Introduction

The Graduate School at Shippensburg University is a place that empowers success: for its students and for its community. With unwavering dedication, the Graduate School centers every resource on empowering its diverse students to make their mark. When facing today's challenges with tenacity, we build skills and solutions to ensure a better tomorrow.

We do this not only because we care about a student's individual future. We also know that every Shippensburg graduate drives transformation for the whole region.

The tireless efforts of the Graduate School's faculty and staff, the committed collaborations between the University and community partners, and the selflessness of our outward-focused mission all create a dominating force for change. When the Graduate School succeeds, all the people of our community benefit.

We don't let anything get in the way of this humbling responsibility. We embody the grit and determination that characterizes the people of southcentral Pennsylvania, pushing past every obstacle so that we rise as leaders, guiding the region's economic growth and journeying toward an ever-brighter future.

Through the energetic curiosity of our students, the commanding leadership of our alumni, and the dedicated care of our faculty and staff, every resource we have focuses on our whole community flourishing.

We are the Graduate School at Shippensburg University. Welcome.

Mission of the University

Student learning and personal development through highly effective and innovative teaching, complemented by a wide variety of out-of-class experiences, continue to serve as the hallmarks of a Shippensburg University education.

Mission of the Graduate School at Shippensburg

Shippensburg University of Pennsylvania offers doctoral, master's, post-baccalaureate and post-master's programs that encourage intellectual excellence, research and scholarship while emphasizing the development of applicable professional skills. The mission of the Graduate School at Shippensburg is to create an atmosphere of intellectual curiosity, academic freedom, diversity, independent scholarship, and creative investigation for its students by offering programs that are:

- Current and flexible;
- Responsive to regional needs;
- Responsive to individual needs and career goals;
- High quality and affordable;
- Taught by qualified and engaged faculty;
- Applied and professional;
- Appropriately interdisciplinary;
- Designed to enhance critical analytic skills; and
- Focused on new concepts and best practices.
These programs are designed to provide advanced study that allows students to enter or advance within a profession, but they may also serve as preparation for pursuit of a doctorate or other advanced degree.

Goals and Objectives

Each program in the Graduate School at Shippensburg embraces the values of quality, integrity, collaboration, efficiency, innovation, creativity, inclusiveness, and a belief in the actualization of individual potential. The programs build on the knowledge and skills gained in baccalaureate programs to prepare students for entry into professional fields, to ensure competence to perform at advanced professional levels, and to encourage lifelong learning in an increasingly diverse society. Academic excellence and the development of professional skills are achieved through a strong commitment to the following objectives:

- Varied and flexible course times and delivery;
- Close faculty/student relationships;
- An interactive learning environment;
- Opportunities for independent and collaborative scholarship;
- Appropriately sized classes;
- Applied practica and internships;
- Degree requirements that ensure academic integrity;
- Opportunities for integration of knowledge and the applications of technology;
- Fostering high ethical standards;
- Development of problem-solving skills.

About the University

Founded in 1871, Shippensburg University offers a unique and quality education for an exceptional value that prepares students for success. Learning by doing is what sets the Shippensburg University experience apart. From day one, students have access to hands-on opportunities through service learning, internships and job shadowing, faculty-guided research and study abroad programs.

Shippensburg University is accredited by the Middle States Commission on Higher Education (MSCHE) and offers 250 industry-aligned undergraduate, graduate, certificate, and doctoral programs, preparing the workforce of the future, today.

The landscaped, 210-acre campus is ideally located in south-central Pennsylvania, fully accessible to major cultural and recreational destinations throughout the Blue Ridge Mountains. An advanced, networked infrastructure supports technology-based teaching, learning, and research.

Ship is home to the College of Arts & Sciences, the College of Education and Human Services, the John L. Grove College of Business, and the Graduate School at Shippensburg. The School of Engineering, housed in a repurposed steam plant, opened in 2021 to serve the region as an economic driver in the areas of computer science, electrical and software engineering, and civil and mechanical Engineering.

Ship's role as a regional engine of economic and research development includes programs of study and real-world resources such as: The Grace B. Luhr's University Elementary School, the state's only on-campus laboratory school; the Institute for Social Inclusion; the Brad E. Hollinger Stock Trading Room; Center for Educational Leadership; Center for Land Use and Sustainability; the Luhr's Performing Arts Center, and the Fashion Archives and Museum.

Shippensburg University is a member of the Pennsylvania State System of Higher Education.
Accreditation

- Middle States Commission on Higher Education (MSCHE)
- Accreditation Board for Engineering and Technology (ABET)
  - The School of Engineering's computer engineering, software engineering and computer science programs are fully accredited.
- Academy of Criminal Justice Sciences (ACJS)
  - Ship's Criminal Justice Department offers one of only eight Bachelor of Science programs in the United States that is fully accredited.
- Accrediting Council on Education in Journalism and Mass Communications (ACEJMC)
  - Ship's Communication/Journalism Department offers one of only three programs in Pennsylvania that is fully accredited.
- American Chemical Society (ACS)
  - Ship's Chemistry and Biochemistry Department's curriculum is fully accredited.
- Association to Advance Collegiate Schools of Business International (AACSB)
  - In 1981, the John L. Grove College of Business became the first school in Pennsylvania's State System of Higher Education to become internationally accredited by the most prestigious business accrediting agency in the world.
- Council on Social Work Education (CSWE)
  - The Bachelor of Social Work and Master of Social Work programs offered by the Ship's Social Work and Gerontology Department are fully accredited.
- Council for the Accreditation of Counseling and Related Educational Programs (CACREP)
  - Programs from the Counseling and College Student Personnel Department are nationally accredited.
- National Council for the Accreditation of Teachers (NCATE)
  - Ship offers several programs with accreditation from the National Council for Accreditation of Teacher Education including Teacher Education; Educational Leadership and Special Education; and School Counseling.

Awards and Accolades

- US News & World Report (Regional Universities North 2021)
  - Top Public Schools
  - Best College and Best Online MBA Programs for Veterans
  - Best Value Schools
  - Best Online MBA Programs
- Top Guard Friendly School by The Pennsylvania National Guard Associations (PNGAS) 2021
- Voter Friendly School by Fair Elections Center's Campus Vote Project and Student Affairs Administrators in Higher Education (NASPA) 2021
  - One of only 231 schools nationwide
- Best Online MBA Programs by Fortune magazine
  - #26 in the nation based upon cost per credit.
- Study.com Top-Ranked School (Grove College National Rankings, 2021)
  - #2 Supply Chain Management
  - #5 Marketing
  - #7 Journalism
  - #12 Business
  - #14 Software Engineering
  - #23 Finance
Office of the Graduate Director

The Office of the Graduate Director, located in Old Main 308, provides a number of services to graduate students including coordination of graduate assistantships. Office hours are 8:00 a.m. to 4:30 p.m. Monday through Friday during the academic year. Summer hours are 8:00 a.m. to 4:00 p.m. Monday through Friday. To contact the office, call (717) 477-1148.

Office of Graduate Admissions

The Office of Graduate Admissions, located in Old Main 105, provides all services related to recruitment and admission application processing. Office hours are 8:00 a.m. to 4:30 p.m., Monday through Friday during the academic year. Summer hours are 8:00 a.m. to 4:00 p.m. Monday through Friday. To contact the office, call (717) 477-1213 or sending e-mail to gradadmiss@ship.edu.

Office of the Registrar

The Office of the Registrar, located in Old Main 110/111, provides the following services: scheduling and registration, verification of graduate enrollment, application for graduation, requests for withdrawal, and application for change of program, name, and address. Office hours are 8:00 a.m. to 4:30 p.m. Monday through Friday during the academic year. Summer hours are 8:00 a.m. to 4:00 p.m. Monday through Friday. To contact the office, call (717) 477-1381.

The Campus

Shippensburg University is located in the Cumberland Valley of south-central Pennsylvania, overlooking the Blue Ridge Mountains. The campus itself is situated on 210 acres of rolling land and is surrounded by a vast array of cultural and recreational sites.

Travel Time

The interstate highway system puts Shippensburg within reasonable travel time of numerous East Coast cities:

- Harrisburg: 45 minutes
- Gettysburg: 30 minutes
- Baltimore: 2 hours
- Washington, D.C.: 2 hours
- Philadelphia: 2.5 hours
- Pittsburgh: 2.5 hours
Directions

If your point of departure is ...

East of Shippensburg : Use Pennsylvania Turnpike Exit 226 (Carlisle) to I-81 south. Take I-81 to Exit 29.

West of Shippensburg : Use Pennsylvania Turnpike Exit 201 (Blue Mountain) to Route 696 south.

North of Shippensburg : Take I-81 south to Exit 29.

South of Shippensburg : Take I-81 north to Exit 24.

Statements of Compliance

The Office of Human Resources in Old Main 106 houses the University's Compliance officer responsible all laws and regulations pertaining to university operations. Direct all inquiries to (717) 477-1323.

Equal Opportunity

Shippensburg University is committed to creating an environment free of discrimination for all of its employees and students. The Office of Social Equity at Shippensburg University assists the university in ensuring equal opportunity and access to educational, employment and contract opportunities for all persons including students, faculty, staff and administrators. The university will make every effort to provide these opportunities to all persons regardless of race, color, religion, sex, national origin, disability, age, veteran status, sexual orientation or gender identity. This applies to all members of the university community, all applicants for admission or employment and all participants in university-sponsored activities. The non-discrimination policy sets clear expectations for an environment free of discrimination, defines discrimination and provides procedures for handling charges of discrimination. The Office of Social Equity coordinates the university's response with laws and regulations relating to equal opportunity and reasonable accommodations for persons with disabilities. Any questions or complaints should be directed to the Executive Director of Social Equity at (717) 477-1161.

Sexual Harassment and Title IX

It is the policy of Shippensburg University to prohibit discrimination on the basis of sex in any of its educational programs or activities. This policy is in accordance with Title IX of the Education Amendments of 1972.

