is placed on selecting and applying appropriate evaluation tools, programs, materials, techniques and psychological principles to learning for the student with disabilities. Offered in spring and summer.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED 600

Complete ALL of the following Courses:

- SPED600 - Introduction to Exceptional Education

SPED681 - Admin and Supervision of Sped

Course Information

Course Title
Admin and Supervision of Sped

Subject code	Course Number	Academic Level
SPED	681	Graduate

Course Description
Current issues and practices of special education curriculum and instruction, school law, budget process, staff development, teacher supervision, family collaboration and public relations are analyzed. Discussions are geared to effecting change to meet standards, student needs and best practices for students with special needs. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED580 and SPED600 and SPED601

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities

SPED689 - Research Seminar in Special Education

Course Information

Course Title
Research Seminar in Special Education

Subject code	Course Number	Academic Level
SPED	689	Graduate

Course Description
Acquaints graduate students with relevant areas of needed research in the field of special education. Attention is given to discovering relevant problem areas for investigation. Historical, descriptive and experimental methods of research are covered. The value of research based teaching practices is stressed. A main purpose is to guide the student through an experience of writing a grant proposal and a literature review. Prereq: EDFN 601

Simple Requirements

Course Prerequisites

Type
Prerequisite

EDFN 601

Complete ALL of the following Courses:

- EDFN601 - Research Methods

SPED690 - Clinical Practicum

Course Information

Course Title
Clinical Practicum

Subject code	Course Number	Academic Level
SPED	690	Graduate

Course Description
This experience will be utilized by students who are certified in areas of education other than special education.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED580 and SPED600 and SPED601 and SPED621 and SPED642 and SPED652 and SPED671

Complete ALL of the following Courses:

- SPED680 - Diagnostic and Assessment Strategies for Students with Disabilities
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities
- SPED621 - Multicultural Aspects
- SPED642 - Teaching Mild and Moderate Disabilities
- SPED652 - Issues of Diversity in Special Education
- SPED671 - Behavior Management

SPED691 - Independent Study in Spec Ed

Course Information

Course Title
Independent Study in Spec Ed

Subject code	Course Number	Academic Level
SPED	691	Graduate

Course Description
Independent Study in Special Education

SPED693 - Action Research

Course Information

Course Title
Action Research

Subject code	Course Number	Academic Level
SPED	693	Graduate

Course Description
In-depth approach to a specially and individually structured problem. Seminars to discuss recent trends and issues in special education will be included. Students may visit and become familiar with institutions, private schools and innovative public school classes for students with disabilities.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED689

Complete ALL of the following Courses:

- SPED689 - Research Seminar in Special Education

SPED695 - Accomplished SPED Capstone

Course Information

Course Title
Accomplished SPED Capstone

Subject code	Course Number	Academic Level
SPED	695	Graduate

Course Description
This course enables the student to put theory into practice as it pertains to the professional contributions of an accomplished special education teacher. In accordance with the ongoing consultation of the instructor, the student will design, implement, and reflect upon a major capstone project aligned with the objectives of the program. Capstone examples include, but are not limited to (a.) action research, (b) creation/presentation of professional development, (c.) creation/presentation of original scholarship at a professional conference, (d.) mentorship of a pre-service or new special education teacher, (e.) grant writing. The course is 3 hours (pass/fail). However, if the student is unable to complete all requirements of the course during a single semester, they may re-enroll for 1 credit up to 2 additional, consecutive semesters for a total of 5 credits.This course requires both in-class instruction and out of class application. Regular access to a special education classroom is highly recommended. Pre-requisites: Completion of all SpEd MEd coursework. Up to 6 credits (not from the Knowledge Core) may be taken concurrently.

SPED698 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
SPED	698	Graduate

Course Description
Independent Study in Special Education.

SPED699 - Thesis

Course Information

Course Title
Thesis

Subject code	Course Number	Academic Level
SPED	699	Graduate

Course Description
An applied research project pertaining to the education of students with disabilities. Research findings must be submitted to a professional journal and papers must be orally defended to a committee.

Simple Requirements

Course Prerequisites

Type
Prerequisite

SPED689

Complete ALL of the following Courses:

- SPED689 - Research Seminar in Special Education

SPED799 - Appl Supervsn: Sped

Course Information

Course Title
Appl Supervsn: Sped

Subject code	Course Number	Academic Level
SPED	799	Graduate

Course Description
Provides prospective supervisors with field experience and problems encountered in the schools. Emphasis on defining and identifying pupils in all areas of disability, planning and operating a comprehensive special education program, and emphasis on techniques in assisting teachers in evaluating and improving their curricula and their teaching techniques.

Technology and Innovation Department

The Master of Science in Technology & Innovation is a unique program designed to complement and enhance your undergraduate degree with new ways of thinking about the world. Discovering and mastering the use of valuable thinking skills such as creativity, problem solving, critical thinking, decision making, design, and innovation are focuses of the program.

This program is ideal for: Teachers with a range of backgrounds in education, content areas and grade levels who are interested in further developing and strengthening their teaching abilities; and. Entrepreneurs, scientists, engineers, and other professionals seeking career advancement and psychological insight as to how people think and grow.

FACULTY LIST
Bowers, Betty-Jo; Associate Professor College of Science and Technology B.S., The Pennsylvania State University, 1995; M.B.A., Ibid., 1998; Ph.D., Alvernia University, 2016
English, Cindy; Assistant Professor College of Science and Technology B.S., Bemidji State University, 1988; B.S., Pennsylvania College of Technology, 1988, M.F.A., Marywood University, 1999
Haughery, John; Assistant Professor College of Science and Technology B.S., Millersville University, 2006; M.S., Morehead State University, 2014; Ph.D., Iowa State University, 2017
Johnson, Alex; Associate Professor College of Science and Technology B.S., University of North Dakota, 2000; M.S., Ibid., 2001; Ph.D., Ibid., 2010
Khalighi, Mehdi; Associate Professor College of Science and Technology B.S., Iran University of Science and Technology (Tehran); M.S., University of Utah, 1994; Ph.D., Ibid., 2001
Litowitz, Leonard; Professor College of Science and Technology B.S., Montclair State College, 1982; M.Ed., Bowling Green State University, 1983; Ed.D., University of Minnesota, 1986
Ogutu, Jack; Professor College of Science and Technology B.S., University of Nairobi (Kenya), 2004; M.S., Auburn University, 2011; Ph.D., Ibid., 2013
Painter, Donna; Associate Professor College of Science and Technology B.S., California University of Pennsylvania, 1988; M.Ed., Seton Hall University, 2005
Snyder, Mark; Professor College of Science and Technology B.S.Ed., Millersville University, 1984; M.A., Eastern Michigan University, 1985; Ed.D., Virginia Polytechnic Institute and State University, 1992
Warner, Scott; Professor College of Science and Technology B.S., Millersville University, 1985; M.A., Ball State University; D.Ed., West Virginia University, 2000
Wright, John; Professor College of Science and Technology B.S.I.T., Central Connecticut State University, 1993; M.S., Ibid., 1996; Ph.D., Iowa State University 1998

Programs

Technology Education Post-Baccalaureate Certification

Overview

The Department of Applied Engineering, Safety & Technology offers a certification program for individuals seeking to become technology education teachers, but do not need to complete a second four-year degree. People with existing undergraduate degrees may elect to seek certification on either a graduate or undergraduate level.

Curriculum

Simple Requirements

Advanced Professional Studies - Post-Bacc Cert (6 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Course Requirements for APS: Foundations Courses

Complete at least 1 of the following:

Option 1. Foundations Graduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN590 - Social Foundation of Educ
- EDFN545 - Advanced Educational Psychology

OR

Option 2. Foundations Undergraduate Level (6 credits)

Complete ALL of the following Courses:

- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

AND

APS Status

Must have APS (Advanced Professional Studies) status. View information on applying for APS Status.

Technology Education - Post-Bacc Certification (55-57 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Technology Literacy Core (12 credits)

Complete ALL of the following Courses:

- AENG110 - Communication and Information Systems
- AENG120 - Energy Systems
- AENG130 - Production Materials & Processes
- AENG140 - Bio-related Technologies

AND

Technical Core (27 credits)

Fulfill ALL of the following requirements:

Required Courses (21 credits)

Complete ALL of the following Courses:

- AENG322 - Transportation
- AENG241 - Drafting Communications
- AENG261 - Electronic Systems
  OR AENG261H - H:Electronic Systems
- AENG327 - Engineering Structures
- AENG344 - Product Design
  OR AENG344H - Hnrs: Product Design
- AENG346 - Architectural Drawing
- AENG435 - Manufacturing Enterprise

AND

Print Media Systems or Web Publishing & Interactive Media (3 credits)

Complete at least 1 of the following courses:

- AENG251 - Graphic Communication

Systems
- AENG252 - Web Publishing Systems

AND

Processing Nonmetallic or Metallic Materials (3 hours)

Complete at least 1 of the following courses:
- AENG271 - Processing Nonmetallic Materials
- AENG281 - Processing Metallic Materials

AND

Technology Elective: Laboratory Electives (7-9 credits)

Complete at least 3 of the following courses:
- AENG243 - Technical Sketching, Design & Rendering
- AENG251 - Graphic Communication Systems
- AENG252 - Web Publishing Systems
- AENG262 - Semiconductor Electronics
- AENG271 - Processing Nonmetallic Materials
- AENG281 - Processing Metallic Materials
- AENG325 - Power Conversion and Control
- AENG326 - Fluid Power
  OR AENG326H - Hon: Fluid Power
- AENG331 - Construction Technology 1
- AENG332 - Construction Technology 2
- AENG342 - Solid Modeling and 3D Prototyping
- AENG345 - Statics/Strength of Materials
- AENG351 - Digital Imaging
- AENG355 - Contemporary Printing
- AENG356 - Digital Publishing
- AENG357 - Packaging Specialty Printing
  OR AENG357H - Hon: Packaging Specialty Printing
- AENG364 - Digital Electronics
- AENG375 - Polymer and Ceramic Technology
- AENG376 - Woodworking Technology
- AENG382 - Automated Manufacturing
- AENG425 - Industrial Robotic Systems 2
- AENG427 - Programmable Logic Controllers 2
- AENG448 - Machine Tool Design
- AENG455 - R&D in Graphic Communications and Packaging
- AENG467 - Mobile Robotics
  OR AENG467H - Hon: Mobile Robotics
- AENG485 - Adv Manufacturing Systems
- AENG498 - Independent Study
- AENG515 - Adv Prob:
- AENG525 - Adv Prob:
- AENG535 - Adv Prob:

AND

Required EDTE Courses (9 credits)

Complete ALL of the following Courses:
- EDTE291 - Foundations of Technology & Engineering Ed
- EDTE391 - Curr & Inst in Tech & Eng Ed
- EDTE491 - Seminar in Techn & Engring Ed
- EDTE496 - Innovatn/Design Methodologies

Count in major GPA

Req Related for Technology Education

Type
Completion Requirement

Required Courses

Fulfill ALL of the following requirements:

English Composition (3 credits)

Complete ALL of the following Courses:
- ENGL110 - Introduction to College Writing
  OR ENGL110H - Hnrs:Introduction to College Writing

AND

General Education (G2) Math course

Complete at least 1 course in the following course sets:
- Any MATH course(s) with G2 attribute

AND

Science Elective

Complete at least 1 of the following courses:

- BIOL100 - General Biology
- CHEM103 - Gen Organic and Biochemistry 1
- PHYS103 - Elements of Physics
- PHYS104 - Applied Physics

Professional Education - Certification (33-37 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Foundations Bloc

Fulfill ALL of the following requirements:

Foundations of Modern Education (3 credits)

Complete at least 1 of the following courses:

- EDFN590 - Social Foundation of Educ
- EDFN211 - Foundations Modern Education
  OR EDFN211H - H: Foundations Modern Education

AND

Psychological Foundations of Teaching (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- EDFN241 - Psychological Foundations of Teaching
  OR EDFN241H - Hon:Psychological Foundations of Teaching

We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN211 Foundations Modern Education/EDFN241 Psyc Foundation of Teaching and please register for both courses in the same block.