Prohibited sex discrimination covers sexual harassment including sexual violence. Sexual harassment is conduct that is sexual in nature and is sufficiently severe, pervasive, and objectively offensive that it unreasonably interferes with, limits, or deprives an individual from participating in or benefiting from any educational, employment, social, or residential program in offered connection with the University. Conduct prohibited by Title IX includes: dating violence, domestic violence, sexual assault, sexual exploitation, hostile environment sexual harassment, quid pro quo sexual harassment, and stalking as defined by the University's Sexual Misconduct Policy.

Inquiries concerning the application of Title IX may be referred to:

Dr. John Burnett, jaburnett@ship.edu
Office of Human Resources
Old Main 106A
(717) 477-1323
Title9@ship.edu

Department of Education
Web: http://www2.ed.gov/about/offices/list/ocr/index.html
E-mail: ocr@ed.gov
400 Maryland Ave SW
Washington, DC 20202-1100
Phone: (202) 245-6700
Toll-free: (800) 421-3481
TTY: (800) 877-8339

Office of Accessibility Resources

Shippensburg University is committed to serving all students, including those with documented disabilities. The Office of Accessibility Resources (OAR) determines, coordinates, and helps facilitate the provision of reasonable and appropriate accommodations for eligible students who present current and comprehensive documentation. In compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act of 2008, OAR coordinates services as outlined by Pennsylvania's State System of Higher Education and by Shippensburg University's equity plans. Additionally, the office works with the Human Resources Office to coordinate accommodations for campus faculty and staff with documented disabilities.

Located at 252 Mowrey Hall, the Office of Accessibility Resources is part of the Elnetta G. Jones University Center for Student Success and Exploratory Studies, with an office space that is easily accessible. For further information, please visit the website at www.ship.edu/oar. Calls may be directed to OAR at (717) 477-1364, or general inquiries via email to oar@ship.edu

Policy for Religious Observances for Students

Shippensburg University respects the principle of the separation of church and state, while promoting and encouraging a climate of dignity where individuals are not discriminated against or treated differently because of their religion or beliefs.

To foster and advance the precepts of an inclusive environment, students desiring to participate in the religious observances of their particular faith, creed, or belief will be granted an excused absence from scheduled classes. Faculty will make appropriate accommodations for the excused absence(s), and students will be accountable for the material covered in class.

Access to Educational Records

In accordance with the Family Educational Rights and Privacy Act of 1974 (commonly known as the Buckley Amendment), Shippensburg University provides its students with privacy safeguards of their educational records. The university issues reports of progress including grades, written evaluations, and letters of warning directly to the student. A student may have access to all information pertaining to his or her educational records and academic status.
Under the provisions of the Buckley Amendment, the university may release directory information about current students without violating privacy rights. Directory information includes name, address, telephone number, e-mail address, enrollment status, major, degree, and honors. Individual students may request this directory information not be released by notifying the Registrar's Office.

**Drug-Free Campus**

Shippensburg University complies with the Drug-Free Schools and Communities Act Amendment of 1989 and has adopted a program to prevent the unlawful possession, use, or distribution of illicit drugs and alcohol by both its students and employees.

**Campus Safety**

Shippensburg University has developed policies and implemented procedures to increase safety awareness and provide precautionary measures for all current students, prospective students and employees. Information on crime statistics is also provided to all campus members. This information is prepared in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act, Title IX, and the Violence Against Women Act. The Pennsylvania College and University Security Requirements (Chapter 33), the Crime Awareness and Campus Security Act of 1990, and the Accuracy in Campus Crime Reporting Act of 1997 are also resourced. The Shippensburg University Campus Safety & Security/Fire Statistics Report may be accessed by visiting: http://www.ship.edu/globalassets/police/safety-and-security-report.pdf.

**Right-To-Know**

Shippensburg University will compile graduation and completion rates for all undergraduate students as well as for undergraduate students receiving athletically-related student aid. These rates will be reported to the U.S. Secretary of Education and will be disclosed to prospective students as required by the Student Right-To-Know Act.

Individuals may request public records from Shippensburg University under the Right-to-Know Law, as amended, 65 P.S., sections 66.1 - 66.9. The guidelines for submitting Right-to-Know requests can be found at http://www.ship.edu/right_to_know/.

All requests to Shippensburg University of Pennsylvania under the Right-to-Know Law must be submitted in writing to:

John Burnett, Ph.D.
Title IX Coordinator/Compliance Officer/University Open Records Officer
Shippensburg University of Pennsylvania
1871 Old Main Drive, Room 106A
Shippensburg, PA 17257-2299
Fax: 717-477-4037 | Email: rtkoffice@ship.edu

Requests may be delivered in person or sent by regular mail to the address listed above. Requests also may be made by email or by fax.

**Consumerism**

Shippensburg University complies with consumer information requirements set forth in Section 493A of Title IV of the Higher Education Act of 1965 and its amendments.
Veterans Benefits

Shippensburg University of Pennsylvania will permit any covered individual to attend or participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under chapter 31 or 33 (a "certificate of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website e-Benefits, or a VAF 28-1905 form for chapter 31 authorization purposes) and ending on the earlier of the following dates:

1. The date on which payment from VA is made to the institution.

2. 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

Shippensburg University of Pennsylvania will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrows additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

Shippensburg University of Pennsylvania does require a covered individual complete, sign, and return the "Application for Veterans Enrollment Certification Form" to a School Certifying Official (SCO) each semester to authorize the SCO to submit the covered individual's certification.

NOTE: A Covered Individual is any individual who is entitled to educational assistance under chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 GI Bill® benefits.

"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 www.benefits.va.gov/gibill.

Nonimmigrant International Students

Shippensburg University is approved by the Student and Exchange Visitor Program through the Department of Homeland Security to host international students on nonimmigrant visas for the purpose of study.

Educational Diversity

As part of a public system of higher education, Shippensburg University is responsible for educating students to face the challenges of our ever-changing global society. Shippensburg University aims to create a campus culture that offers opportunities for increasing knowledge, awareness, and understanding of diversity and inclusiveness and promotes a climate that builds upon values that welcome and nurture all members of the university community. Creating an inclusive campus environment helps to prepare students to be productive public citizens in a society comprised of people from different backgrounds.

Shippensburg University seeks to attain these goals by offering academic and co-curricular activities that address the differences that have historically divided people and have led to unjust and discriminatory practices based on race, religion, sex, national origin, ancestry, age, sexual orientation, gender identity, gender expression, marital status, disability, or veteran status. The university also remains committed to the recruitment and retention of a broad, inclusive student body, faculty, staff, and administration who represent a diverse range of interests, talent, and cultures. By working to accomplish these goals, Shippensburg University will ensure students receive an education that prepares them for the challenges of a global society.

Catalog Provisions
This catalog is intended to be a description of the policies, academic programs, degree requirements, and course offerings in effect for the 2022-2024 academic years. It should not be construed as an irrevocable contract between the student and the university. Shippensburg University reserves the right to change any of the policies, procedures, or fees described in this catalog and to apply these changes to any or all of its students as it sees fit. The university may also choose to add or delete course offerings or degree programs at any time.

**Admission Policies and Procedures**

**Admission Policies**

The following policies govern admission to all graduate degree programs.

In order to be considered for graduate study at Shippensburg University, you must provide official transcript(s) from every institution that has awarded you college credits. For admittance to a master's degree program, you must show you have been awarded a bachelor's degree from a college or university that is accredited by the appropriate regional accrediting agency. For admittance to post-master or doctoral programs you must show you have been awarded a bachelor's and master's degree from a college or university that is accredited by the appropriate regional accrediting agency. Academic departments, at their discretion, may require an interview, resume, writing sample, goal statement, letters of recommendation, standardized testing or other requirements as deemed necessary.

Shippensburg University takes a holistic approach to graduate admissions. Individual graduate degree programs may have their own specific requirements for admission. Information on these requirements may be found under the description of the degree program on the website at http://www.ship.edu/academics/colleges/graduate/application_process/. All applicants to the Graduate School at Shippensburg will either be "Admitted" or "Denied." If, pursuant to a review of the admitted applicant's undergraduate credentials, an academic department notes academic prerequisites requiring supplemental coursework, the required foundational background courses will be noted by the Registrar's Office. Pursuant to department policy, foundational courses may, or may not, be taken simultaneously with courses required to obtain the graduate degree. Graduate degrees will be awarded only upon completion of the courses required to satisfy the foundational requirements. The required foundational courses are in addition to the graduate courses required to complete the degree.

Your application for admission will be reviewed by the academic department to which you are applying. The department will then make a recommendation to the Executive Director of Admissions. You will be officially notified of a decision by the Office of Admissions.

An offer of admission to graduate study requires you to matriculate to Shippensburg University for the semester for which you have been admitted. You must confirm your offer of admission immediately upon receiving your letter of admission. Failure to do so will prohibit your ability to schedule and begin classes. Confirmation can be completed online through the admissions application portal. Instructions are outlined in the letter of admission. If you do not matriculate by enrolling in graduate coursework at Shippensburg within that semester, you may defer your application for a maximum of one year. If the application is more than one year old, you must submit a new application and pay an additional application fee.

Students applying for a second graduate degree (master's, post-master's or doctoral) or additional certification at Shippensburg University must submit an updated graduate application. No additional application fee is required.

**Policy on Prior Disciplinary Suspension/Dismissal in Admissions**

As required by PASSHE, Shippensburg University of Pennsylvania requests that all applicants for admission or individuals intending to take classes must disclose information regarding any disciplinary suspension or dismissal
imposed by other higher education institutions. Shippensburg University is committed to promoting a safe and secure work and learning environment for all members of the University community.

If an applicant has met all admission criteria for general university admission and for the specific program to which they applied or non-degree admission, and they have answered in the affirmative that they have been the subject of a disciplinary suspension/dismissal, the applicant will receive a document that details the policy and the procedures of the University. The applicant will also be provided with a copy of a Dean of Students Certification Form in order to access additional information that the applicant must complete and send to their previous institution(s) in which they have received an outcome of disciplinary suspension or dismissal.

For the purposes of this policy, a disciplinary suspension/dismissal has the following meaning: "Any instance of judicial or administrative action taken by a previous institution for behavior on University property or off University property that is not consistent with that institution's Student Code of Conduct that has resulted in a suspension or dismissal."