AND

APS - Professional Bloc

Fulfill ALL of the following requirements:

Content Area Literacy for Diverse Classrooms (3 credits)

Complete at least 1 of the following courses:

- SEED340 - Content Area Literacy for Diverse Classrooms
- SEED540 - Cntnt Area Litrcy Divers Class

AND

Secondary Students w/Disabilities in Inclusive Settings (3 credits)

Complete at least 1 of the following courses:

- SPED346 - Secondary Students w/ Disabilities in Inclusive Settings
- SPED546 - Sec Stdnts w Disab Inclu Sttgs

AND

Foundations of Technology Education (3 credits)

Complete ALL of the following Courses:

- EDTE291 - Foundations of Technology & Engineering Ed

AND

Curriculum/Instruction in Technology Education (3 credits)

Complete ALL of the following Courses:

- EDTE391 - Curr & Inst in Tech & Eng Ed

AND

Innovation and Design Methods (2-6 credits)

Complete at least 1 of the following courses:

- EDTE496 - Innovatn/Design

Methodologies
- TEIN698 - Capstone

Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc, but prior to Student Teaching.

AND

Student Teaching Seminar (4 credits)

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:
- SEED471 - Student Teaching Seminar

AND

Seminar in Technology Education (1 credit)

Complete ALL of the following Courses:
- EDTE491 - Seminar in Techn & Engring Ed

File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Access the Student teaching Website

AND

Student Teaching Semester (9 credits)

Complete at least 1 of the following courses:
- SCED461 - Student Teaching in Science
- SCED462 - Student Teaching in Science

Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Access the packet on the Certification Website.

Technology and Innovation, M.S., Education Concentration

Overview

The Master of Science in Technology and Innovation degree program has been created for students from a variety of backgrounds, including education; business and industry; science and technology; and entrepreneurship. The program has two concentrations from which to choose— education and enterprise. The courses in the program are designed to develop and engage students in creativity, design thinking, innovation, ingenuity, problem solving, critical thinking, decision making, research, curiosity, scholarship, leadership, and professionalism. The thinking processes of professionals such as designers, engineers and entrepreneurs are the foundation of the Technology and Innovation core courses. These thinking processes are universal and enduring concepts and are widely considered important tools for success in a world submerged in technology. Experiences in this program provide students with insight as to how their own thinking processes affect them in both their personal and professional lives, and how those thinking processes can be modified to meet the circumstances. Teachers, employees and business leaders alike will learn to think about their own thinking. The Technology and Innovation program is structured to be flexible enough to allow students to customize their graduate studies to a significant degree. This flexibility enables students in the program to make choices, including which option works best to complete the program, the topic to explore through a thesis or research and development technical project, or the variety of courses from which to choose to address one’s areas of interest or professional development needs.

Admission Requirements

Applicants must possess a baccalaureate degree. Students holding a variety of baccalaureate degrees can benefit from the completion of the Master of Science in Technology and Innovation. Admission to the program is granted after a favorable review of application materials. A minimum undergraduate cumulative average of 3.0 is required. Applicants with less than a 3.0 GPA are required to submit test scores from the Graduate Record Examination (GRE) that are determined to be acceptable by the department. Probationary admission may be granted at the discretion of the department. See the *Admission Requirements* section for additional application information. Selected graduate courses may be credited toward both graduate-level certificates or teaching endorsements and the master’s

degree in technology and innovation. See the department chairperson or graduate program coordinator for further information.

Degree Requirements

Each student is required to complete all four courses in the technology and innovation core and either the education core or the enterprise core (depending on the degree concentration selected), and the identified expectations of one of the three degree-completion options.

1. Option 1 - the Thesis Option. TEIN 699: Thesis must be satisfactorily completed as part of a minimum of 30 s.h. of approved graduate study.
2. Option 2 - the Capstone Option. Requires satisfactory completion of TEIN 698: Capstone as part of 30 s.h. of approved graduate study.
3. Option 3 involves the completion of 33 s.h. of graduate study by taking four approved elective courses which have been selected based on their fit to the professional development needs of the student.

Technology and innovation and other approved courses in related disciplines are elected to complete the semester-hour requirements. The graduate program coordinator serves as the advisor for all graduate students pursuing a master's degree. Master's degree candidates who elect the thesis option will select, in consultation with the graduate coordinator, a thesis advisor from the Department of Applied Engineering, Safety and Technology. The thesis advisor will work with at least two other members of a student's thesis committee. These other committee members must consist of at least one other graduate-level faculty member of the Department of Applied Engineering, Safety and Technology. The third member must come from outside of the department and can be a recognized expert in a given field.

Degree Candidacy

The student will apply for admission to degree candidacy after completing six to 15 s.h. of graduate-degree credits. Graduate faculty will evaluate the student's performance and provide a written recommendation regarding the individual as a degree candidate. At the time of admission to degree candidacy, the student will consult with the graduate program coordinator to review and update his or her program of studies for completing the degree requirements.

Curriculum

Simple Requirements

Major in Technology and Innovation - MS

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Technology & Innovation Program Common Core (12 credits)

Complete ALL of the following Courses:

- TEIN603 - Fostering Creativity by Design
- TEIN604 - Engineering, Ethics, and AI
- TEIN605 - Applying Critical Thinking and Decision Making
- TEIN646 - Writing the Professional Paper

AND

Degree Completion Options (9-12 credits)

Complete at least 1 of the following:

Option 1. Thesis Option (9 credits)

Fulfill ALL of the following requirements:

Technology & Innovation Thesis (6 credits)

Complete ALL of the following Courses:

- TEIN699 - Thesis

AND

Technology & Innovation Electives (3 credits)

Technology and Innovation Electives. Additional Special Topics or other relevant electives may be approved by the program coordinator.

Earn at least 3 credits from the following:

- ACTE625 - Technology and Assessment for Learning
- ACTE630 - Current Technology for Online Instruction
- ACTE632 - Online Learning Environments
- ACTE633 - Learners in Online

Classrooms
- ACTE634 - Legal and Ethical Issues in Online Education
- ACTE635 - Instructional and Curricular Design for Online, Blended and Customized Instruction
- ACTE651 - Science Curriculum and Reform
- ACTE655 - Integrative STEM Education
- ART526 - Trends Art Ed:
- ART584 - Intro Studio Art:
- COMM610 - Seminar in Organizational Comm
- CMSC501 - Coding for Educators
- ECED614 - Advanced Curriculum in ECHD
- EDFN520 - Instructional Technology in Elem Ed
- EDFN530 - Instructional Technology, Design and Assessment
- EDLD610 - Theory and Organizatnl Behavr
- EDLD614 - School Community Relations
- EDLD620 - School Law and Public Policy
- EDLD667 - Leadership Seminar 1
- EDLD668 - Leadership Seminar 2
- EDLD669 - Leadership Seminar 3
- EDTE586 - Topics in Industry & Tech
- EDTE587 - Topics in Industry & Tech
- EDTE588 - Sp Topics in Industry & Tech
- EDTE589 - Sp Topics in Industry & Tech
- EDTE690 - Integrtve Lrning Exprntl Strgy
- EDTE691 - Independent Study
- EDUC575 - Current Trends in Education
- EDUC580 - Methods for Teaching English Language Learners
- EDUC651 - Math in the School Program
- EDUC661 - Science in the School Program
- EMGT601 - Principles & Practices of Emergency Management
- EMGT605 - Social Dimensions of Disaster
- EMGT607 - Emergency Mental Health and Trauma
- EMGT615 - Emergency Preparedness for Industry
- EMGT619 - Emergency Management Planning
- EMGT629 - Topics:
- ENTR510 - ENTR Promotions & Branding
- ENTR511 - Entre: Networking & Sales
- ENTR540 - Entrepreneurship Capstone
- GFED670 - Psychology of the Gifted
- GFED674 - Program for the Gifted
- GFED675 - Evaluating Instruct. Effectiveness: App for the Gifted
- GFED676 - Teaching Gifted Learners Instructional Strategies
- AENG515 - Adv Prob:
- AENG525 - Adv Prob:
- AENG535 - Adv Prob:
- AENG586 - Special Topics:
- AENG587 - Special Topics:
- AENG588 - Special Topics:
- AENG589 - Special Topics:
- MATH622 - 21st Century Math
- SOWK501 - Principles and Philosophies of Social Work
- SOWK505 - Understanding Social Work Practices w Diverse Pops
- SOWK510 - Human Behavior in the Social Environment I
- SOWK511 - Human Behavior in the Social Environment II
- SOWK515 - Social Welfare Policy
- SOWK619 - Global Perspectives in SOWK
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities
- SPED651 - Advocacy and Leadership in Special Education
- SPED671 - Behavior Management
- WSSD551 - Coaching of Sport

- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD604 - Facilities and Event Management
- WSSD610 - Women in Sport
- WSSD615 - Campus Recreation Program
- WSSD622 - Sport Finance
- WSSD691 - Ind Stdy:
- ACTE610 - The Reflective Practitioner

Any WSSD 686-689 course(s)

Total Degree Credits: 30

OR

Option 2. Research & Development Technical Projects (30credits)

Fulfill ALL of the following requirements:

Research & Development Report (3 credits)

Complete ALL of the following Courses:

- TEIN698 - Capstone

AND

Technology & Innovation Electives (6 credits)

Technology and Innovation Electives. Additional Special Topics or other relevant electives may be approved by the program coordinator.

Earn at least 6 credits from the following:

- ACTE625 - Technology and Assessment for Learning
- ACTE630 - Current Technology for Online Instruction
- ACTE632 - Online Learning Environments
- ACTE633 - Learners in Online Classrooms
- ACTE634 - Legal and Ethical Issues in Online Education
- ACTE635 - Instructional and Curricular Design for Online, Blended and Customized Instruction
- ACTE651 - Science Curriculum and Reform
- ACTE655 - Integrative STEM Education
- ART526 - Trends Art Ed:
- ART584 - Intro Studio Art:
- COMM610 - Seminar in Organizational Comm
- CMSC501 - Coding for Educators
- ECED614 - Advanced Curriculum in ECHD
- EDFN520 - Instructional Technology in Elem Ed
- EDFN530 - Instructional Technology, Design and Assessment
- EDLD610 - Theory and Organizatnl Behavr
- EDLD614 - School Community Relations
- EDLD620 - School Law and Public Policy
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- EDLD668 - Leadership Seminar 2
- EDLD669 - Leadership Seminar 3
- EDTE586 - Topics in Industry & Tech
- EDTE587 - Topics in Industry & Tech
- EDTE588 - Sp Topics in Industry & Tech
- EDTE589 - Sp Topics in Industry & Tech
- EDTE690 - Integrtve Lrning Exprntl Strgy
- EDTE691 - Independent Study
- EDUC575 - Current Trends in Education
- EDUC580 - Methods for Teaching English Language Learners
- EDUC651 - Math in the School Program
- EDUC661 - Science in the School Program
- EMGT601 - Principles & Practices of Emergency Management
- EMGT605 - Social Dimensions of Disaster
- EMGT607 - Emergency Mental Health and Trauma
- EMGT615 - Emergency Preparedness

for Industry
- EMGT619 - Emergency Management Planning
- EMGT629 - Topics:
- ENTR510 - ENTR Promotions & Branding
- ENTR511 - Entre: Networking & Sales
- ENTR540 - Entrepreneurship Capstone
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- GFED674 - Program for the Gifted
- GFED675 - Evaluating Instruct. Effectiveness: App for the Gifted
- GFED676 - Teaching Gifted Learners Instructional Strategies
- AENG515 - Adv Prob:
- AENG525 - Adv Prob:
- AENG535 - Adv Prob:
- AENG586 - Special Topics:
- AENG587 - Special Topics:
- AENG588 - Special Topics:
- AENG589 - Special Topics:
- MATH622 - 21st Century Math
- SOWK501 - Principles and Philosophies of Social Work
- SOWK505 - Understanding Social Work Practices w Diverse Pops
- SOWK510 - Human Behavior in the Social Environment I
- SOWK511 - Human Behavior in the Social Environment II
- SOWK515 - Social Welfare Policy
- SOWK619 - Global Perspectives in SOWK
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities
- SPED651 - Advocacy and Leadership in Special Education
- SPED671 - Behavior Management
- WSSD551 - Coaching of Sport
- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD604 - Facilities and Event Management
- WSSD610 - Women in Sport
- WSSD615 - Campus Recreation Program
- WSSD622 - Sport Finance
- WSSD686 - Sp Topics:
- WSSD691 - Ind Stdy:
- ACTE610 - The Reflective Practitioner

Or Any WSSD 686-689 course(s)

Total Degree Credits: 9

OR

Option 3. Technology & Innovation Electives (12 credits)

Fulfill ALL of the following requirements:

Technology & Innovation Electives - Choose 12 hours from

Technology and Innovation Electives. Additional Special Topics or other relevant electives may be approved by the program coordinator.