The university will not necessarily deny admission to the university in general or a particular academic program or to housing because of a disciplinary issue. This information will only be considered after it has been determined that the student has met all admission criteria for the university and the specific program to which they applied. Each case will be separately evaluated based upon the rational relationship of interests and needs of the university to the nature, severity, recency of the disciplinary issue; circumstances surrounding the issues; records of other issues; the responsibility and repentance of the applicant; and any other relevant factors. These factors will be carefully considered and weighed. The disclosure of information and access to related additional information will be made to the Special Admissions Review Committee and Divisions of Enrollment Management, Student Success, and Student Affairs as appropriate.

Policy on Criminal Convictions in Admissions Degree Seeking and Non-Degree

As required by PASSHE, Shippensburg University of Pennsylvania requests all applicants for admissions or individuals intending to take classes must disclose information regarding criminal convictions. Shippensburg University is committed to promoting a safe and secure work and learning environment for all members of the University community.

If an applicant has met all criteria for general university admission and for the specific program to which they applied or non-degree admission, and s/he answered in the affirmative that s/he has a criminal conviction, the applicant will receive this document that details the policy and the procedures of the University. The applicant will also be provided with a copy of a Consent and Authorization to Access Additional Information form that the applicant must complete and return. The members of the Special Admissions Review Committee will review all documents and recommend an admissions decision to the Office of Admissions as they deem appropriate.

For the purposes of this policy, a "criminal conviction" has the following meaning:

"Any instance in any state or national jurisdiction where you have plead guilty or been found guilty by a judge or jury to charges that you committed a felony offense. This includes any plea of 'no contest' or 'nolo contendere', and any conviction that may be under current appeal." It does not include an arrest that does not result in a charge, or charges being dropped, or being found not guilty, or a conviction overturned on appeal, or convictions that have been expunged, or convictions that have been executively pardoned.

The university will not necessarily deny admission to the university in general or a particular academic program or to housing because of the presence of a conviction. This information will only be considered after it has been determined that the student has met all admission criteria for the university and the specific program to which they applied. Each case will be separately evaluated based upon the rational relationship of interests and needs of the university to the nature, severity, recency of the crime; circumstances surrounding the crime; records of other convictions; the responsibility and repentance of the applicant; and any other relevant factors. Generally, the university does not accept anyone who has not completed their criminal sentence, absent any extraordinary circumstances. All of these factors
Admission Procedures

Applicants for admission to Shippensburg University should apply online at http://www.ship.edu/graduate/admissions/graduate_admissions/. They may also e-mail gradadmiss@ship.edu or call (717) 477-1213.

Applications are accepted for the fall, spring, and summer terms. Complete and submit the application together with a non-refundable application fee of $45 (subject to change) to the Office of Admissions. Checks should be made payable to Shippensburg University. You should make arrangements with other colleges and universities you have attended to have official transcripts sent to the Office of Admissions. You must submit transcripts from any institution that has awarded you undergraduate or graduate credit. It is not necessary to submit a transcript of work taken at Shippensburg University.

Candidates are encouraged to submit applications as soon as possible to the degree program of choice. Please refer to the individual departmental descriptions or http://www.ship.edu/academics/programs/graduate/graduate_programs/ for more specifics.

Examinations

Certain departments require you to present standardized test scores either as a regular admission requirement or for those students whose undergraduate quality point average is less than 2.75 (2.8 for the Master of Social Work) on a 4.0 scale. Information on these requirements may be found under the description of the degree program. Please be aware some graduate programs have minimum GPA requirements higher than a 2.75 on a 4.0 scale (a 3.0 for the M.Ed. in Dual School Counseling and M.Ed. in Literacy) and may not accept testing as an alternative.

Miller Analogies Test

Some departments require applicants to take the Miller Analogies Test (MAT). Information regarding the test is available at pearsonassessments.com/graduate-admissions/mat/about.html.

Graduate Record Examination

Some departments require applicants to take the Graduate Record Examination (GRE). Applications and information on the GRE General Test are available at www.ets.org/gre.

Other Admission Categories

Non-Degree Students

If you are a college graduate not planning to enroll in a degree program, you may apply and register as a non-degree graduate student. You must complete the online graduate non-degree application in order to register. The application is available at https://www.ship.edu/pcoe/non_degree/.

As a non-degree student, you may enroll for any graduate course for which you have the necessary prerequisite coursework, with the approval of the academic department offering the course. Certain courses may not be available to non-degree graduate students. Academic departments may restrict enrollment in their courses or give scheduling preference to majors.
If you are planning to pursue a degree program you should not enroll as a non-degree student. While non-degree students may subsequently apply for a degree program, there is no assurance they will be admitted. Also, academic departments at their discretion may approve a maximum of nine credit hours of coursework (with grades of B or higher) taken in non-degree status to count toward a graduate degree. Non-degree students are required to meet the minimum academic standards outlined under Academic Policies and Procedures. **Applicants who have been denied admission to a degree program may take classes as a non-degree student with the permission of the academic department offering the course(s) on a course-by-course basis.**

**International Students**

Applicants from outside the United States who do not hold immigrant visas or permanent resident/resident alien status must complete an international application for admission. You may complete an application online at www.ship.edu/admissions/international.

Applicants for admission must have their complete academic records (transcripts, mark sheets, degree certificates, diplomas, etc.) evaluated by a NACES approved professional credential evaluation service. The Graduate School prefers that you use one of the following professional evaluation services: Educational Credential Evaluators (ECE) or World Education Services (WES).

Educational Credential Evaluators, Inc.
P.O. Box 514070
Milwaukee, WI 53204-3470
USA

ECE telephone number: (414) 289-3400  
ECE fax number: (414) 289-3411  
ECE e-mail: eval@ece.org  
ECE website: www.ece.org  

OR

World Education Services
P.O. Box 745, Old Chelsea Station
New York, New York 10011-0745
USA

WES telephone number: (800) 937-3895  
WES fax number: (212) 966-6395  
WES e-mail: info@wes.org  
WES website: www.wes.org

ECE or WES will then forward their official evaluation of your credentials to the Office of Admissions. Once the evaluation of credentials has been received, the application for admission will be processed.

International applicants who have English as a second language must present an official TOEFL score report sent directly to the Shippensburg University Office of Admissions from the Educational Testing Service (ETS). Scores from the paper-based, computer-based, or Internet-based TOEFL are acceptable. An official Intensive English Language Testing System (IELTS) score report sent directly to the Shippensburg University office of Admissions from British Council et al. or via Duolingo English language exam is also permissible.

All materials including admission application and fee, official TOEFL or IELTS or Duolingo score report, credential evaluation results, and financial information should be submitted to the Office of Admissions.

Immigration regulations require an affidavit of support and a current bank statement if the support is not furnished by an official governmental or international agency. In order to receive the I-20 document (required to apply for your F-1 student visa), you must be admitted to the degree program AND have your financial information (affidavit of support,
current bank statement, and income verification) approved by our Director of International Programs. An I-20 will not be issued prior to receiving and reviewing the required documents listed above.

Upon arrival on campus, students holding F-1 visas must report to the Director of International Programs located in the Center for Global Education, Mowrey Hall room 247. Bring your passport, visa, and student copy of the I-20.

Please be advised that students on the F-1 visa must be enrolled in full-time degree programs in order to maintain their immigration status. Also for F-1 students, no more than the equivalent of one graduate class or three credits per session (semester, term) may be taken online OR through distance education.

International students are required to pay out-of-state tuition and are not permitted to work off campus without proper authorization. Limited on-campus employment is sometimes available for qualified students. All international students are required to carry adequate health and accident insurance.

Further questions regarding international students at Shippensburg University should be addressed to the Center for Global Education, Mowrey Hall Room 247, 1871 Old Main Drive, Shippensburg, PA 17257-2299 USA, (717) 477-1279 or e-mail: meburnett@ship.edu.

Transfer Students

Shippensburg University may admit to its graduate program transfer students from other regionally accredited graduate schools provided they are in good standing in those schools and satisfy all other admission requirements. A maximum of nine credit hours of graduate coursework earned at another institution may be accepted as transfer credit toward a graduate degree. The courses must be part of a graduate degree program at the sponsoring institution and must be appropriate for the student's program at Shippensburg University. In order to be evaluated for transfer credit, courses must be listed on an official graduate transcript with a final grade of B or higher. Credit earned more than five years prior to the date you begin your graduate program at Shippensburg does not qualify for transfer credit.

The academic department of the graduate degree program to which you are applying does a transfer credit evaluation. Additional documentation (such as catalog course descriptions) may be required to complete this process. Students wanting to appeal their transcript evaluation must contact the appropriate department chair for reconsideration.

Condensed one-week graduate courses for three graduate credits may qualify for transfer credit based on the following criteria: the number of contact hours follows our credit hour policy, and the student learning outcomes and their assessments are at the graduate level. Non-college educational experiences do not qualify for graduate transfer credit.

Academic Policies and Procedures

As a graduate student at Shippensburg University, you will need to understand and follow all academic policies and procedures in order to successfully complete your course of study. University officials such as your faculty advisor, department chair, and academic dean can provide assistance, but it is ultimately your responsibility to be aware of policies relating to grading, academic progress, withdrawal from courses, and requirements for graduation. This chapter explains the general academic policies for graduate students. The chapter on University Curricula discusses the specific requirements for individual graduate degree programs.

Applicable Policies

In general, you will be subject to the academic policies and degree requirements that are in effect during the semester you matriculate at Shippensburg University. You matriculate by registering for and starting an academic semester as a degree-seeking student. You do not need to declare a major in order to matriculate. If you begin taking classes in the summer, you will be considered as matriculating in the fall semester.
This catalog is intended to be a description of the policies, academic programs, degree requirements, and course offerings in effect for the 2022-2024 academic years. It should not be construed as a contract between the student and the university. Shippensburg University reserves the right to change any of the policies and procedures contained in this catalog and to apply these changes to any or all of its students as it sees fit. The university may also choose to add or delete course offerings or degree programs at any time.