Earn at least 12 credits from the following:
- ACTE625 - Technology and Assessment for Learning
- ACTE630 - Current Technology for Online Instruction
- ACTE632 - Online Learning Environments
- ACTE633 - Learners in Online Classrooms
- ACTE634 - Legal and Ethical Issues in Online Education
- ACTE635 - Instructional and Curricular Design for Online, Blended and Customized Instruction
- ACTE651 - Science Curriculum and Reform
- ACTE655 - Integrative STEM Education
- ART526 - Trends Art Ed:
- ART584 - Intro Studio Art:
- COMM610 - Seminar in Organizational Comm
- CMSC501 - Coding for Educators
- ECED614 - Advanced Curriculum in ECHD

- EDFN520 - Instructional Technology in Elem Ed
- EDFN530 - Instructional Technology, Design and Assessment
- EDLD610 - Theory and Organizatnl Behavr
- EDLD614 - School Community Relations
- EDLD620 - School Law and Public Policy
- EDLD667 - Leadership Seminar 1
- EDLD668 - Leadership Seminar 2
- EDLD669 - Leadership Seminar 3
- EDTE586 - Topics in Industry & Tech
- EDTE587 - Topics in Industry & Tech
- EDTE588 - Sp Topics in Industry & Tech
- EDTE589 - Sp Topics in Industry & Tech
- EDTE690 - Integrtve Lrning Exprntl Strgy
- EDTE691 - Independent Study
- EDUC575 - Current Trends in Education
- EDUC580 - Methods for Teaching English Language Learners
- EDUC651 - Math in the School Program
- EDUC661 - Science in the School Program
- EMGT601 - Principles & Practices of Emergency Management
- EMGT605 - Social Dimensions of Disaster
- EMGT607 - Emergency Mental Health and Trauma
- EMGT615 - Emergency Preparedness for Industry
- EMGT619 - Emergency Management Planning
- EMGT629 - Topics:
- ENTR510 - ENTR Promotions & Branding
- ENTR511 - Entre: Networking & Sales
- ENTR540 - Entrepreneurship Capstone
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- GFED674 - Program for the Gifted
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- GFED676 - Teaching Gifted Learners Instructional Strategies
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- AENG525 - Adv Prob:
- AENG535 - Adv Prob:
- AENG586 - Special Topics:
- AENG587 - Special Topics:
- AENG588 - Special Topics:
- AENG589 - Special Topics:
- MATH622 - 21st Century Math
- SOWK501 - Principles and Philosophies of Social Work
- SOWK505 - Understanding Social Work Practices w Diverse Pops
- SOWK510 - Human Behavior in the Social Environment I
- SOWK511 - Human Behavior in the Social Environment II
- SOWK515 - Social Welfare Policy
- SOWK619 - Global Perspectives in SOWK
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities
- SPED651 - Advocacy and Leadership in Special Education
- SPED671 - Behavior Management
- WSSD551 - Coaching of Sport
- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD604 - Facilities and Event Management
- WSSD610 - Women in Sport
- WSSD615 - Campus Recreation Program
- WSSD622 - Sport Finance
- WSSD686 - Sp Topics:
- WSSD691 - Ind Stdy:
- ACTE610 - The Reflective Practitioner

Or Any WSSD 686-689 course(s)

Total Degree Credits: 33

Depending on the completion option you choose, your total credits needed for degree completion will vary. Thesis option or R&D Report option=30 credits. Elective option=33 credits.

AND

Concentration in Education

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:

- EDFN601 - Research Methods

AND

Social Foundations (3 credits)

Complete at least 1 of the following courses:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education
- EDFN604 - Education and Public Policy

AND

Psychology Area (3 credits)

Complete at least 1 of the following courses:

- PSYC525 - Advanced Child Psychology
- PSYC526 - Advanced Adolescent Psychology
- PSYC625 - Human Growth and Development
- EDFN545 - Advanced Educational Psychology

AND

Field Experience in Technology & Innovation

Students in the Education Concentration must complete a Field Experience during the duration of their program. Please consult your program coordinator for options.

AND

Culminating Experience in Technology & Innovation

Culminating Experiences include but are not limited to published articles, curriculum artifacts and professional presentations

Technology and Innovation, M.S., Enterprise Concentration

Overview

The Master of Science in Technology and Innovation degree program has been created for students from a variety of backgrounds, including education; business and industry; science and technology; and entrepreneurship. The program has two concentrations from which to choose— education and enterprise. The courses in the program are designed to develop and engage students in creativity, design thinking, innovation, ingenuity, problem solving, critical thinking, decision making, research, curiosity, scholarship, leadership, and professionalism. The thinking processes of professionals such as designers, engineers and entrepreneurs are the foundation of the Technology and Innovation core courses. These thinking processes are universal and enduring concepts and are widely considered important tools for success in a world submerged in technology. Experiences in this program provide students with insight as to how their own thinking processes affect them in both their personal and professional lives, and how those thinking processes can be modified to meet the circumstances. Teachers, employees and business leaders alike will learn to think about their own thinking. The Technology and Innovation program is structured to be flexible enough to allow students to customize their graduate studies to a significant degree. This flexibility enables students in the program to make choices, including which option works best to complete the program, the topic to explore through a thesis or research and development technical project, or the variety of courses from which to choose to address one's areas of interest or professional development needs.

Admission Requirements

Applicants must possess a baccalaureate degree. Students holding a variety of baccalaureate degrees can benefit from the completion of the Master of Science in Technology and Innovation. Admission to the program is granted after a favorable review of application materials. A minimum undergraduate cumulative average of 3.0 is required. Applicants with less than a 3.0 GPA are required to submit test scores from the Graduate Record Examination (GRE) that are determined to be acceptable by the department. Probationary admission may be granted at the discretion of the department. See the *Admission Requirements* section for additional application information. Selected graduate courses may be credited toward both graduate-level certificates or teaching endorsements and the master's degree in technology and innovation. See the department chairperson or graduate program coordinator for further information.

Degree Requirements

Each student is required to complete all four courses in the technology and innovation core and either the education core or the enterprise core (depending on the degree concentration selected), and the identified expectations of one of the three degree-completion options.

1. Option 1 - the Thesis Option. TEIN 699: Thesis must be satisfactorily completed as part of a minimum of 30 s.h. of approved graduate study.
2. Option 2 - the Capstone Option. Requires satisfactory completion of TEIN 698: Capstone as part of 30 s.h. of approved graduate study.
3. Option 3 involves the completion of 33 s.h. of graduate study by taking four approved elective courses which have been selected based on their fit to the professional development needs of the student.

Technology and innovation and other approved courses in related disciplines are elected to complete the semester-hour requirements. The graduate program coordinator serves as the advisor for all graduate students pursuing a master's degree. Master's degree candidates who elect the thesis option will select, in consultation with the graduate coordinator, a thesis advisor from the Department of Applied Engineering, Safety and Technology. The thesis advisor will work with at least two other members of a student's thesis committee. These other committee members must consist of at least one other graduate-level faculty member of the Department of Applied Engineering, Safety and Technology. The third member must come from outside of the department and can be a recognized expert in a given field.

Degree Candidacy

The student will apply for admission to degree candidacy after completing six to 15 s.h. of graduate-degree credits. Graduate faculty will evaluate the student's performance and provide a written recommendation regarding the individual as a degree candidate. At the time of admission to degree candidacy, the student will consult with the graduate program coordinator to review and update his or her program of studies for completing the degree requirements.

Curriculum

Simple Requirements

Major in Technology and Innovation - MS

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Technology & Innovation Program Common Core (12 credits)

Complete ALL of the following Courses:

- TEIN603 - Fostering Creativity by Design
- TEIN604 - Engineering, Ethics, and AI
- TEIN605 - Applying Critical Thinking and Decision Making
- TEIN646 - Writing the Professional Paper

AND

Degree Completion Options (9-12 credits)

Complete at least 1 of the following:

Option 1. Thesis (30 credits)

Fulfill ALL of the following requirements:

Technology & Innovation Thesis (6 credits)

Complete ALL of the following Courses:

- TEIN699 - Thesis

AND

Technology & Innovation Electives (3 credits)

Technology and Innovation Electives. Additional Special Topics or other relevant electives may be approved by the program coordinator.

Earn at least 3 credits from the following:

- ACTE625 - Technology and Assessment for Learning
- ACTE630 - Current Technology for Online Instruction
- ACTE632 - Online Learning Environments
- ACTE633 - Learners in Online Classrooms
- ACTE634 - Legal and Ethical Issues in Online Education
- ACTE635 - Instructional and Curricular Design for Online, Blended and Customized Instruction
- ACTE651 - Science Curriculum and Reform
- ACTE655 - Integrative STEM Education
- ART526 - Trends Art Ed:
- ART584 - Intro Studio Art:
- COMM610 - Seminar in Organizational Comm
- CMSC501 - Coding for Educators
- ECED614 - Advanced Curriculum in ECHD
- EDFN520 - Instructional Technology in Elem Ed
- EDFN530 - Instructional Technology, Design and Assessment
- EDLD610 - Theory and Organizatnl Behavr
- EDLD614 - School Community Relations
- EDLD620 - School Law and Public Policy
- EDLD667 - Leadership Seminar 1
- EDLD668 - Leadership Seminar 2
- EDLD669 - Leadership Seminar 3
- EDTE586 - Topics in Industry & Tech
- EDTE587 - Topics in Industry & Tech
- EDTE588 - Sp Topics in Industry & Tech
- EDTE589 - Sp Topics in Industry & Tech
- EDTE690 - Integrtve Lrning Exprntl Strgy
- EDTE691 - Independent Study
- EDUC575 - Current Trends in Education
- EDUC580 - Methods for Teaching English Language Learners
- EDUC651 - Math in the School Program
- EDUC661 - Science in the School Program
- EMGT601 - Principles & Practices of

Emergency Management
- EMGT605 - Social Dimensions of Disaster
- EMGT607 - Emergency Mental Health and Trauma
- EMGT615 - Emergency Preparedness for Industry
- EMGT619 - Emergency Management Planning
- EMGT629 - Topics:
- ENTR510 - ENTR Promotions & Branding
- ENTR511 - Entre: Networking & Sales
- ENTR540 - Entrepreneurship Capstone
- GFED670 - Psychology of the Gifted
- GFED674 - Program for the Gifted
- GFED675 - Evaluating Instruct. Effectiveness: App for the Gifted
- GFED676 - Teaching Gifted Learners Instructional Strategies
- AENG515 - Adv Prob:
- AENG525 - Adv Prob:
- AENG535 - Adv Prob:
- AENG586 - Special Topics:
- AENG587 - Special Topics:
- AENG588 - Special Topics:
- AENG589 - Special Topics:
- MATH622 - 21st Century Math
- SOWK501 - Principles and Philosophies of Social Work
- SOWK505 - Understanding Social Work Practices w Diverse Pops
- SOWK510 - Human Behavior in the Social Environment I
- SOWK511 - Human Behavior in the Social Environment II
- SOWK515 - Social Welfare Policy
- SOWK619 - Global Perspectives in SOWK
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities
- SPED651 - Advocacy and Leadership in Special Education
- SPED671 - Behavior Management
- WSSD551 - Coaching of Sport
- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD604 - Facilities and Event Management
- WSSD610 - Women in Sport
- WSSD615 - Campus Recreation Program
- WSSD622 - Sport Finance
- WSSD686 - Sp Topics:
- WSSD687 - Sp Topics:
- WSSD688 - Sp Topics:
- WSSD689 - Sp Topics:
- WSSD691 - Ind Stdy:
- ACTE610 - The Reflective Practitioner

OR

Option 2. Research & Development Technical Project (30 credits)

Fulfill ALL of the following requirements:

Research & Development Report (3 credits)

Complete ALL of the following Courses:
- TEIN698 - Capstone

AND

Technology & Innovation Electives (6 credits)

Technology and Innovation Electives. Additional Special Topics or other relevant electives may be approved by the program coordinator.

Earn at least 6 credits from the following:
- ACTE625 - Technology and Assessment for Learning
- ACTE630 - Current Technology for Online Instruction
- ACTE632 - Online Learning Environments
- ACTE633 - Learners in Online Classrooms
- ACTE634 - Legal and Ethical Issues in Online Education
- ACTE635 - Instructional and Curricular Design for Online, Blended

and Customized Instruction
- ACTE651 - Science Curriculum and Reform
- ACTE655 - Integrative STEM Education
- ART526 - Trends Art Ed:
- ART584 - Intro Studio Art:
- COMM610 - Seminar in Organizational Comm
- CMSC501 - Coding for Educators
- ECED614 - Advanced Curriculum in ECHD
- EDFN520 - Instructional Technology in Elem Ed
- EDFN530 - Instructional Technology, Design and Assessment
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- SPED671 - Behavior Management
- WSSD551 - Coaching of Sport
- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD604 - Facilities and Event Management

- WSSD610 - Women in Sport
- WSSD615 - Campus Recreation Program
- WSSD622 - Sport Finance
- WSSD686 - Sp Topics:
- WSSD687 - Sp Topics:
- WSSD688 - Sp Topics:
- WSSD689 - Sp Topics:
- WSSD691 - Ind Stdy:
- ACTE610 - The Reflective Practitioner

OR

Option 3. Technology & Innovation Electives (33 credits)

Fulfill ALL of the following requirements:

Technology & Innovation Electives (12 credits)

Technology and Innovation Electives. Additional Special Topics or other relevant electives may be approved by the program coordinator.

Earn at least 12 credits from the following:

- ACTE625 - Technology and Assessment for Learning
- ACTE630 - Current Technology for Online Instruction
- ACTE632 - Online Learning Environments
- ACTE633 - Learners in Online Classrooms
- ACTE634 - Legal and Ethical Issues in Online Education
- ACTE635 - Instructional and Curricular Design for Online, Blended and Customized Instruction
- ACTE651 - Science Curriculum and Reform
- ACTE655 - Integrative STEM Education
- ART526 - Trends Art Ed:
- ART584 - Intro Studio Art:
- COMM610 - Seminar in Organizational Comm
- CMSC501 - Coding for Educators
- ECED614 - Advanced Curriculum in ECHD
- EDFN520 - Instructional Technology in Elem Ed
- EDFN530 - Instructional Technology, Design and Assessment
- EDLD610 - Theory and Organizatnl Behavr
- EDLD614 - School Community Relations
- EDLD620 - School Law and Public Policy
- EDLD667 - Leadership Seminar 1
- EDLD668 - Leadership Seminar 2
- EDLD669 - Leadership Seminar 3
- EDTE586 - Topics in Industry & Tech
- EDTE587 - Topics in Industry & Tech
- EDTE588 - Sp Topics in Industry & Tech
- EDTE589 - Sp Topics in Industry & Tech
- EDTE690 - Integrtve Lrning Exprntl Strgy
- EDTE691 - Independent Study
- EDUC575 - Current Trends in Education
- EDUC580 - Methods for Teaching English Language Learners
- EDUC651 - Math in the School Program
- EDUC661 - Science in the School Program
- EMGT601 - Principles & Practices of Emergency Management
- EMGT605 - Social Dimensions of Disaster
- EMGT607 - Emergency Mental Health and Trauma
- EMGT615 - Emergency Preparedness for Industry
- EMGT619 - Emergency Management Planning
- EMGT629 - Topics:
- ENTR510 - ENTR Promotions & Branding
- ENTR511 - Entre: Networking & Sales
- ENTR540 - Entrepreneurship Capstone
- GFED670 - Psychology of the Gifted
- GFED674 - Program for the Gifted

- GFED675 - Evaluating Instruct. Effectiveness: App for the Gifted
- GFED676 - Teaching Gifted Learners Instructional Strategies
- AENG515 - Adv Prob:
- AENG525 - Adv Prob:
- AENG535 - Adv Prob:
- AENG586 - Special Topics:
- AENG587 - Special Topics:
- AENG588 - Special Topics:
- AENG589 - Special Topics:
- MATH622 - 21st Century Math
- SOWK501 - Principles and Philosophies of Social Work
- SOWK505 - Understanding Social Work Practices w Diverse Pops
- SOWK510 - Human Behavior in the Social Environment I
- SOWK511 - Human Behavior in the Social Environment II
- SOWK515 - Social Welfare Policy
- SOWK619 - Global Perspectives in SOWK
- SPED600 - Introduction to Exceptional Education
- SPED601 - Psyc of Stdnts w/ Disabilities
- SPED651 - Advocacy and Leadership in Special Education
- SPED671 - Behavior Management
- WSSD551 - Coaching of Sport
- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD604 - Facilities and Event Management
- WSSD610 - Women in Sport
- WSSD615 - Campus Recreation Program
- WSSD622 - Sport Finance
- WSSD686 - Sp Topics:
- WSSD687 - Sp Topics:
- WSSD688 - Sp Topics:
- WSSD689 - Sp Topics:
- WSSD691 - Ind Stdy:
- ACTE610 - The Reflective Practitioner

AND

Concentration Enterprise (9-10 credits)

See separate block

Additional Comments:
Depending on the completion option you choose, your total credits needed for degree completion will vary. Thesis option or R&D Report option=30 credits. Elective option=33 credits.

Concentration in Enterprise (9-10 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Business Courses (6 credits)

Complete ALL of the following Courses:

- MGMT653 - Operations Management
- MGMT670 - Strategy and Policy

AND

Analytics/Statistics Courses (3-4 credits)

Complete at least 1 of the following courses:

- MATH503 - Probability and Statistics for Teachers
- MATH535 - Statistical Methods 1
- MATH610 - Problem Solving Seminar

AND

Practicum Experience in Technology & Innovation

Students in the Enterprise Concentration must complete a Practicum Experience. Please consult your program coordinator for options.

AND

Culminating Experience in Technology & Innovation

Culminating Experiences include but are not limited to published articles, curriculum artifacts and professional presentations.

Wellness & Sport Sciences Department

The Wellness and Sport Sciences Department (WSSD) will inspire students to engage in Millersville University's EPPIIC values and make a difference in the communities where they will live and work.

The mission of WSSD is that we are dedicated to high-quality wellness instruction for all undergraduate students and the delivery of excellent academic programs for undergraduate and graduate students in the sport-related careers of Sport Administration and Management, Sports Medicine, Pre-Athletic Training, and Athletic Coaching.

The WSSD offers one degree with two options leading to the Sport Administration baccalaureate degree.

- Sport Administration with Sport Business concentration
- Sport Administration with any minor or 2nd major

The department also teaches courses for the wellness requirement, which is required for graduation of all Millersville University students. In addition, the department collaborates with other departments within the University to offer several different majors:

- Multidisciplinary Studies, B.A., Pre-Occupational Therapy Option
- Allied Health Technology, B.S. - Sports Medicine
- Allied Health Technology, B.S. - Pre-Athletic Training Dual-Degree Option
- Communication, B.S. - Journalism Concentration

Moreover, the department offers a minor in athletic coaching for those wishing to develop the knowledge and skills necessary to safely coach athletes; a minor in sport studies giving students opportunity to examine the role that sport plays in shaping culture and in preparing for sport-related careers in humanities, social and environmental sciences; and a minor in sport science that will equip students with the essential knowledge and skills required for admission into competitive master's degree programs while at the same time enhancing their overall career prospects in a sport-related field. Students are eligible to receive certification in the American Sport Education Program. Furthermore, the department offers an elective course which grants national certification in first aid. The department also offers a graduate program with a master's degree in sport management, with a concentration in athletic management and athletic coaching.

FACULTY LIST
Dupain, Mandi; Assistant Professor Lombardo College of Business B.A., Dominican College, 1996; M.A., Saint Mary's College, 1998; Ph.D., University of Pittsburgh, 2002
Keefer, Daniel; Department Chairperson, Professor Lombardo College of Business B.S., East Stroudsburg University, 1993; M.S., University of Tennessee, 1995; Ph.D., University of North Carolina at Greensboro, 2001
Lombardi, Julie; Associate Professor Lombardo College of Business B.S. Trinity University, 1994; M.S., University of New Mexico, 1993; P.E.D., Indiana University, 1995
O'Connell, Colleen; Assistant Professor Lombardo College of Business B.A., Vassar College, 2016; M.S., Springfield College, 2020; Ph.D., Ibid., 2023
Schaeffer, Stratton; Assistant Professor Lombardo College of Business B.S., West Chester University, 1984; M.Ed., University of Texas-El Paso, 1991; Ph.D., Texas A&M University, 1998
Wimer, Jeffrey; Professor Lombardo College of Business B.S.Ed., Slippery Rock University, 1989; M.S., Ohio University, 1990; Ph.D., University of Dayton, 2000

Programs

Sports Management, M.Ed. - Athletic Coaching Concentration

Overview

The Department of Wellness and Sport Sciences offers the M.Ed. in Sport Management, with specialty concentrations in athletic coaching and athletic management. The degree program is designed to meet the needs of full-time students as well as working professionals, including athletic directors, coaches, athletic trainers and sport industry professionals. The program will appeal to individuals involved in the management of professional sport industries, school-based athletics, commercial and community recreation, sport facilities, fitness clubs, and related private-sector enterprises. Studies leading to this M.Ed. are interdisciplinary, drawing on expertise in sport science, educational theory, and research. A thesis option is available.

Admission Requirements

In addition to meeting regular University admission criteria, applicants for admission to the master's degree program in sport management should have an undergraduate GPA of 2.75 or higher. Applicants with a cumulative GPA between 2.75 and 2.99 will choose to either take the Graduate Record Exam (GRE), Miller Analogies Test (MAT), Graduate Management Admissions Test (GMAT) or complete a face-to-face interview with a short writing assignment on a topic appropriate to the sport management program. Applicants with a cumulative GPA above 3.0 are only required to submit a complete application. Applicants with a cumulative GPA below 2.75 may submit an application for consideration. These students will also need to comply with admission requirements for applicants with a cumulative GPA between 2.75 and 2.99 as previously stated above.

Curriculum

Simple Requirements

MED Professional Core Requirements (6 credits)

Type
Completion Requirement

Requirements

Complete at least 2 of the following:

Methods of Research or Research Methods in Sport (3 credits)

Complete at least 1 of the following courses:

- EDFN601 - Research Methods
- WSSD612 - Research Methods in Sport

OR

Psychological Core Requirement (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- PSYC525 - Advanced Child Psychology
- PSYC526 - Advanced Adolescent Psychology
- PSYC625 - Human Growth and Development

OR

Philosophical Core Requirement (3 credits)

Complete at least 1 of the following courses:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education
- EDFN604 - Education and Public Policy

Additional Comments:
PROFESSIONAL CORE
EDFN601 Research Methods is required. Choose 2 courses from two of the three Core Option areas.

Major in Sport Management (MED)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD603 - Moral and Ethical Issues in Sports
- WSSD604 - Facilities and Event

Management
- WSSD605 - Sport and the Law

AND

Elective Course or Thesis

Fulfill ANY of the following requirements:

Option 1. Elective Course

Complete at least 1 course in the following course sets:
- Any 5-level WSSD course(s)
- Any 6-level WSSD course(s)

OR

Option 2. Thesis Option

Complete ALL of the following Courses:
- WSSD698 - Research Proposal
- WSSD699 - Thesis

AND

Athletic Coaching Concentration

See separate block

Concentration in Athletic Coaching

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (3 credits)

Complete ALL of the following Courses:
- WSSD619 - Internship for Athletic Coaching

AND

Athletic Coaching Electives

Complete at least 2 courses in the following course sets:
- Any 5-level WSSD course(s)
- Any 6-level WSSD course(s)

Sport Management, M. Ed. : Athletic Management Concentration

Overview

The Department of Wellness and Sport Sciences offers the M. Ed. in sport management, with specialty concentrations in athletic coaching and athletic management. The degree program is designed to meet the needs of full-time students as well as working professionals, including athletic directors, coaches, athletic trainers and sport industry professionals. The program will appeal to individuals involved in the management of professional sport industries, school-based athletics, commercial and community recreation, sport facilities, fitness clubs, and related private-sector enterprises. Studies leading to this M.Ed. are interdisciplinary, drawing on expertise in sport science, educational theory and research. A thesis option is available.

Admission Requirements

In addition to meeting regular University admission criteria, applicants for admission to the master's degree program in sport management should have an undergraduate GPA of 2.75 or higher. Applicants with a cumulative GPA between 2.75 and 2.99 will choose to either take the Graduate Record Exam (GRE), Miller Analogies Test (MAT), Graduate Management Admissions Test (GMAT) or complete a face-to-face interview with a short writing assignment on a topic appropriate to the sport management program. Applicants with a cumulative GPA above 3.0 are only required to submit a complete application. Applicants with a cumulative GPA below 2.75 may submit an application for consideration. These students will also need to comply with admission requirements for applicants with a cumulative GPA between 2.75 and 2.99 as previously stated above.