**Time Definition**

Many of the policies in this catalog refer to time periods such as the first week of the semester. A week of the semester (or week of classes) is defined as seven calendar days beginning with and including the first day of daytime classes. For example, if daytime classes begin on a Thursday, the first week of the semester ends the following Wednesday at the official closing time of university offices (usually 4:30 p.m.).

**Graduate Council**

Within the university's governance structure, the Graduate Council is responsible for recommending the policies that govern the operation of the graduate program. These recommendations include graduate courses and degree programs, admissions procedures and standards, and requirements for good academic standing. Membership in the Graduate Council includes graduate faculty, college deans, the Director of the Graduate School, and a representative of the Graduate Student Association Board.

**Department Chairs and Deans**

Academic decisions concerning individual graduate students are generally made by a recommendation from the student's department chair to the dean of the college in which the department is located. Such decisions include admission to a degree program, admission to candidacy, recommendations for independent study or individualized instruction, substitution or modification of degree requirements, extension of time for completing a degree, and final approval for graduation. Decisions of the deans are subject to review by the Director of the Graduate School.

**Grading and Point System**

The following system of grades is used to indicate the quality of academic work for graduate students:

**Regular Letter Grades**

- *A*  Excellent
- *A-*
- *B+*
- *B*  Good
- *B-*
- *C*  Fair
Failure

Special Grades

Incomplete

Deferred grade

Passed

Transfer Credit

Audit (no credit)

Withdrawal

No Credit (when the semester has been disrupted)

Credit (when the semester has been disrupted)

Individual faculty members may choose to use single letter grades and not award plus/minus grades.

Quality Point Average (QPA)

Your quality point average or QPA is determined by assigning numerical values to the letter marks and weighing them according to the number of class hours. The values assigned to the letters are:

A  4.0 quality points
A- 3.7 quality points
B+ 3.3 quality points
B  3.0 quality points
B- 2.7 quality points
C  2.0 quality points
F  0.0 quality points

To calculate your QPA, follow these steps:

1. Compute the number of quality points earned for each course by multiplying the value of your letter grade by the number of credits earned. For example, a grade of B (3 points) in a 3-credit course earned 9 quality points.
2. Add up the quality points earned in all your classes.
3. Add up the number of credits attempted in all your classes. This total should include all classes in which you received a regular letter grade (A through F).
4. Divide the total number of quality points earned by the total number of credits attempted. This is your QPA. Only courses in which you received a regular letter grade (A through F) are used in calculating your QPA. Courses you have repeated will have an impact on the way your QPA is calculated. See the section on Repeating Graduate Courses for details.
Your semester QPA is the average for one semester or summer term, while your cumulative QPA refers to the average for all courses completed during a graduate degree program. A B average would be the equivalent of a 3.0 QPA.

Temporary Grades ('Q' and 'I')

The grades 'Q' and 'I' are temporary grades, which mean you have not completed all the requirements for a particular course. Apply to your college dean if you are unable to complete the requirements of all your courses.

With prior approval of the appropriate dean, the grade of Q (deferred grade) may be awarded for courses such as research, dissertation, thesis, and internship, which are designed to extend over more than one grade period. If you receive a Q grade in a course, you should work closely with the instructor to plan a schedule in order to complete the work within a specified time period (maximum of three years) or the grade will convert to an F.

The grade of I (incomplete) should only be requested if you have successfully completed a majority of the work for the course and due to overwhelming and unavoidable circumstances that are beyond your control (e.g., serious illness, death in the family), you are unable to complete all the requirements of the course. Being awarded an I is a privilege not a right of the student and the decision to grant an incomplete grade rests solely with the course instructor. When permission is granted by a faculty member, the approval signature affirms that the remaining assignments/requirements will be communicated to the student.

Stipulations regarding incomplete grades:

- Students should rarely request an incomplete grade.
- You must be passing the course and be able to complete the remaining course assignments without attending additional classes or needing additional instruction from the faculty member. Incomplete grades are typically awarded near the end of the semester when only a small amount of graded materials is required of the student.
- If you do not complete the work for a course in which you received a grade of I by the last day of classes (before final exam week) of the next full semester, you will receive a grade of F for that course.
- If the student is failing a course, an I cannot be awarded in place of the failing grade.

Incompletes can be extremely problematic:

- You cannot graduate from the university with a temporary grade on your record.
- An incomplete grade does not prevent academic action for dismissal.
- Incomplete grades affect the number of credits earned in the short term and may have an impact on financial aid eligibility, athletic eligibility, or visa status for international students.

Other Types of Grades

A grade of P is given for courses where you successfully complete the requirements of the course and a letter grade is not appropriate. Examples of such courses include internships and other field experiences. If you register for such a course and do not complete the requirements, a grade of F will be given.

Credits you earn at another institution that are accepted toward your degree at Shippensburg are indicated with a grade of TR. See the Transfer Credit section for further details.

Credits earned with grades of P or TR will be counted toward the total number of credits required for your degree, but they are not used in calculating your QPA.

A grade of N indicates you have audited a class. When you audit, you can attend class and participate in class activities, but you do not receive academic credit. You may audit a course by receiving the written permission of the instructor and approval of your dean on an audit form. This form must be returned to the Registrar's Office during the first week.
of the semester. You must schedule and pay the regular fee for any courses you audit, and you may not receive credit or a grade for these courses at a later date.

W grades indicate courses from which you withdrew. Further information may be found in the section Withdrawal from a Class.

The grade of PASS is a non-punitive grade used in unique situations where a semester is disrupted (e.g. natural disaster, pandemic, etc.). When use of this grade is invoked, student's will have the option of electing a PASS grade in place of a letter grade of "A" through "C". Course credits will be counted as attempted and earned credits, but hours taken will not enter into the computation of the student's QPA.

The grade of NC is a non-punitive grade used in unique situations where a semester is disrupted (e.g. natural disaster, pandemic, etc.). When use of this grade is invoked, it will be issued in place of a letter grade of "F" for a student who does not successfully complete the requirements for a course. Course credits will be counted as attempted credits, but no credit is earned and hours taken will not enter into the computation of the student's QPA.

**Academic Progress and Standing**

Your progress in each class is regularly evaluated by the course instructor. Instructors schedule office hours to allow you to confer regarding academic achievements or particular problems with coursework. At the end of each semester a final grade is recorded on your permanent record for each course taken.

**Full-Time Status**

Six credit hours per semester is considered a full-time load for a graduate student, with 15 credit hours as the maximum for which a full-time graduate student may register per semester. Students taking less than six credit hours are considered part-time.

**Issuance of Grades**

In accordance with the Family Educational Rights and Privacy Act, commonly known as the Buckley Amendment, students are provided with privacy safeguards of their educational records. The university issues reports of progress including grades, written evaluations, and letters of warning directly to the student. You may have access to all information pertaining to your educational records and academic status. At the end of the semester, grades will be posted on the university’s secure student portal.

**Grade Appeals**

(I) Introduction

A graduate student contemplating filing a grade appeal understands that consistent with the practice of academic freedom, faculty bear responsibility for assigning course grades in accordance with professionally acceptable standards that have previously been communicated to students verbally or in writing. At the same time, students have the right to ensure grades are calculated accurately and consistently, fairly and equitably, and without discrimination.

*Note: Any grade appeals or grade change requests initiated on the basis of alleged academic dishonesty shall be handled under the procedures set forth for academic dishonesty discussed later in this chapter.*

(II) Basis for Appealing Final Course Grade
Graduate students may appeal a final course grade assigned to them by an instructor based on one of three conditions:

1. The course instructor miscalculated the final course grade.
2. The course instructor committed an oversight in calculating the final course grade.
3. The course instructor acted in an arbitrary and/or capricious manner in assigning grades to the student, including the final course grade to the student. For an instructor to act in an arbitrary, and/or capricious manner in assigning grades is defined as follows:
   1. The instructor assigned a course grade to a student on some basis other than performance in the course.
   2. The instructor assigned a course grade to a student by resorting to unreasonable standards different from those applied to other students in that course.
   3. The instructor assigned a course grade to a student in a manner that represented a substantial, unreasonable, and unannounced departure from the instructor's previously articulated standards.

(III) Selection and Composition of the Academic Appeals Committee

The Academic Appeals Committee of the department or program shall consist of a minimum of three regular tenure track faculty members in the department or program (excluding the department chairperson or program director) and an equal number of students who are majors in the program, with a faculty member and student serving as co-chairs. In the event a faculty or student member of the Academic Appeals Committee is a party in a grade appeal an alternate previously selected shall serve in his or her place.

Within the first week of the fall semester, each academic department or program shall elect at least three faculty members and one faculty member alternate to serve on the Academic Appeals Committee for the academic year and designate three graduate students and one graduate alternate enrolled in the academic program to serve on the Academic Appeals Committee. Each academic department or program shall develop a standard process for selecting student members for the Academic Appeals Committee. By the end of the first full week of the fall semester, the names of the faculty and student members of the Academic Appeals Committee and alternates selected for each academic year shall then be forwarded to the graduate dean's office. In the event a program lacks sufficient faculty to staff the Academic Appeals Committee and provide a faculty alternate member it shall notify the dean of the college in which the program is located. The dean's office shall provide assistance in identifying a suitable pool of faculty from the college to staff the Academic Appeals Committee and provide an alternate member for the committee if the need should arise.

(IV) Timetable and Procedures for the Grade Appeal Process

Compliance with all timelines set forth in this policy is required.

A student may initiate a grade appeal within thirty (30) calendar days following the first day of the next regular (fall or spring) academic semester. However, appeals from the winter term shall be filed within sixty (60) calendar days following the first day of spring semester; appeals from the summer terms shall be filed within thirty (30) calendar days from the first day of fall semester. Should the deadline for completing a step in the grade appeal process set forth below fall on a day the university is not open for business, that deadline shall be moved to the next date the university is open for business.

Note: Non-standard course terms shall have their deadline dates calibrated with the deadline for formal appeals from the semester or term in which they end.