Curriculum

Simple Requirements

MED Professional Core Requirements (9 credits)

Type
Completion Requirement

Requirements

Complete at least 2 of the following:

Methods of Research or Research Methods in Sport (3 credits)

Complete at least 1 of the following courses:

- EDFN601 - Research Methods
- WSSD612 - Research Methods in Sport

OR

Psychological Core Requirement (3 credits)

Complete at least 1 of the following courses:

- EDFN545 - Advanced Educational Psychology
- PSYC525 - Advanced Child Psychology
- PSYC526 - Advanced Adolescent Psychology
- PSYC625 - Human Growth and Development

OR

Philosophical Core Requirement (3 credits)

Complete at least 1 of the following courses:

- EDFN511 - Comparative Education
- EDFN590 - Social Foundation of Educ
- EDFN603 - Philosophy of Education
- EDFN604 - Education and Public Policy

Additional Comments:
EDFN601 Research Methods is required. Choose 2 courses from two of the three Core Option areas.

Major in Sport Management (MED)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (15 credits)

Complete ALL of the following Courses:

- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD603 - Moral and Ethical Issues in Sports
- WSSD604 - Facilities and Event Management
- WSSD605 - Sport and the Law

AND

Elective Course or Thesis

Complete at least 1 of the following:

Option 1. Elective Course

Complete ALL of the following Course Sets:

- Any 5-level WSSD course(s)
- Any 6-level WSSD course(s)

OR

Option 2. Thesis Option

Complete ALL of the following Courses:

- WSSD698 - Research Proposal
- WSSD699 - Thesis

AND

Athletic Management Concentration

See separate block

Concentration in Athletic Management (9 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- WSSD616 - Internship for Athletic Management
- WSSD622 - Sport Finance

AND

Special Topics: Sport Marketing (3 credits)

Complete ALL of the following Courses:

- WSSD689 - Sp Topics:

Athletic Coaching Minor

Overview

A minor in Athletic Coaching equips students with the principles of coaching, behavior, teaching, physical training and management, which are the essentials to becoming a successful coach. The goal of this program is to train students to be effective teachers and trainers while simultaneously enhancing communication and motivational skills and improving team dynamics and risk management skills.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Athletic Coaching (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- WSSD311 - Resp to Emergen: First Aid CPR
- WSSD483 - Legal Aspects of Sport

AND

Kinesiological & Physiological Foundation of Sport (3 credits)

Complete ALL of the following Courses:

- WSSD450 - Kinesiology and Phys Found of Sport

AND

Theory/Techniques of Coaching and Sport (3 credits)

Complete at least 1 of the following courses:

- WSSD480 - Theory & Tech of Coach & Sprt
- WSSD551 - Coaching of Sport

Permission is required for undergraduates to register for WSSD551 Coaching of Sport.

AND

Electives (2-6 credits)

Complete at least 2 of the following courses:

- WSSD300 - Co-Op Ed Experience in WSSD
- WSSD350 - Sport in North America
- WSSD375 - Prevention and Care of Athletic Injuries
- WSSD384 - Contemporary Issues in Sport
- WSSD410 - Intl. Sport Issues & Industry **OR** WSSD410H - Hon: Intl. Sport Issues & Industry
- WSSD452 - Nutrition for Performance Enhancement
- WSSD454 - Leadership Development in Sports
- WSSD482 - Coaching Effectiveness
- WSSD485 - Psychological Aspects of Sport and Exercise
- WSSD486 - Topics
- WSSD498 - Independent Study
- COMM429 - Topics in Communication **OR** COMM429H - Hon: Topics in Communication

Sport Science minor

Overview

The minor in Sport Science will equip students with the essential knowledge and skills required for admission into competitive master's degree programs while at the same time enhancing their overall career prospects in a sport-related field. The purpose of the Sport Science minor is to provide the prerequisite sport science coursework necessary for entrance in a sport-related graduate degree program.

Curriculum

Simple Requirements

Minor in Sport Science

Type
Completion Requirement

Required Courses

Complete ALL of the following Courses:

- WSSD450 - Kinesiology and Phys Found of Sport
- WSSD491 - Exercise Physiology

Electives

Earn at least 12 credits from the following:

- WELL175 - Wellness
- WSSD110 - Medical Terminology
- WSSD375 - Prevention and Care of Athletic Injuries
- WSSD400 - Co-Op Ed Experience in WSSD
- WSSD452 - Nutrition for Performance Enhancement
- WSSD480 - Theory & Tech of Coach & Sprt
- WSSD485 - Psychological Aspects of Sport and Exercise
- WSSD498 - Independent Study

Sport Studies Minor

Overview

The minor in Sport Studies gives students the opportunity to examine the role that sport plays in shaping culture and provides information needed for sport-related careers in the humanities and the social and environmental sciences.

With the new major in Journalism, a minor in Sport Studies is necessary for the University to continue to offer students the opportunity to prepare for careers in Sport Journalism. In addition, students who graduate in a major related to a sport field of study may look to advance their degree status with entry into a respective graduate program. The Sport Studies minor would provide the background necessary to enhance acceptance into one of these graduate programs.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Sport Studies

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- WSSD350 - Sport in North America
- WSSD384 - Contemporary Issues in Sport

AND

Electives (12 credits)

Earn at least 12 credits from the following:

- WSSD360 - International Sport Management
- WSSD410 - Intl. Sport Issues & Industry **OR** WSSD410H - Hon: Intl. Sport Issues & Industry
- WSSD454 - Leadership Development in Sports
- WSSD480 - Theory & Tech of Coach & Sprt
- WSSD485 - Psychological Aspects of Sport and Exercise
- WSSD486 - Topics
- WSSD498 - Independent Study
- COMM429 - Topics in Communication **OR** COMM429H - Hon: Topics in Communication
- GEOG228 - Geography of Sport

Sport Administration, B.S. - with any minor or second major

Overview

Millersville University's Sport Administration program prepares students to enter the sport industry's complex business background. The sport administration major equips students to interact with sport industries and various business departments within sport organizations. The B.S. in Sport Administration has two options for students to choose from based on their career goals:

1. A concentration in Sport Business or
2. No concentration combined with another university major or minor, like marketing or athletic coaching.

This page is for the major with no concentration, which must be combined with another university major or minor.

Curriculum

Simple Requirements

Sport Administration (39 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses for Sport Administration (36 credits)

Fulfill ALL of the following requirements:

Required Courses (33 credits)

Complete ALL of the following Courses:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- FINA203 - Personal Finance **OR** FINA203H - Hon: Personal Finance
- BUSN231 - Principles of Marketing **OR** BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management **OR** BUSN251H - Hnrs:Principles of Management
- WSSD311 - Resp to Emergen: First Aid CPR
- WSSD350 - Sport in North America **OR** WSSD384 - Contemporary Issues in Sport
- WSSD358 - Sport Fundraising & Devel Prin
- WSSD454 - Leadership Development in Sports
- WSSD483 - Legal Aspects of Sport
- COMM429 - Topics in Communication **OR** COMM429H - Hon: Topics in Communication

AND

International Sport Administration or International Sport Tour (3 credits)

Complete at least 1 of the following courses:

- WSSD360 - International Sport Management
- WSSD410 - Intl. Sport Issues & Industry **OR** WSSD410H - Hon: Intl. Sport Issues & Industry

AND

Required Capstone Experience (3 credits)

Complete ALL of the following Courses:

- WSSD400 - Co-Op Ed Experience in WSSD

AND

A Minor or a Second Major is Required

For the Sport Administration major and you must select a university approved minor or second major. This requirement will register as complete when you have declared the second major or the minor using the Academic Program Change request form. If you have questions and please consult your advisor.

Sport Administration, B.S. - Sport Business Option

Overview

Millersville University's Sport Administration program prepares students to enter the sport industry's complex business background. The sport administration major equips students to interact with sport industries and various business departments within sport organizations. The B.S. in Sport Administration has two options for students to choose from based on their career goals:

1. A concentration in Sport Business or
2. No concentration combined with another university major or minor, like marketing or athletic coaching.

This page is for the major with the Sport Business option.

Curriculum

Simple Requirements

Sport Administration (39 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses for Sport Administration (36 credits)

Fulfill ALL of the following requirements:

Required Courses (33 credits)

Complete ALL of the following Courses:

- BUSN161 - Intro to Financial Accounting
- BUSN162 - Intro to Managerial Accounting
- FINA203 - Personal Finance
  OR FINA203H - Hon: Personal Finance
- BUSN231 - Principles of Marketing
  OR BUSN231H - H:Principles of Marketing
- BUSN251 - Principles of Management
  OR BUSN251H - Hnrs:Principles of Management
- WSSD311 - Resp to Emergen: First Aid CPR
- WSSD350 - Sport in North America
  OR WSSD384 - Contemporary Issues in Sport
- WSSD358 - Sport Fundraising & Devel Prin
- WSSD454 - Leadership Development in Sports
- WSSD483 - Legal Aspects of Sport
- COMM429 - Topics in Communication
  OR COMM429H - Hon: Topics in Communication

AND

International Sport Administration or International Sport Tour (3 credits)

Complete at least 1 of the following courses:

- WSSD360 - International Sport Management
- WSSD410 - Intl. Sport Issues & Industry
  OR WSSD410H - Hon: Intl. Sport Issues & Industry

AND

Required Capstone Experience (3 credits)

Complete ALL of the following Courses:

- WSSD400 - Co-Op Ed Experience in WSSD

AND

Concentration in Sport Business

See separate block

Concentration in Sport Business (18 credits)

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Business Courses for Sport Business Option (12 credits)

Earn at least 12 credits from the following:

- BUSN202 - Legal Environment of Business **OR** BUSN202H - Hon: Legal Environment of Business
- BUSN352 - Human Resource Management **OR** BUSN352H - H:Human Resource Management
- MGMT372 - Organizational Behavior
- MKTG333 - Personal Selling
- MKTG335 - Advertising
- MKTG405 - Topics in Marketing

AND

Required Wellness and Sport Science Courses for Sport Business Option (3 credits)

Earn at least 3 credits from the following:

- WSSD300 - Co-Op Ed Experience in WSSD
- WSSD360 - International Sport Management
- WSSD384 - Contemporary Issues in Sport
- WSSD410 - Intl. Sport Issues & Industry **OR** WSSD410H - Hon: Intl. Sport Issues & Industry
- WSSD480 - Theory & Tech of Coach & Sprt
- WSSD486 - Topics
- WSSD498 - Independent Study
- WSSD551 - Coaching of Sport

A minimum of 12 credits must be taken from the Business Courses listing, A minimum of 3 credits must be taken from the Wellness and Sport Science Courses listing. 18 credits minimum must be taken from the option courses. Only 1 of WSSD 480 or 551 may be taken for credit. Students admitted to the accelerated BS to MED program will use the required courses for that program to fulfill the Wellness and Sport Science courses here.

Courses

FYEX100G - First Year Experience: Leadership through Sport

Course Information

Course Title
First Year Experience: Leadership through Sport

Subject code	Course Number	Academic Level
FYEX	100G	Undergraduate

Course Description
First Year Experience. 3 credit hour course.
Teamwork. Passion. Perseverance. Confidence. The skills participating in sports instills will benefit far beyond the court, field, pool or rink. The true benefit of sport are the life skills that enable athletes to reach their fullest potential and become future leaders. This class explores leadership through sports.

Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100L - Nutrition Advice/Social Media

Course Information

Course Title
Nutrition Advice/Social Media

Subject code	Course Number	Academic Level
FYEX	100L	Undergraduate

Course Description
First Year Experience. 3 credit hour course focusing on how people seek health-related information. Many people find information from social media. Individuals utilizing social media are bombarded with unverified health-related information, especially concerning nutritional advice. This first-year course will examine the process for sifting through this nutritional advice to access sound, evidence-based nutritional guidance. Additionally, students will learn how to be well-informed consumers of information and to critically analyze and then normalize to the general population recommendations for healthy eating patterns. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100O - More Than A Game

Course Information

Course Title
More Than A Game

Subject code	Course Number	Academic Level
FYEX	100O	Undergraduate

Course Description
First-Year Seminar (FYEX) courses are designed to support students' successful transition to university life. These courses use at least one high-impact educational practice to develop and foster skills that will lead to success in college, career, and personal life. This course examines the game of football, the most popular spectator sport in the United States. It will explore the game's history, controversies, and cultural impact on society. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100P - Cultivating Connections Through Sport

Course Information

Course Title
Cultivating Connections Through Sport

Subject code	Course Number	Academic Level
FYEX	100P	Undergraduate

Course Description
Communication, teamwork, preparation: these are core values deeply ingrained in the fabric of sport. Importantly, their significance extends far beyond the field of competition. In this course, you'll explore how these core principles are also embedded within the sport profession. Our primary focus will be how to cultivate, strengthen, and utilize connections – with peers, with industry professionals, and through digital platforms – so you can navigate and thrive within this dynamic industry. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100Q - Problem Solving through Team Challenge Activities

Course Information

Course Title
Problem Solving through Team Challenge Activities

Subject code	Course Number	Academic Level
FYEX	100Q	Undergraduate

Course Description
First-Year Seminar (FYEX) courses are designed to support students' successful transition to university life. These courses use at least one high-impact educational practice to develop and foster skills that will lead to success in college, career, and personal life. In this course, we will explore resources and strategies for students to be successful in college and examine problem solving techniques when working with teams. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

FYEX100Y - First Year Experience: Life's a game. Let's play to win

Course Information

Course Title
First Year Experience: Life's a game. Let's play to win

Subject code	Course Number	Academic Level
FYEX	100Y	Undergraduate

Course Description
FYEX 100Y (Life's a Game. Let's Play to Win) is a freshmen level course designed to help incoming students develop the necessary networking skills needed to flourish in today's competitive career environment. The theme of this course is the use of a variety of both active and classroom games that help facilitate a skill for teambuilding and teamwork. It also addresses issues that all college students can benefit from ranging from interview skills, money management, financial aid, and writing. These valuable insights are provided by University staff and personnel in these fields. Credit will only be granted for one FYEX 100 course, regardless of letter or title.

Cornerstone Stage Labels
First-Year Experience (FYEX)

WELL175 - Wellness

Course Information

Course Title
Wellness

Subject code	Course Number	Academic Level
WELL	175	Undergraduate

Course Description
This course offers a comprehensive discussion of the dimensions of wellness including such topics as physical fitness, nutrition, psychological well-being, time- and stress-management, STI prevention, sexual violence risk reduction, active bystander interventions, addictive behaviors related to alcohol and other drugs, cultural responsiveness, as well as chronic diseases. The course includes useful and practical advice for adopting a wellness lifestyle that considers individual interests, goals, and life situations.

Gateway Stage Labels
Personal Wellness (PWEL)

WELL240 - Health, Safety, Nutr for Child

Course Information

Course Title
Health, Safety, Nutr for Child

Subject code	Course Number	Academic Level
WELL	240	Undergraduate

Course Description
This course is specifically designed to address the essential components of children's health and wellness. The course will present culturally relevant and sustaining educational methods to teach and promote children's health through awareness, effective and diverse practices, and knowledge of health and wellness issues; address the creation and maintenance of safe environments for young children both inside and outside of the classroom environment; and meet children's nutritional needs through culturally relevant education and planning. The course includes useful and practical advice for adopting a wellness lifestyle that considers individual interests, goals, and life situations. Emphasis will be placed on preventive, inclusive, health practices, the promotion of lifelong physical activity that is diverse in its options, and on the collaborative effort of families, communities, and teachers in the promotion of these wellness issues in the face of current health and wellness issues for children, especially mental and physical health.

Gateway Stage Labels
Information Literacies (IL), Personal Wellness (PWEL)

Simple Requirements

Major/Field of Study Restrictions

Type
Prerequisite

Degree/Major/Field of Study Restrictions

Students must be U_BSE_ERCH - Early Childhood Education - PreK-Grade 4, B.S.Ed. or U_BSE_SPED_SPED - Special Education, BS.Ed.
ECPK, SPPD or SPED

This course has a field component. A complete and valid clearance packet must be on file with Field Services by the deadline date advertised on the Clearances webpage at https://www.millersville.edu/fieldservices/clearances.php

Failure to follow the submission procedures and deadline dates outlined on the Clearances webpage may result in being dropped from this course.

WSSD103 - Foundations for Success

Course Information

Course Title
Foundations for Success

Subject code	Course Number	Academic Level
WSSD	103	Undergraduate

Course Description
Obstacles don't have to stop you. If you run into a wall, don't turn around and give up. Figure out how to climb it, go through it, or work around it. This mantra by Michael Jordan, Hall of Fame professional basketball player, serves as a foundation for success. This course explores the power of caring mentors to shape an individual's future. In this course we explore how education improves humanity. Amazing people don't just happen! Students will learn how to develop a growth mindset and, through a process called critical inquiry, reflect on themselves and learn how to secure good mentors in their lives to partner in their future success. Using teaching and coaching as a framework, students will also recognize the pedagogical techniques used in their classes and how all students can best respond to those techniques to be successful in college. The course is open to all students and not intended as an introduction to a major course.

WSSD110 - Medical Terminology

Course Information

Course Title
Medical Terminology

Subject code	Course Number	Academic Level
WSSD	110	Undergraduate

Course Description
The study of medical terminology introduces students to the language of medicine. Students will gain an understanding of basic elements, rules of building and analyzing medical words, and medical terms associated with the body as a whole.

WSSD279 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
WSSD	279	Undergraduate

Course Description
Experimental

WSSD300 - Co-Op Ed Experience in WSSD

Course Information

Course Title
Co-Op Ed Experience in WSSD

Subject code	Course Number	Academic Level
WSSD	300	Undergraduate

Course Description
Co-Op Ed Experience in WSSD

WSSD310 - PE for Elementary Schools

Course Information

Course Title
PE for Elementary Schools

Subject code	Course Number	Academic Level
WSSD	310	Undergraduate

Course Description
Methods, materials, facilities and equipment for programs of health and physical education in elementary schools. Opportunities for observation of children at play, making equipment, program planning and teaching. Offered in fall, spring.

WSSD311 - Resp to Emergen: First Aid CPR

Course Information

Course Title
Resp to Emergen: First Aid CPR

Subject code	Course Number	Academic Level
WSSD	311	Undergraduate

Course Description
Preparation of students to develop skill and knowledge enabling them to administer first aid in the case of an accident or sudden illness. Certification in CPR and standard first aid according to American Red Cross standards.

WSSD350 - Sport in North America

Course Information

Course Title
Sport in North America

Subject code	Course Number	Academic Level
WSSD	350	Undergraduate

Course Description
Examines major issues in North America sport both in the past and at the present. It emphasizes developing a historical and environmental perspective of the evolution in modern North America sports. Students will study various social and cultural issues that have significantly influenced the development of sport - race and ethnicity, nationality, occupation, gender and sexual orientation, religion, economics, education, social class, and politics. It explores the implications of the continuous evolution of sports in North American society.

Gateway Stage Labels
Ethical Action & Citizenship (EAC), Information Literacies (IL)

WSSD358 - Sport Fundraising & Devel Prin

Course Information

Course Title
Sport Fundraising & Devel Prin

Subject code	Course Number	Academic Level
WSSD	358	Undergraduate

Course Description
Introduces students to the unique nature of sport fundraising at both the professional and amateur levels. Principles and practices of fundraising and donor development specific to the sport business environment combining theory and practical advice.

WSSD360 - International Sport Management

Course Information

Course Title
International Sport Management

Subject code	Course Number	Academic Level
WSSD	360	Undergraduate

Course Description
Students will be introduced to a wide range of issues concerning international sport management, such as globalized sport industry, emerging trends in international sport, governance in international sport, international sport business strategies, and frontiers in international sport management. They will examine specific issues, challenges, as well as opportunities within the domain of international sport management. The course will cover many professional sporting events in every continent and region of the world regarding their backgrounds, the participants in terms of athletes and spectators, the governance and management of the events , and the economic impacts.

WSSD375 - Prevention and Care of Athletic Injuries

Course Information

Course Title
Prevention and Care of Athletic Injuries

Subject code	Course Number	Academic Level
WSSD	375	Undergraduate

Course Description
Basics of prevention, recognition, care, assessment, treatment and rehabilitation of injuries to physically-active populations. Survey of the musculoskeletal anatomy; tissue response to injury; protective equipment; emergency procedures in sport; environmental concerns; mechanisms of sport injury; injury prevention, assessment and management; and abnormalities and disabilities as they apply to athletic participation. Prereq: WSSD 311.

Simple Requirements

Course Prerequisites

Type
Prerequisite

WSSD 311

Complete ALL of the following Courses:

- WSSD311 - Resp to Emergen: First Aid CPR

WSSD384 - Contemporary Issues in Sport

Course Information

Course Title
Contemporary Issues in Sport

Subject code	Course Number	Academic Level
WSSD	384	Undergraduate

Course Description
Students will be introduced to a wide range of sporting issues, such as violence, cheating, doping, and corruption as well as broad themes that can be examined using sport as a lens to view society. The course will cover sport at the youth, intercollegiate, and professional levels considering how sport at these levels is differently experienced by individuals, communities, organizations, and broadly by society.

Gateway Stage Labels
Ethical Action & Citizenship (EAC)

WSSD390 - Athltc Trng Tech w/ Surf Anatm

Course Information

Course Title
Athltc Trng Tech w/ Surf Anatm

Subject code	Course Number	Academic Level
WSSD	390	Undergraduate

Course Description
This course introduces students to the fundamental principles and basic techniques used by Certified Athletic Trainers (ATCs). Topics will include appropriate taping, wrapping and bracing procedures commonly prescribed for athletic injuries, selected therapeutic modalities, and an understanding of basic anatomy and functions of the musculoskeletal system, including an orientation to the major anatomical landmarks and underlying body structures. Pre-Athletic Training majors only. Offered in summer.

Simple Requirements

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Pre-Athletic Training Majors Only

Restricted to Pre-Athletic Training majors only.

WSSD395 - Senior Living and Active Aging

Course Information

Course Title
Senior Living and Active Aging

Subject code	Course Number	Academic Level
WSSD	395	Undergraduate

Course Description
Emphasizing the seven dimensions of wellness—physical, emotional, environmental, financial, social, spiritual, and occupational, this course examines the challenges and opportunities of active aging for older adults through the lens of wellness. Strategies and techniques for promoting an active lifestyle for disease prevention and well-being will be discussed, while considering how decisions earlier in life influence health outcomes in later years.

Gateway Stage Labels
Personal Wellness (PWEL)

WSSD400 - Co-Op Ed Experience in WSSD

Course Information

Course Title
Co-Op Ed Experience in WSSD

Subject code	Course Number	Academic Level
WSSD	400	Undergraduate

Course Description
Co-Op Ed Experience in Wssd

Capstone Stage Label
Yes

WSSD410 - Intl. Sport Issues & Industry

Course Information

Course Title
Intl. Sport Issues & Industry

Subject code	Course Number	Academic Level
WSSD	410	Undergraduate

Course Description
The purposes of this course are to introduce students to global sport-related issues and industries and to obtain firsthand experience in international sport events or organizations through a study abroad opportunity.

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

WSSD410H - Hon: Intl. Sport Issues & Industry

Course Information

Course Title
Hon: Intl. Sport Issues & Industry

Subject code	Course Number	Academic Level
WSSD	410H	Undergraduate

Keystone Stage Labels
Diverse Cultural Contexts (DCC)

WSSD450 - Kinesiology and Phys Found of Sport

Course Information

Course Title
Kinesiology and Phys Found of Sport

Subject code	Course Number	Academic Level
WSSD	450	Undergraduate

Course Description
The study of movement, specifically dealing with movement of the human body, including mechanics, laws of motion, anatomy and the detailed analysis of coaching activities. The functions of the various systems of the human body under stress of muscular activity that are basic for the development and maintenance of physical fitness and sport.

WSSD452 - Nutrition for Performance Enhancement

Course Information

Course Title
Nutrition for Performance Enhancement

Subject code	Course Number	Academic Level
WSSD	452	Undergraduate

Course Description
This course will provide a comprehensive overview of the nutritional needs of athletes and how proper nutrition may lead to better overall personal health and performance. Course restricted to Junior/Senior status and students in the Allied Health Technology, Sport Administration, Athletic Coaching, Pre-Athletic Training and Sports Medicine majors minors or concentrations only.