In the event a faculty member, department chairperson, or program director (or chair of the department's Professional Affairs Committee if necessary) fails to comply with the timelines or procedures set forth in this policy, the student shall have the right to appeal to the dean of the college in which the appeal has arisen. If the dean determines the student's rights under this policy have been violated he or she shall direct the department to schedule the Formal Grade Appeal Hearing in a timely fashion consistent with the intent of the policy.

1. Meeting with the Faculty Member Assigning the Final Course Grade - Following notification of a final grade assigned in a course a student disagreeing with a final course grade shall meet informally with the course instructor at a mutually acceptable place in an effort to resolve the matter prior to resorting to the formal
appeal process.* Either party may choose to have another person present at this meeting. This informal meeting between the student and the faculty member assigning the disputed grade shall occur no later than thirty (30) calendar days following the onset of the next regular (fall or spring) academic semester.** If the faculty member finds in favor of the student, a grade change will be sent to the Registrar's Office after the program chair has signed the grade change form. A copy will be sent to the student. However, if the faculty member decides the grade as given was correct, the student will be notified in writing within seven (7) calendar days. Students who are not satisfied with the results may initiate a formal appeal of the final grade assigned in the course, as outlined below.

*In the event the faculty member assigning the final grade in the course is no longer an employee of Shippensburg University the student desiring to appeal a course grade shall meet with the department chairperson or program director to establish procedures consistent with this policy and past practice for entertaining the desired grade appeal.

** Note: Shippensburg University policy permits faculty members to change grades if there has been a miscalculation or oversight in grading, but not on the basis of additional student work or revision of previously accepted work.

2. Initiating a Formal Grade Appeal - A student wishing to formally appeal a final course grade based on the factors listed in Section II, Basis for Appealing a Final Course Grade, must file a written appeal with the department chairperson or program director of the academic program home to the course whose grade they are seeking to appeal no later than thirty (30) calendar days following the first day of the next regular (fall or spring) academic semester. Appeals from the winter term shall be filed within sixty (60) calendar days following the first day of spring semester; appeals from the summer terms shall be filed within thirty (30) calendar days from the first day of fall semester.

Formal appeals from the spring semester and summer terms shall be filed no later than thirty (30) calendar days from the first day of the fall semester; formal appeals from the fall semester shall be filed no later than thirty (30) calendar days from the first day of the spring semester; formal appeals from winter term shall be filed no later than sixty (60) days from the first day of spring semester. Failure to meet the deadline for formally filing a grade appeal shall result in the forfeiture of a student's appeal rights.***A student wishing to pursue a grade appeal shall by this date submit to the department chairperson or program director (or chair of the department's Professional Affairs Committee in the event that the student is appealing a grade assigned by the department chairperson or program director) the completed grade appeal form, signed and dated, and supporting documentation which sets forth the basis for the appeal and the desired resolution. A graduate grade appeal form may be obtained in the department office of the major/program where the appeal is filed or from the graduate dean's office. Formal Grade Appeals may not be filed electronically; a fax with a legal signature is acceptable.

***Note: Both the informal attempt at resolving the disputed grade with the faculty member assigning such grade and the formal initiation of the formal grade appeal must be completed no later than thirty (30) calendar days following the first day of the next regular (fall or spring) academic semester. Winter term formal appeals must be initiated no later than sixty (60) days following the first day of the subsequent spring semester.

3. Meeting with Department Chairperson or Program Director - Within seven (7) calendar days of receiving a completed grade appeal form, the program chairperson (or designee) will notify the faculty member that a formal appeal has been filed and shall meet individually and/or jointly, if useful, with the student and the faculty member to discuss the disputed grade in an effort to mediate an amicable resolution to disagreement over the final grade assigned. Such meeting(s) may occur in person or via conference call if necessary. The mediated result must be given in writing to both the student and faculty.

4. Formal Program Grade Appeal Hearing - If the student finds the mediated effort fails to address his or her concerns or achieve the desired results, he or she must notify the department chairperson or program director in writing within fourteen (14) calendar days of the meeting with the program chairperson (or designee) of his or her desire to continue on to the formal grade appeal hearing before the Academic Appeals Committee
of the program. Failure to meet this fourteen (14) day deadline for proceeding with the formal grade appeal shall result in the forfeiture of a student's appeal rights.

1. **Scheduling of the Academic Appeals Hearing** - Upon notification by the student of his or her desire to continue with the appeal, the Academic Appeals Committee shall have fourteen (14) calendar days to conduct a hearing on the matter and to issue its findings and recommendations.

2. **An equal number of students and faculty, but in no case fewer than four members, shall be present at an Appeals Hearing.**

3. **Conduct of the Academic Appeals Hearing** - The chairpersons of the Academic Appeals Committee shall have sole responsibility for the conduct of the hearing. Prior to the hearing the student shall submit to the committee a written statement setting forth the issue(s) in the dispute and the desired resolution. Only the student and the faculty member in the dispute have the right to attend the hearing. Both the student and faculty member involved in the grade appeal shall have the right to be present during the grade appeal hearing itself. Both the student and the faculty member have the right to introduce materials into the hearing that are directly relevant to the assignment of the final grade in the course, including such items as:
   - Course syllabi as given to the student
   - Graded assignments such as, but not limited to, journals, research papers, group projects, examinations
   - Other material relevant to the determination of the student's final course grade

5. **Decision of the Academic Appeals Committee** - Only members of the graduate Academic Appeals Committee shall be present during the discussion of and deliberations on the outcome of the student's grade appeal. The Academic Appeals Committee's deliberations shall be viewed as confidential and no transcripts, notes, or records shall be made regarding their discussion other than a record of their final decision. The record of the final decision will be maintained in the department office for three years. The committee has the power to decide the outcome of the final grade dispute by simple majority vote taken by secret ballot. A tie vote upholds the faculty member's decision in the case. If the committee sustains the appeal (i.e., rules in favor of the student) a grade change form will be sent to the Registrar's Office after being signed by the program chair. With the exception of the grade, no part of these proceedings will become part of the student's official academic record. In addition, no part of these proceedings will become part of the faculty member's record or file. The evidence, proceedings, and the final decision of the Academic Appeals Committee shall remain confidential.

(V) **Request for Reconsideration**

A student whose grade appeal has been denied may file a written request for reconsideration within seven (7) calendar days with the appropriate academic dean of the college in which the academic program is housed upon the following grounds:

- The student can demonstrate substantial procedural irregularities or inequities in the conduct of the hearing.
- The student provides substantial new evidence that was not available at the time of the hearing that would have had a bearing on the outcome of the appeal.
- The student is able to demonstrate that the Academic Appeals Committee's decision was erroneous or unfair.

In the absence of a written request for reconsideration of the committee's decision filed with the appropriate academic dean in the college wherein the appeal arose within the specified seven (7) day period, the committee's initial findings and action on the appeal filed shall be final.

(VI) **Reconsideration of the Academic Appeals Committee Determination**

Within seven (7) calendar days of the request for reconsideration, the academic dean of the college in which the grade appeal arose shall determine whether a compelling reason has been presented for setting aside the initial decision of the Academic Appeals Committee. If the dean finds a compelling reason exists to take such action he or she may direct the committee to reconsider their findings and determination or take other appropriate action consistent with the guidelines. If the dean does not find a compelling reason to ask the Academic Appeals Committee to reconsider, the dean communicates with the student and this record will be maintained by the dean's office for three years.
Upon direction from the dean, the Academic Appeals Committee shall have ten (10) calendar days to reconvene and reconsider their initial decision on the grade appeal. The committee in undertaking such review and reconsideration shall examine and take into account the concerns raised by the dean.

The decision of the Grade Appeals Committee, following review and reconsideration shall be final.

**Minimum Academic Standards**

As a graduate student at Shippensburg University, you are expected to maintain satisfactory academic standing, which requires a cumulative QPA of a 3.0 (B) or better each semester. If your cumulative QPA drops below 3.0, you will be placed on academic probation, and if your cumulative QPA drops below a 2.0, you will be dismissed from the degree or professional certification program. Students on academic probation must raise their cumulative QPA to 3.0 by the end of the next semester in which they register (Spring term semester = January-May; Full summer term = Summer term A and B; Fall term semester = August-January) or they will be dismissed from the degree or professional certification program. If a student must take undergraduate prerequisites while pursuing a graduate degree or professional certification, the specific department academic standards for minimum QPA applies. In all cases where graduate or certification programs answer to and must meet accreditation standards, the departments administering these programs impose and enforce the minimum academic requirements.

**Notice and Appeal**

If you are academically dismissed you will be notified in writing by the Registrar's Office. You may appeal your dismissal by the date indicated in the dismissal letter by writing a letter to the Chair or Program Director of the department from which you were academically dismissed. Only upon the approval of the department Chair or Program Director will an appeal be granted.

**Readmission**

If you are dismissed for academic reasons, you may not apply for readmission to the university for one academic term (excluding summer and winter sessions) following your dismissal. Dismissed students may, however, take classes as a non-degree student in any department other than the one from which you were dismissed. Should a previously dismissed student take classes as a non-degree student and then successfully apply for re-admission, the decision to count for credit courses taken as a non-degree student lies in the sole discretion of the admitting department. To apply for readmission to a degree-granting graduate program, you must submit the appropriate application form to the Admission's Office with the regular application fee.

Readmission is never guaranteed following academic dismissal and such application should present evidence you can perform academically at the level needed to obtain a graduate degree or professional certificate.

Any graduate student who fails to enroll in any courses at Shippensburg University for 24 continuous months will be placed on inactive status and must submit the appropriate application form to the Admission's Office with the regular application fee.

**Earning Academic Credits**

You may earn graduate academic credits at Shippensburg University in several ways: by taking normal coursework at the university, by working on internships, through independent study projects, and by taking courses at other accredited institutions for transfer back to Shippensburg University.
Registering for Classes

The normal semester hour workload for graduate students varies between 6 and 15 credit hours. Students with less than 6 credit hours are classified as part-time.

Current and newly admitted graduate students may register for classes at the university online during the registration period held each semester for the next semester.

If you have an outstanding obligation to the university, a hold may be placed on your account and you will not be permitted to schedule. Reasons for holds include but are not limited to: unpaid tuition or fees, library fines, and final transcripts not submitted. It is your responsibility to satisfy the obligation with the office that placed the hold before you will be allowed to schedule.

Satisfying Your Bill

It is the policy of Shippensburg University that students who fail to make appropriate, acceptable payment arrangements by the published deadline will have their semester schedule canceled.

When a schedule is canceled, payment is required prior to re-registration. The Registrar's Office will be notified when payment is made, and the student will be rescheduled, subject to space availability in the classes. Students who have not registered for class(es) by the end of the W grade period will not receive any credit or grades for the course(s). Payment cannot be made and a grade retroactively assigned.

Dual-Level (700) Courses

Some courses with numbers from 700 to 799 are open to master's and doctoral degree students.

Dual-Level (400) Courses

Some courses with numbers from 400 to 499 are open to graduate and advanced undergraduate students. In order to earn graduate credit for these courses, students are expected to meet the customary standards appropriate to graduate-level studies. These standards are reflected in the specific requirements found in syllabi for each of the 400-level courses. A maximum of 12 semester hour credits of 400-level courses may be applied to the master's degree requirements.

Undergraduate Courses

Graduate students may take undergraduate courses to make up deficiencies, fulfill prerequisites, or meet certification requirements. If you take an undergraduate course, it will be recorded on a separate undergraduate transcript along with the grade earned. The credits earned will not be counted toward the graduate degree, and the grades are not used in calculating your graduate-level quality point average.

Withdrawal from a Class

Courses may be added or dropped without penalty or record notation during the official schedule adjustment period held at the beginning of the semester. Dates for this schedule adjustment period will be announced by the Registrar's Office. The drop/add period will extend to the eighth calendar day excluding holidays and when the university is
closed, to provide the student with one full week plus the weekend in a typical semester to obtain any necessary approval for closed courses or prerequisite overrides.

You may withdraw from a class through the tenth week of the semester. If you have scheduled more than one course, you may withdraw online during this period. Requests for withdrawals from your final course of the term must be initiated through the Registrar's Office by visiting www.ship.edu/Registrar/Withdrawal_Request_Form/. Following the initial schedule adjustment period, any courses from which you withdraw will remain on your academic record and will be assigned a grade of W. If you withdraw after the beginning of the eleventh week of the semester you will receive an F grade. You may not withdraw from a course in which you have been accused of or found guilty of academic dishonesty and have been assigned the penalty of an F grade for the course, according to the Academic Dishonesty policy.

Should you withdraw from any class, it is your responsibility to do so officially, whether or not you have ever attended that class. If you do not attend and do not withdraw, your name will remain on the class roll until the final grading period and you will receive a grade of F for the course.

You may be allowed to withdraw from all your classes with grades of W after the normal withdrawal period if you provide to your college dean clear medical evidence you are unable to continue your course work. It will be the determination of the dean whether this evidence is substantial enough to merit a medical withdrawal. Notification of a medical withdrawal must be received by the academic dean prior to the end of the current semester. Medical withdrawals are not permitted after the semester ends. If you receive a medical withdrawal, you will be eligible for a refund only if your withdrawal occurs within the time period normally allowed for refunds.

**Independent Study**

Shippensburg University affords opportunity to deserving and capable graduate students to engage in independent study related to their major field, a supporting area, or specialized interest. This program is highly individualized, related entirely to the student's preparation and interest and the overall appropriateness of study as judged by the department and college dean.

Independent study must include some new experience of inquiry, evaluation, and/or creative activity. This experience must be one that is not available through an established course, including a course by appointment.

To be selected and approved for an independent study project you should have a cumulative QPA of at least 3.0. Your project must be agreed to by the faculty member you would like to work with and then approved by your department chair and academic dean as well as the faculty member's chair and dean. Final approval is required from the Dean of the Graduate School. You must register for the independent study project in the semester for which it is approved.

The acceptance of independent study students shall be voluntary on the part of the faculty member; however, when such students are accepted, at least five hours of faculty time per credit offered shall be made available upon request of each student. This time shall be outside the periods already allocated by the faculty member to classroom and office commitments.

In some unusual cases it is possible for independent study to span several semesters if the department chair(s) and college dean(s) are convinced of the need. A special designation by the dean will indicate approval for continuation of the independent study. A grade will be given during the semester of its completion only. At the time a grade is given, there should be a one-page written record of the completion and the evaluation of the independent study project prepared and signed by both the student and the faculty member. A copy should be placed in the college dean's office and, if desired, in the department office.

An independent study course may not be used to repeat or replace a course in which a grade of F was earned.

**Individualized Instruction**
In some cases, you may be able to earn credit for a course during a semester in which the course is not offered. If a faculty member is willing to work with you on an individual basis, you may apply for individualized instruction. These courses are generally restricted to students who have completed a substantial portion of their degree program and who need the particular course to complete their degree requirements.

Application forms for individualized instruction are available in the Registrar's Office. Your course must be agreed to by the faculty member you would like to work with and then approved by your department chair and college dean as well as the faculty member's chair and dean. Final approval is required from the Dean of the Graduate School.

**Internships**

Experiential learning in the form of internships and field experiences is available to graduate students in many areas of study. You should contact your academic advisor or department chair for information regarding these academic opportunities.

To register for an internship at the graduate level, you must be enrolled in a graduate degree program at Shippensburg University and have a cumulative QPA of at least 3.0. The maximum credit for a graduate internship is six credit hours. Internship experiences are graded on a pass-fail basis only.

Internships must have the approval of your advisor, department chair, and college dean. When an internship is approved, you must schedule the appropriate number of credit hours and pay all course fees.

In programs that include clinical components, practicums, and/or internships, each student's effectiveness and suitability for the program will be given a broad-based evaluation by faculty and/or supervisors. Final decisions regarding continuance of studies will be predicated on a combination of factors such as demonstrated clinical competence, personality factors, and other relevant issues in addition to course grades.

**Repeating Graduate Courses**

Students may repeat any course taken previously, regardless of letter grade. Permission from the academic department must be obtained before a course may be repeated. Graduate students are limited to a total of two repeats where the most recent grade of the course will be used in the QPA calculation, regardless of whether that grade is higher or lower. A single course repeat for grade improvement is limited to one time. The academic transcript is a permanent record. The course and grade for each instance that a course is taken is noted on the academic transcript regardless of whether the grade is included in the QPA calculation.

If you repeat a course, only the most recent grade will be used in calculating your cumulative QPA. If you repeat a passed course and fail, you will lose both the quality points and the credits you had previously earned. After the second repeat instance, any additional course repeats will include both the previous and new grade in the QPA calculation.

A C or F grade earned at Shippensburg University may not be made up at another institution of higher learning for the same course. Independent study or individualized instruction may not be used to repeat a course.

**Transfer Credit**

In order to meet the needs of individual students who are not transfer students, specialized work at other institutions may be recommended to a maximum of nine credit hours. If you are admitted to Shippensburg's graduate program and wish to take graduate courses elsewhere for transfer credit after starting your program, you must receive prior approval from your advisor and from the Dean of the Graduate School in order to insure transfer credit can be granted. A maximum of nine semester hour credits of graduate work earned at another institution will be accepted provided the courses are appropriate for your program at Shippensburg University, and the credits are received on an official
transcript with grades of B or higher. Credits transferred to a Shippensburg University graduate degree program from other institutions must not have been applied to a previously earned bachelor's degree.

Grades earned in courses transferred from other colleges and universities are not included in determining your quality point average in the graduate program at Shippensburg.

Credit earned more than five years prior to the date you begin your graduate program at Shippensburg University does not qualify for transfer credit.

**Graduation Requirements**

As a fulfillment of its obligation to higher education, Shippensburg University has established high standards of achievement and promise for its students that must be met without question before graduation is approved by the faculty or the administration of the university. Specific requirements relating to individual graduate degree programs may be found in under University Curricula.

General requirements for graduate degree programs include a cumulative QPA of 3.0, the completion of all coursework, the completion of any comprehensive requirement (including thesis), and the resolution of all outstanding judicial and/or academic dishonesty matters. Additional graduation requirements may also be required by academic departments.

Applications for graduation must be submitted to the Registrar's Office prior to the beginning of your final term.

Two commencement ceremonies are held each year, one in December and one in May. They are generally held at the end of final examination week. A graduate of the university is expected to participate in the commencement ceremonies at the end of the semester in which they complete all requirements for graduation. Students who, at the completion of either the fall or spring semester, are within six (6) credits of completing their degree requirements may petition their academic dean's office to participate in the preceding semester's commencement ceremony. Final approval is given by the Provost's Office. Approval will be granted when there is evidence that the student will be unable to attend the ceremony following completion of all requirements.

Students who complete all graduation requirements in the summer are expected to participate in the commencement ceremony at the end of the summer. Students who meet those requirements in the winter are expected to participate in the commencement ceremony at the end of the fall semester. Students who are completing their degree requirements at the end of the summer or winter may petition their academic dean's office to participate in the commencement ceremony immediately following the completion of their requirements. Final approval is given by the Provost's Office. Approval will be granted when there is evidence that the student will be unable to attend the ceremony directed preceding the completion of all requirements.

**Time Limit**

All coursework and research for graduate degree programs must be completed within a seven-year period beginning the semester you matriculate in the degree program. Extensions must be requested through your department chair and approved by your college dean and the Director of The Graduate School. The request is to contain an analysis of the previous coursework and how it applies to the current program taking into account if the content of the course has changed significantly and needs to be made up, a list of the coursework yet to be completed, and a deadline for the completion of the degree. If completion of the program includes a project, thesis, or dissertation, milestones with dates for reaching them should be included.

This policy does not apply to students who have been dismissed from their program and have been re-admitted after separation from the university. The policy regarding transfer credits applies in these circumstances.
Advisement

When you are admitted to graduate study, the chair of your major department (or a designated representative) will assign you a program advisor. It is your responsibility to arrange an appointment with the program advisor as soon as possible to outline your program, taking into consideration previous work and your individual objectives. You should follow the curriculum as outlined for your field of specialization unless an adjustment is approved on the basis of previous work or experience. Although the program advisor will assist you in planning your program, you are responsible for knowing the curriculum requirements and seeing these requirements are met.