Gateway Stage Labels
Information Literacies (IL)

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

Degree/Major/Field of Study Restrictions

Type
Prerequisite

Major/Minor/Concentration Restriction

Restricted to students in the Allied Health Technology, Sport Administration, Athletic Coaching, Pre-Athletic Training and Sports Medicine majors minors or concentrations only.

WSSD454 - Leadership Development in Sports

Course Information

Course Title
Leadership Development in Sports

Subject code	Course Number	Academic Level
WSSD	454	Undergraduate

Course Description
This course is designed for students involved in the athletic coaching minor program as well as any student who wants to learn more about leadership in sports. To be a successful coach, it is essential to understand key leadership concepts such as motivation, integrity, team building and influencing people. The program content of this class will reflect these key leadership issues as well as other areas like vision, problem solving, building effective relationships, group dynamics and diversity. In addition, all participants will complete a Leadership Project. The Leadership Project will be a well-conceived vision and plan for action for the participants to implement upon completion of the class.

WSSD479 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
WSSD	479	Undergraduate

Course Description
Experimental

WSSD480 - Theory & Tech of Coach & Sprt

Course Information

Course Title
Theory & Tech of Coach & Sprt

Subject code	Course Number	Academic Level
WSSD	480	Undergraduate

Course Description
Theory and techniques of the function, organization and administration of athletics in the total education program. Certification in Coaching Principles and Sport First Aid is available through the American Sport Education Program. Offered anually.

WSSD482 - Coaching Effectiveness

Course Information

Course Title
Coaching Effectiveness

Subject code	Course Number	Academic Level
WSSD	482	Undergraduate

Course Description
Course introduces students to the fundamental principles and basic techniques used by athletic coaches. Topics include skill acquisition, competitive sport strategies, practice planning and game tactics to assist athletic coaches in designing successful athletic programs.

Gateway Stage Labels
Problem Solving (PS)

WSSD483 - Legal Aspects of Sport

Course Information

Course Title
Legal Aspects of Sport

Subject code	Course Number	Academic Level
WSSD	483	Undergraduate

Course Description
The primary purpose of WSSD 483 (Legal Aspects of Sport) is to investigate legal issues in sport that are commonly associated with the careers of athletic coaches, athletic trainers, athletic directors, sport journalists, and sport business personnel. This course also addresses the development of safety and risk management actions to reduce injury and liability in sport settings. This course is not intended to substitute for the advice of an attorney nor can it necessarily forestall lawsuits as no course or text can make such claims. It is also important that students realize that the interpretation of what action a “reasonably prudent” coach, sport manager, etc., would take is a dynamic rather than static interpretation. Thus, throughout their professionals working in these fields must remain abreast of current practices, professional standards of care, law revision and court interpretation, as well as new laws and legal precedent regarding issues introduced in this course.

WSSD484 - Psyc-Soc Foundation Coaching

Course Information

Course Title
Psyc-Soc Foundation Coaching

Subject code	Course Number	Academic Level
WSSD	484	Undergraduate

Course Description
The psychosocial factors affecting human behavior in modern society as applied to coaching situations and the historical development of sports programs. Offered periodically.

WSSD485 - Psychological Aspects of Sport and Exercise

Course Information

Course Title
Psychological Aspects of Sport and Exercise

Subject code	Course Number	Academic Level
WSSD	485	Undergraduate

Course Description
This course will help students understand how psychological factors affect an individual's physical performance and understand how participation in sport and exercise affects a person's psychological development, health and well-being. By the end of this course, students will view sport and physical activity as agents for personal and social change. Prereq: PSYC 100 for the B.S. BIOL/PATHL; WSSD 480 for athletic coaching minor.

Simple Requirements

Course Prequisites for B.S. BIOL/PATHL

Type
Prerequisite

PSYC 100 or PSYC 100H

Complete ANY of the following Courses:
- PSYC100 - General Psychology
- PSYC100H - Hnrs:General Psychology

Course Prequisites for Athletic Coaching Minor

Type
Prerequisite

WSSD 480

Complete ALL of the following Courses:
- WSSD480 - Theory & Tech of Coach & Sprt

WSSD486 - Topics

Course Information

Course Title
Topics

Subject code	Course Number	Academic Level
WSSD	486	Undergraduate

Course Description
Detailed investigations of a topic of current interest. Topic to be announced each time course is offered.

WSSD489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
WSSD	489	Undergraduate

WSSD491 - Exercise Physiology

Course Information

Course Title
Exercise Physiology

Subject code	Course Number	Academic Level
WSSD	491	Undergraduate

Course Description
Theory and laboratory experiences relating to the mechanisms by which the body adapts physiologically to selected conditions of muscular performance within the context of physical activity and sports. Laboratory experiments will include circulatory and respiratory response to exercise, respiratory metabolic measurements, identification of the ventilatory threshold, assessment of maximal oxygen uptake, energy cost of physical activity and assessment of body composition.

Simple Requirements

WSSD 491 Pre-req

Type
Prerequisite

Complete ALL of the following Courses:

- BIOL254 - Human Anatomy & Physiology I
- BIOL255 - Human Anatomy & Physiology II **OR** WSSD450 - Kinesiology and Phys Found of Sport

WSSD492 - Seminar in Sport Science

Course Information

Course Title
Seminar in Sport Science

Subject code	Course Number	Academic Level
WSSD	492	Undergraduate

Course Description
Group discussions. General theme to be determined by professor. Prereq: junior standing (60 earned credits)

Simple Requirements

Course Prerequisites

Type
Prerequisite

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

WSSD498 - Independent Study

Course Information

Course Title
Independent Study

Subject code	Course Number	Academic Level
WSSD	498	Undergraduate

Course Description
Independent study is available for well-qualified students. Students who receive approval for independent study are expected to complete a significant study or project in some area of Sport Administration, Sport Medicine, Sport Science, or something related to these topics.

Capstone Stage Label
Yes

WSSD499 - Dept Hnrs:

Course Information

Course Title
Dept Hnrs:

Subject code	Course Number	Academic Level
WSSD	499	Undergraduate

WSSD500 - Co-Op Ed Experience in WSSD

Course Information

Course Title
Co-Op Ed Experience in WSSD

Subject code	Course Number	Academic Level
WSSD	500	Graduate

Course Description
Co-Op Ed Experience in WSSD

WSSD525 - Growth, Maturation, and Physical Activity

Course Information

Course Title
Growth, Maturation, and Physical Activity

Subject code	Course Number	Academic Level
WSSD	525	Graduate

Course Description
Existing Description:
Introduction to the anatomical, physiological and psychosocial issues related to exercise and physical activity in children and adolescents such as effects of maturation, growth and puberty on physical performance.

Revised Description:
This course introduces students to the anatomical, physiological, psychological, and sociological issues related to exercise and physical activity in children and adolescents such as effects of maturation, growth and puberty on physical performance. Children and adolescents do not physiologically respond to exercise and training in the same manner as adults. Therefore, exercise training programs must be tailored to meet the developmental needs of children and adolescents. Professionals, such as sport coaches, who work with these populations should understand the physiological and psychological responses and demands that are unique to the child and adolescent populations. In addition, students will explore how to coach individuals with clinical pediatric health issues (e.g. asthma, diabetes) and how to adapt appropriate and safe physical activity and exercise programs.

WSSD551 - Coaching of Sport

Course Information

Course Title
Coaching of Sport

Subject code	Course Number	Academic Level
WSSD	551	Graduate

Course Description
Designed to develop the major area of knowledge pertinent to the profession of coaching. The American Sport Education Program (ASEP), dealing with sport philosophy, sport psychology, sport pedagogy, sport physiology, sport first aid and sport management, will be presented. Students may take the certification exam. Offered periodically.

WSSD581 - Performance In Sport

Course Information

Course Title
Performance In Sport

Subject code	Course Number	Academic Level
WSSD	581	Graduate

Course Description
Provides a clear understanding of factors to be considered when analyzing human movement pertaining to sport and athletic competition. Offered periodically.

WSSD582 - Sport Psychology

Course Information

Course Title
Sport Psychology

Subject code	Course Number	Academic Level
WSSD	582	Graduate

Course Description
Focuses on the latest psychological skills training techniques for both coaches and athletes. The latest techniques in neurolinguistic programming and its implications for coaches and athletes will be utilized. Students will be introduced to and learn the latest mental-training techniques of Olympic and professional athletes. Offered periodically.

WSSD590 - Drug and Alcohol Symposium

Course Information

Course Title
Drug and Alcohol Symposium

Subject code	Course Number	Academic Level
WSSD	590	Graduate

Course Description
CR. Drug and Alcohol Symposium

WSSD601 - Organization and Administration of Sport Programs

Course Information

Course Title
Organization and Administration of Sport Programs

Subject code	Course Number	Academic Level
WSSD	601	Graduate

Course Description
Includes regulations of sport-governing bodies, federal law, academic integrity, institutional control, financial effectiveness and welfare of sport personnel and participants. Offered periodically.

WSSD602 - Sport in American Culture

Course Information

Course Title
Sport in American Culture

Subject code	Course Number	Academic Level
WSSD	602	Graduate

Course Description
An examination of 20th-century American culture and the role played in it by sports. Areas which will come under scrutiny include, but are not limited to, the family, labor, industry, schools, churches, race relations and democracy as they relate to sport in American culture. Offered periodically.

WSSD603 - Moral and Ethical Issues in Sports

Course Information

Course Title
Moral and Ethical Issues in Sports

Subject code	Course Number	Academic Level
WSSD	603	Graduate

Course Description
An inquiry into ethics and morality as these apply to sport management. Competition, violence, rules, drugs and athletic scholarships are some of the concepts examined. Various ethical approaches are considered. Offered periodically.

WSSD604 - Facilities and Event Management

Course Information

Course Title
Facilities and Event Management

Subject code	Course Number	Academic Level
WSSD	604	Graduate

Course Description
Principles of financing, operating and managing public-assembly facilities. Emphasis on event management in arenas. Lectures, projects, papers and practical experience emphasized. Offered periodically.

WSSD605 - Sport and the Law

Course Information

Course Title
Sport and the Law

Subject code	Course Number	Academic Level
WSSD	605	Graduate

Course Description
The purpose of this course is to provide students with an understanding of the current legal principles which affect the supervision, management, and business operations of sport. Specific areas of law covered will include tort law, constitutional law, employment and labor law, Title VII and Title IX, and contract law, among others. Students will be exposed to a variety of legal issues at the interscholastic, intercollegiate, and professional levels of sport while learning professional standards/practices of care to best reduce liability and act as a reasonably prudent sport manager.

WSSD610 - Women in Sport

Course Information

Course Title
Women in Sport

Subject code	Course Number	Academic Level
WSSD	610	Graduate

Course Description
Examines the history of female participation, womens relationships to changing female roles and ideals, and the attitudes of society toward competition for women. Includes an overview of womens sport organizations, federal laws and the motivations of female athletes. Offered periodically.

WSSD612 - Research Methods in Sport

Course Information

Course Title
Research Methods in Sport

Subject code	Course Number	Academic Level
WSSD	612	Graduate

Course Description
Overview of the nature of research in sport sciences. Topics include different types of research methods in sport, research design, skills in data collection and assessment, and application of research to the management of sport.

WSSD615 - Campus Recreation Program

Course Information

Course Title
Campus Recreation Program

Subject code	Course Number	Academic Level
WSSD	615	Graduate

Course Description
Overview includes budgets, personnel, facilities, legal concerns, gender issues, planning and evaluation, publicity and evaluation. Programming areas include intramurals, extramurals, informal sports, club sports and outdoor pursuits. Offered periodically.

WSSD616 - Internship for Athletic Management

Course Information

Course Title
Internship for Athletic Management

Subject code	Course Number	Academic Level
WSSD	616	Graduate

Course Description
Practical experience related to athletic management. Students will coordinate their course work with specific field experience. Program supervised by a member of the Department of Wellness and Sport Sciences. Students must contact the graduate coordinator of sport management one semester prior to enrolling to complete the Internship Application packet. Prereq: WSSD 601, 602, 603, 604 and 605

Simple Requirements

Course Prerequisites

Type
Prerequisite

WSSD 601 and WSSD 602 and WSSD 603 and WSSD 604 and WSSD 605

Complete ALL of the following Courses:

- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD603 - Moral and Ethical Issues in Sports
- WSSD604 - Facilities and Event Management
- WSSD605 - Sport and the Law

WSSD617 - Sport Conditioning

Course Information

Course Title
Sport Conditioning

Subject code	Course Number	Academic Level
WSSD	617	Graduate

Course Description
The physiological principles underlying the process of physical conditioning. The student will also learn how to apply these principles to individuals training for sport and physical fitness. Offered periodically.