Admission to Candidacy

Some academic departments require you to apply for and be admitted to candidacy in order to complete the program of study leading to the master's or doctoral degree. The candidacy process is used to review your progress and compliance with academic policies.

Departments requiring candidacy may establish their own guidelines. Contact your department for further information.

Research Requirement

All graduate degree programs must require an appropriate research and/or statistics course.

Comprehensive Requirement

The completion of a graduate degree must have an evaluation or a culminating experience to be determined by each academic discipline. This requirement could be in the nature of a comprehensive written examination, an oral examination, an interview, proof of competencies being met in a program, or other similar evaluation activity that demonstrates mastery of subject area.

Dual Majors

Dual majors are earned when students enroll in programs that have the same degree designations, such as both programs are a M.S. or both programs are a M.Ed. Students intending to opt for two majors shall be required to complete the prescribed specified courses in each respective major. A maximum of nine credits earned in one major at Shippensburg may be transferred to a second graduate major at Shippensburg University.

Dual Graduate Degrees

For graduate students completing dual graduate degrees simultaneously, no more than 9 credits can be transferred in from another institution. For awarding two graduate degrees from Shippensburg University at the same time, at least 12 credit hours will be required beyond the minimal credit requirements for the degree program with the most required credits.

Second Master's Degree
Students need to complete an additional 15 credits (regardless of number of earned credits of the first master's degree) and complete degree requirements in effect at time of matriculation for the second master's degree.

**Dual Concentrations**

The pursuit of two concentrations within the same major is permitted, however no credits can be shared between concentrations.

**Certificates**

Shippensburg University offers graduate certificate programs at the post-baccalaureate or post-master's level. A certificate is a statement of recognition on the academic record of an organized set of courses or short program of study not culminating in a degree.

Certificates will have a minimum of 9 graduate credits. All credits must be completed through Shippensburg University. No credits taken for one certificate may be counted toward another certificate, but the number of credits a graduate certificate may share with the graduate major is to be determined by the graduate student's major department or program.

**Thesis**

Before registering for thesis you should confer with the department chair concerning the appointment of your research advisor and the other members of your thesis committee. The names of the approved advisor and committee members must be submitted to the Registrar's Office at the time you register for the thesis. Registration for the thesis may be completed at the beginning of any semester or summer session. In planning work on your thesis, you should take into consideration faculty members are not always on campus during the summer sessions.

You may register for Thesis I and Thesis II concurrently or in different semesters. A temporary grade of Q will be recorded for a thesis when the work is not completed at the end of the semester. Only when the thesis is completed can a regular letter grade be recorded. Under no conditions may a regular letter grade be submitted unless the thesis is completed and signed by all thesis committee members.

You must submit the thesis to the Registrar's Office in final approved form within one calendar year from the date you register for Thesis II. Otherwise, you must register again for Thesis II and pay the appropriate course fees. Students are not required to register during the winter or summer terms. If you do not complete the thesis within the required time and do not re-register for Thesis II, grades of F will be recorded for both Thesis I and Thesis II.

When registering for thesis credit, you must submit the Arrangements for Completing the Thesis Requirement for the Master's Degree form. For additional information, contact the Registrar's Office.

**Dissertation**

Before registering for dissertation you should confer with the department chair concerning the appointment of your research advisor and the other members of your dissertation committee. The names of the approved advisor and committee members must be submitted to the Registrar's Office at the time you register for the dissertation. Registration for the dissertation may be completed at the beginning of any semester or summer session. In planning work on your dissertation, you should take into consideration faculty members are not always on campus during the summer sessions.
You may register for Dissertation I after completing the Dissertation Seminar. You may register for Dissertation II after completing Dissertation I. A temporary grade of Q will be recorded for Dissertation I and II when the work is not completed at the end of the semester. Only when the dissertation is completed can a regular letter grade be recorded. Under no conditions may a regular letter grade be submitted unless the dissertation is completed and signed by all dissertation committee members.

You must submit the dissertation to the Registrar's Office in final approved form at the end of the semester in which you register for Dissertation II. Otherwise, you must register for a 1-credit Dissertation Extension and pay the appropriate course fees. If you do not complete the dissertation within the required time and do not register for the 1-credit Dissertation Extension, grades of F will be recorded for both Dissertation I and Dissertation II.

When registering for dissertation credit, you must submit the Arrangements for Completing the Dissertation Requirement for the Doctoral Degree form. For additional information, contact the Registrar's Office.

Academic Dishonesty

It is the policy of Shippensburg University to expect academic honesty. Students who commit breaches of academic honesty will be subject to the various sanctions outlined in this section. This policy applies to all students enrolled at Shippensburg during and after their time of enrollment.

Definition

As used in this policy, the term academic dishonesty means deceit or misrepresentation in attempting (successfully or unsuccessfully) to influence the grading process or to obtain academic credit by a means that is not authorized by the course instructor or university policy. A breach of academic honesty is committed by students who give, as well as receive, unauthorized assistance in course and laboratory work and/or who purposefully evade or assist other students in evading, the university's policy against academic dishonesty.

Academic dishonesty includes but is not limited to:

- Bribing or attempting to bribe, faculty or staff personnel in order to attain an unfair academic advantage.
- Possessing course examination materials prior to administration of the examination by the instructor without the instructors' consent.
- Using unauthorized materials or devices such as crib notes during an examination.
- Providing and/or receiving unauthorized assistance during an examination.
- Using a substitute to take an examination or course.
- Misusing transcripts, records or identification, such as forgery or alteration of transcripts.
- Allowing others to conduct research for you or prepare your work without advance authorization from the instructor, including, but not limited to, the services of commercial term paper companies.
- Plagiarism, as the term is defined in the section Plagiarism.
- Intentionally and without authorization falsifying or inventing any information or citation in an academic exercise, such as making up data in an experiment or observation.

The preceding list is only for purposes of illustration. Other forms of inappropriate conduct may also be subject to charges of academic dishonesty.

Resolution of Charges

When an instance of academic dishonesty is alleged, the issue should be resolved on an informal basis between the student and faculty member. If an informal resolution cannot be achieved, a formal process of deciding culpability and
assessing sanctions will be followed. If the student has committed a previous violation, the formal process must be followed.

**Informal Resolution**

A faculty member who obtains information that a student has been dishonest should act promptly to resolve the issue. The faculty member should first contact the Dean of Students to determine if this is the first violation for the student. If the suspected incident is not the first violation, the offense must be handled through the formal resolution process.

For a first violation, the faculty member may attempt to resolve the issue informally with the maximum penalty to be a grade of "F" in the course. If the faculty member feels that the offense warrants a more severe penalty, the matter must be resolved through the formal process.

For the matter to be resolved informally, the faculty member must meet with the student and present any evidence of a violation. The student will be given an opportunity to provide an explanation after hearing the evidence. If the faculty member determines that violation has occurred, he/she will complete the form "Settlement of a Charge of Academic Dishonesty". This form will include the penalty that the faculty member will apply.

The form is then given to the student, who has 72 hours to seek advice and decide whether to sign. If the student agrees to accept the penalty, he/she must sign in the presence of the faculty member. The faculty member will then implement the accepted penalty and forward the settlement form to the Dean of Students. The form will be kept on record for five years and may be used if the student is accused of another academic dishonesty offense or any other violation of the Student Code of Conduct. The information will only be used for internal purposes and will not be disclosed outside the University. Once a violation of academic dishonesty has been alleged, the student is not permitted to withdraw from the course until the alleged violation has been resolved.

If the student refuses to sign, the faculty member may pursue the matter through the formal resolution process.

**Formal Resolution**

An allegation of academic dishonesty must be resolved through a formal process if the student disputes the charges or does not accept the penalty proposed by the faculty member. The formal process must also be followed if the incident is not the student's first violation.

In the formal process, an allegation of academic dishonesty will be treated as a violation of the Student Code of Conduct. The charges will be resolved through the Conduct Process administered by the Dean of Students. The Dean of Students and an academic administrator designated by the Provost will consult to determine if sufficient information is present to warrant further action.

If there is sufficient information to proceed with the complaint, the steps outlined in the "Student Conduct Process" section of the student handbook Swataney will be followed. Academic dishonesty cases must be heard by the University hearing board; the student conduct hearing officer option is not available for these cases.

Appeals of academic dishonesty decisions will be handled by the Vice President for Student Affairs and the Provost.

**Penalties**

The Student Code of Conduct contains a list of sanctions which may be imposed for violations. In addition to those in the Code of Conduct, the following two sanctions may be imposed against students found to have committed acts of academic dishonesty:
Grade Reduction. The grade for a particular unit of work or for the entire course may be reduced.

Imposition of a Failing ("F") Grade. The student may receive an "F" grade for the course.

These two penalties may be imposed through the informal settlement process or the formal hearing process. More severe penalties, including suspension or expulsion, may only be imposed through the formal process. Additional stipulations may also be attached to any sanctions. In the event a student has withdrawn from a course prior to a final settlement, the withdrawal will be reversed and the penalty will be imposed.

Plagiarism

Plagiarism is a form of academic dishonesty. Shippensburg University will not tolerate plagiarism and the faculty will make all reasonable efforts to discourage it.

Plagiarism is your unacknowledged use of another writer's own words or specific facts or propositions or materials in your own writing. When other writers' words or materials (even short phrases or specific terminology) are used, you should put these words, phrases, or sentences inside quotation marks (or else indent and single-space more extended quotations) and you should then cite the source of the quotation either in the text of your writing or in footnotes. Failure to do so may be considered plagiarism. When the propositions of another writer are restated in your own words (paraphrased), you should also indicate the source of the paraphrased material in your own text or in footnotes. Comparable citation should be made for borrowings from media other than printed texts, such as lectures, interviews, broadcast information, or computer programs.

The more flagrant form of plagiarism is your submission of an entire paper or computer program or lab report (or a substantial portion of a longer work) written by someone else and presented as your own work. This can include material obtained from a friend, from a fraternity or sorority file, from duplicated student writings used for analysis in other writing courses, from commercial sources, or from published materials. Another common form of plagiarism is the unacknowledged borrowing from other sources (either words or propositions) and the integration of such material in your own work.