WSSD618 - Athletic Injuries

Course Information

Course Title
Athletic Injuries

Subject code	Course Number	Academic Level
WSSD	618	Graduate

Course Description
The basic principles of sports medicine. Emphasis on injury prevention, management and rehabilitation. Current topics and methods in athletic training are also discussed. Offered periodically.

WSSD619 - Internship for Athletic Coaching

Course Information

Course Title
Internship for Athletic Coaching

Subject code	Course Number	Academic Level
WSSD	619	Graduate

Course Description
Practical experience related to athletic coaching. Students will coordinate their coursework with specific field experience. Program supervised by a member of the Department of Wellness and Sport Sciences. Students must contact the graduate coordinator of sport management one semester prior to enrolling to complete the Internship Application packet. Prereq: WSSD 601, 602, 603, 604 and 605.

Simple Requirements

Course Prerequisites

Type
Prerequisite

WSSD 601 and WSSD 602 and WSSD 603 and WSSD 604 and WSSD 605

Complete ALL of the following Courses:

- WSSD601 - Organization and Administration of Sport Programs
- WSSD602 - Sport in American Culture
- WSSD603 - Moral and Ethical Issues in Sports
- WSSD604 - Facilities and Event Management
- WSSD605 - Sport and the Law

WSSD621 - Nutrition for Exercise and Sport

Course Information

Course Title
Nutrition for Exercise and Sport

Subject code	Course Number	Academic Level
WSSD	621	Graduate

Course Description
Complete study of nutrition and its effects upon exercise and sport. Offered periodically.

WSSD622 - Sport Finance

Course Information

Course Title
Sport Finance

Subject code	Course Number	Academic Level
WSSD	622	Graduate

Course Description
Provides students with an improved understanding of sports-related finance issues and expands their skills in financial analysis and planning. Develops an appreciation for the financial decision-making process in sports business. Using a number of case studies and selected readings, the course will include the following topics: organization, accountability, financial planning, purchasing, revenue streams, sponsorship, licensing, franchises, box office operations, retail operations, customer retention, fundraising, grant writing, booster clubs, working with volunteers, financial risk management and payroll procedures.

WSSD686 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
WSSD	686	Graduate

Course Description
In-depth investigation and development of an area of current sport management interest. Offered periodically.

WSSD687 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
WSSD	687	Graduate

Course Description
In-depth investigation and development of an area of current sport management interest. Offered periodically.

WSSD688 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
WSSD	688	Graduate

Course Description
In-depth investigation and development of an area of current sport management interest. Offered periodically.

WSSD689 - Sp Topics:

Course Information

Course Title
Sp Topics:

Subject code	Course Number	Academic Level
WSSD	689	Graduate

Course Description
In-depth investigation and development of an area of current sport management interest. Offered periodically.

WSSD691 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
WSSD	691	Graduate

Course Description
Intensive study of a particular field or problem in sport management not normally covered in a regular course. Offered as needed.

WSSD698 - Research Proposal

Course Information

Course Title
Research Proposal

Subject code	Course Number	Academic Level
WSSD	698	Graduate

Course Description
To fulfill the requirements of the course, students must satisfactorily complete an introduction, a review of literature and provide a written research design. APA format will be used for the research proposal. Offered as needed.

WSSD699 - Thesis

Course Information

Course Title
Thesis

Subject code	Course Number	Academic Level
WSSD	699	Graduate

Course Description
Each student writes and orally defends a study of some significance in the field of sport management demonstrated by (1) an individual bound thesis or (2) by condensing his/her findings and submitting them to a professional journal. APA format will be used for the thesis. Offered periodically.

Simple Requirements

Course Prerequisites

Type
Prerequisite

WSSD 698

Complete ALL of the following Courses:

- WSSD698 - Research Proposal

Women, Gender and Sexuality Studies Department

The Program in Women's Gender and Sexuality Studies at Millersville University fosters critical thinking and problem-solving skills by considering how gender, race, sexuality and other identities relate to social, political, ethical, legal and cultural issues.

Many students identify courses in the Women's, Gender, and Sexuality Studies Program (WGSS) as among the most exciting and enlightening they take at Millersville. The students who enroll in our classes each semester find their background in WGSS to be a valuable resource for their professional development and lifelong intellectual growth.

FACULTY LIST
Dr. Jennifer Miller, coordinator

Programs

Women's, Gender and Sexuality Studies Minor

Overview

The program in Women's, Gender, and Sexuality Studies at Millersville University incorporates new and current scholarship on women, gender, and sexuality into the university curriculum. In classes, in labs, and in archives, students explore how social, economic, legal, historical, and psychological forces shape individuals, communities, and societies.

As more career opportunities require credentials in diversity and inclusion, Women's, Gender, and Sexuality Studies provides a thoughtful choice as a minor for careers in medicine, business, teaching, education, sports management, social work, government, law, and other endeavors where equity, social sensitivity, and cultural knowledge are expected.

WGSS interdisciplinary scholars reach across divisions of historical, political, economic, legal, representational, technological, and scientific analysis; they offer students innovative methods and theories to expand the breadth of their studies as well as their everyday lives.

Students who enroll in WGSS classes find their background in *Women's, Gender, and Sexuality Studies* to be not only a valuable resource for their professional development, but also for their lifelong intellectual and personal growth. Many students identify courses in the *Women's, Gender, and Sexuality Studies* program as among the most exciting and enlightening they take at Millersville.

Through their understanding of complex, intersectional identities, WGSS minors have found themselves well prepared to pursue advanced degrees and training in the professions, to gain employment in community service agencies, to engage in artistic expression in the creative arts, and to assume leadership roles and positions in both business and law/government. Their increased sensitivity to diversity and inclusion makes them sought-after employees.

Curriculum

Simple Requirements

Regulations Governing Minor Course Work

1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

Minor in Women's, Gender and Sexuality Studies

Type
Completion Requirement

Requirements

Fulfill ALL of the following requirements:

Required Courses (6 credits)

Complete ALL of the following Courses:

- GNDW220 - Introduction to Women's & Gender Studies
- GNDW488 - Senior Seminar

AND

Feminist Theory

Complete at least 1 of the following courses:

- GNDW330 - Feminist Theory
  OR GNDW330H - Feminist Theory
- SOCI329 - Topics in Sociology
  OR SOCI329H - Hnrs: Topics in Sociology

AND

Elective Courses

Complete at least 3 of the following courses:

- ANTH344 - Gender, Race, and Class
- ART305 - Women in Art
- ART404 - Contemporary Movements in Art
- COMM227 - Movements & Digital Activism
- COMM330 - Media and Women's Culture

- COMM333 - Gender and Communication
- EDFN312 - Women in Education
  OR EDFN312H - Women in Education
- EDFN376 - Whose School Is It?
  OR EDFN376H - Hnrs:Whose School Is It?
- EDUC433 - Gender and Race Issues
  OR EDUC433H - Hnrs:Gender and Race Issues
- ENGL242 - Reading Our World:
  OR ENGL242H - Hnrs: Reading Our World:
- ENGL337 - Women Writers in Middle Ages
- ENGL416 - The Woman Writer
- ENGL435 - Journlsm Thru Women's Prspctvs
- ENGL429 - Smnr Sel Am Auth:
  OR ENGL429H - Hnrs:Smnr Sel Am Auth:
- HIST250 - Women in American History
- HIST320 - Renaissance and Reformation
- GOVT212 - Women & American Politics
- NURS316 - Women, Health, and Health Care
  OR NURS316H - H: Women, Health, and Health Care
- PHIL391 - Gender, Utopia, Human Nature
- SOSC212 - The Black Woman
  OR SOSC212H - Hon: The Black Woman
- SOCI337 - Gender and the Law
  OR SOCI337H - Hon: Gender and the Law
- SOWK312 - SOWK & Wmn: Strgth, Need & Opp
- SOWK313 - Family Violence
  OR SOWK313H - H: Family Violence
- GNDW491 - Topics Wmn, Gendr, Sex Stdy

Students will pick courses to satisfy the electives with the Women's & Gender Studies Steering Committee and their Women's & Gender Studies adviser. Must include at least one 300-400 level course.

Courses

GNDW220 - Introduction to Women's & Gender Studies

Course Information

Course Title
Introduction to Women's & Gender Studies

Subject code	Course Number	Academic Level
GNDW	220	Undergraduate

Course Description
Interdisciplinary and multicultural study of womens roles and relationships and the ways they differ among women by race, ethnicity, class and sexual orientation. Overview of theoretical perspectives on gender and examination of contemporary issues facing women.

Gateway Stage Labels
Information Literacies (IL)

GNDW300 - Internship in Wmn, Gndr, SexIt

Course Information

Course Title
Internship in Wmn, Gndr, SexIt

Subject code	Course Number	Academic Level
GNDW	300	Undergraduate

Course Description
Co-Op Ed Experience in Wstu

GNDW330 - Feminist Theory

Course Information

Course Title
Feminist Theory

Subject code	Course Number	Academic Level
GNDW	330	Undergraduate

Course Description
This course explores diverse strains of feminist theory, including liberal, radical, black, global, socialist/Marxist and lesbian feminisms. This is a required course for all womens studies minors. Prereq: COMM 110, ENGL 110, GNDW 220, junior status or instructor permission.

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:
- ENGL 110 and COMM 100

GNDW 220

Complete ALL of the following Courses:
- GNDW220 - Introduction to Women's & Gender Studies

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

GNDW330H - Feminist Theory

Course Information

Course Title
Feminist Theory

Subject code	Course Number	Academic Level
GNDW	330H	Undergraduate

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H or COMM100 or COMM100H

Complete ANY of the following Course Sets:

- ENGL 110 and COMM 100

GNDW 220

Complete ALL of the following Courses:

- GNDW220 - Introduction to Women's & Gender Studies

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits
Or must have permission of instructor.

GNDW379 - Experimental

Course Information

Course Title
Experimental

Subject code	Course Number	Academic Level
GNDW	379	Undergraduate

Course Description
Experimental

GNDW400 - Internship in Wmn, Gndr, Sexlt

Course Information

Course Title
Internship in Wmn, Gndr, Sexlt

Subject code	Course Number	Academic Level
GNDW	400	Undergraduate

Course Description
Co-Op Ed Experience in Wstu

GNDW488 - Senior Seminar

Course Information

Course Title
Senior Seminar

Subject code	Course Number	Academic Level
GNDW	488	Undergraduate

Course Description
Interdisciplinary and mutlicultural examination of how feminist perspectives and a focus on women can restructure social institutions, ways of thinking and academic disciplines. Prereq: ENGL 110, junior or senior status, and GNDW 220 or another approved womens studies course or permission of instructor.

Capstone Stage Label
Yes

Simple Requirements

Course Prerequisites

Type
Prerequisite

ENGL 110 or ENGL 110H

Complete ANY of the following Courses:
- ENGL110 - Introduction to College Writing
- ENGL110H - Hnrs:Introduction to College Writing

Credit Hours Completion (Junior or Senior Class Standing)

Earn at least 60 credits

GNDW 220

Complete ALL of the following Courses:
- GNDW220 - Introduction to Women's & Gender Studies

Or an approved Women's studies course or must have permission of instructor.

GNDW489 - Honors Course

Course Information

Course Title
Honors Course

Subject code	Course Number	Academic Level
GNDW	489	Undergraduate

Course Description
Honors Course

GNDW491 - Topics Wmn, Gendr, Sex Stdy

Course Information

Course Title
Topics Wmn, Gendr, Sex Stdy

Subject code	Course Number	Academic Level
GNDW	491	Undergraduate

Course Description
Investigates topics related to womens and gender studies in history, literature, music, art, anthropology, sociology, communications, business, science or other field.

GNDW498 - Ind Stdy:

Course Information

Course Title
Ind Stdy:

Subject code	Course Number	Academic Level
GNDW	498	Undergraduate

Course Description
Allows students to pursue an academic area of interest not available through an established course, with faculty supervision and guidance. For further information, see the Special Academic Opportunities section of the catalog, and consult with the director of womens studies.

GNDW500 - Internship in Wmn, Gndr, Sexlt

Course Information

Course Title
Internship in Wmn, Gndr, Sexlt

Subject code	Course Number	Academic Level
GNDW	500	Graduate

Course Description
Co-Op Ed Experience in Wstu