Certain situations may cause conscientious students to fear plagiarizing when they are not really plagiarizing. These include:

- **Improper format for documentation.** Improper documentation is not plagiarism but a technical academic problem. Different professors, different academic departments, and different academic disciplines have various ways of documenting borrowed materials. Each professor should make clear to you how he/she wants borrowed materials documented for given writing or programming assignments. You should make every effort to understand precisely what your professor expects regarding documentation. As long as you make a clear effort to document all borrowed materials, you are not plagiarizing.

- **Use of supplemental individualized instruction on an assignment.** Various tutorial resources are available at the university, including a writing center and assistance from faculty who assist students during the process of composing a paper. When you seek these kinds of legitimate academic assistance, you are not plagiarizing. In fact, you are making an extraordinary attempt to improve your writing and academic performance. In such cases, you should inform your instructor of the fact you have sought assistance from a given source on an assignment. This acknowledgment should be stated on the cover sheet of your paper or program. The prohibition against plagiarism should in no way inhibit or discourage you from seeking legitimate supplemental instruction in developing an assignment.

- **Use of a proofreader.** If you are unsure of your ability to produce finished drafts which are virtually error-free, you may use such resources as hired typists, more editorially proficient friends, tutors, or writing center personnel to insure your finished papers are relatively error-free. You should indicate on the title page the fact your paper was typed and/or proofread by someone else. The prohibition against plagiarism should in no way inhibit or discourage you from using available reference and/or human editorial resources in seeking to produce an error-free final copy of a paper.
In summary, plagiarism is the unacknowledged borrowing of another writer's, speaker's or programmer's words and/or propositions. To avoid plagiarism, you should acknowledge assistance received in developing and/or proofreading a paper. If you need or desire such assistance, you should not be discouraged from seeking it because of the university policy on plagiarism.

Student Matters

This chapter concerns some of the non-academic areas of graduate student life at Shippensburg University, including fees, student services, and financial assistance.

Tuition and Fees

Fees and due dates are subject to change.

Summary of Costs

The following are per credit costs for a graduate student who is a Pennsylvania resident (2021-22 costs).

<table>
<thead>
<tr>
<th>Fee</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Tuition</td>
<td>$516</td>
</tr>
<tr>
<td>Technology Tuition Fee</td>
<td>$28</td>
</tr>
<tr>
<td>Student Union Fee</td>
<td>$25</td>
</tr>
<tr>
<td>Educational Services Fee</td>
<td>$82</td>
</tr>
<tr>
<td>Comprehensive Health Fee</td>
<td>$14</td>
</tr>
<tr>
<td>Total</td>
<td>$665</td>
</tr>
</tbody>
</table>

Payment of Fees

Fees are payable in advance as indicated below. Payment by check, cash or money order may be made directly to the Student Accounts Office. Unless otherwise indicated, all checks shall be made payable to Shippensburg University. Payments by electronic check and credit card (Master Card, VISA, Discover, American Express) may also be made online through the Student Information System at https://my.ship.edu. Credit card payments are subject to a 2.49 percent service fee. There is no charge for payment by e-check.

Do not send cash by mail.

Semester Payments Due

First    mid August
Second   early January

The above dates are subject to change.

Delinquent Accounts
If your account is not paid in full, you will not be permitted to enroll for classes, graduate, or receive a diploma or transcript. Accounts delinquent for 90 days are turned over to the Pennsylvania Attorney General for collection.

**Pennsylvania Resident Tuition**

Graduate students who are residents of Pennsylvania pay a tuition fee of $516 per credit, whether they are taking graduate or undergraduate courses.

**Out-of-State Student Tuition**

Graduate students whose legal residence is not in the state of Pennsylvania pay a tuition fee of $774 per credit, whether they are taking graduate or undergraduate courses. Out-of-state graduate students taking online courses pay a fee of $526 per credit hour.

*NOTE: The above fees are valid only through the summer of 2022.*

**Fees**

**Semester Fees**

*All fees are subject to change without notice.*

**Technology Tuition Fee**

This fee is established by the Board of Governors of the State System of Higher Education. The purposes of the technology tuition fee are: (1) to acquire, install, and maintain up-to-date and emerging technologies for the purpose of enhancing student-learning outcomes; (2) to provide equitable access to technology resources; and (3) to ensure that State System graduates are competitive in the technologically sophisticated workplace.

The technology tuition fee is not a user fee, but is instead a fee that is paid by all students according to their residency status (in state/out of state). Currently (2021-22), the technology tuition fee for graduate students is $28 per credit in state and $40 per credit out of state.

The technology tuition fee is non-refundable.

**Educational Services Fee**

This fee provides instructional and library supplies and equipment. It is charged to all students in all semesters and sessions in accordance with the following schedule:

**Regular Semesters**

- Graduate per credit $82

**Summer Sessions**

- Graduate per credit $82

This fee is refundable according to the schedule in the section *Refunds.*
Limited to the following programs, there is a flat rate tuition of $626 per credit with only the additional fees of Comprehensive Health $14 per credit, and Student Union $25 per credit.

<table>
<thead>
<tr>
<th>Curriculum and Instruction, MEd</th>
<th>Special Education Supervisory Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Leadership, MEd</td>
<td>Special Education, MEd</td>
</tr>
<tr>
<td>Literacy, MEd</td>
<td>STEM Education, MAT</td>
</tr>
<tr>
<td>Online Learning, Instruction, and Technology Certificate</td>
<td>Superintendent Letter of Eligibility</td>
</tr>
<tr>
<td>Principal's Certification</td>
<td>Teaching English as a Second Language (TESL) Certificate</td>
</tr>
</tbody>
</table>

**Student Union Fee**

State law and policies of the Board of Governors of the Pennsylvania State System of Higher Education require the cost of constructing the original Ceddia Union Building and its addition be paid by students enrolled at the university. This fee is applicable to all full- and part-time students, both graduate and undergraduate, during both regular semesters and summer sessions, in accordance with the following schedule established by the University Council of Trustees:

**Regular Semesters**

Graduate per credit $25

**Summer Sessions**

Graduate per credit $20

Students taking online courses do not pay this fee.

The Student Union Fee is refundable based on the schedule in the section *Refunds*.

**Comprehensive Health Fee**

All graduate students must pay a Comprehensive Health Fee of $14 per credit. During the summer sessions, the graduate comprehensive health fee is $11 per credit hour (2021). Students taking online courses do not pay this fee.

**Special Fees**

All fees are subject to change without notice.

**Application Fee**

A fee of $45 is charged when you first apply for graduate study at Shippensburg University. The application fee is not refundable and is not credited toward course fees. A fee of $15 is charged for non-degree applicants.

If you do not begin your graduate study within one year of being admitted, you will need to pay an additional fee to apply again.
Late Payment Fee

If you submit your semester bill payment after the bill due date, you will be subject to a late payment fee of $100. All semester bills must be paid or cleared on line prior to the bill due date to avoid the late fee.

Graduation Fee

A fee of $60 must be paid at the time you apply for graduation. This fee covers the cost of processing your application and preparing your diploma.

Miller Analogies Test Fee

A fee of $85 is required of all persons who take the Miller Analogies Test.

Parking Fee

All vehicles operated by faculty, staff, and students (graduate or undergraduate) are required to be registered with the University Police and to display a current parking decal on the right rear bumper. Student parking decals (through 2021-2022 academic year):

- $75 for the academic year
- $40 per Semester
- $15 summer only (May through August)
- $10 for additional vehicles

Bad Check Fee

A fee of $35 may be charged for each paper check or electronic check that is not honored by the payee's bank for any reason.

Room and Board

Campus housing graduate students during the regular semester is based on the availability of space. A meal plan is available for commuting students. Housing is available during the summer terms.

Meal Plans

During the regular semester, meal plans are available that provide a certain number of meals per week in the dining halls. All of the meal plans include $250 initial flex. Meal plans may also be purchased with $375 initial flex. Additional flex may be purchased in $25 increments.

The flex-only meal plan is perfect for the student looking to eat the occasional meal on campus and begins at $100 per semester. With this plan you receive flex dollars that you can spend at any dining location on campus. You can add additional flex dollars to your account at any time.

Meal plans are also available during the summer sessions. Meal plan rates are subject to change.

Summer Sessions Room and Board

Information about graduate student housing for the summer sessions can be obtained by contacting the Housing and Residence Life Office at (717) 477-1701. For details, please visit https://www.ship.edu/housing/.

Refunds
A graduate student is considered to be in class attendance up to the date on which a written notice of intent to withdraw is received in the Registrar's Office. This date becomes the official date of withdrawal when calculating adjustments of tuition and fees and the return of federal financial aid.

During the academic year the following schedule determines the amount of refund or reduction in tuition and fees to be granted in the event of withdrawal:

<table>
<thead>
<tr>
<th>Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through the drop period</td>
<td>100%</td>
</tr>
<tr>
<td>End of drop period through 2nd week</td>
<td>80%</td>
</tr>
<tr>
<td>3rd week</td>
<td>60%</td>
</tr>
<tr>
<td>4th week</td>
<td>50%</td>
</tr>
<tr>
<td>5th week</td>
<td>40%</td>
</tr>
<tr>
<td>Over 5 weeks</td>
<td>0%</td>
</tr>
</tbody>
</table>

There is no refund or reduction of charges for individual courses withdrawn after the end of the drop period. Refunds are only issued for full semester withdrawals. Students enrolled in late starting courses may be subject to an alternate refund schedule. Details may be obtained at www.ship.edu/Student_Accounts/ under Refund Information.

The most current summer session refund dates may be found at www.ship.edu/Student_Accounts/ under Summer Tuition.

The refund schedules assume the student account is paid in full and the percentages are not being applied to a partial payment of tuition. The application fee, technology fee and advance deposits are non-refundable.

If a student is a recipient of federal Title IV financial aid, the amount of federal aid that the student earned up to the date of withdrawal is calculated using a specific formula. If the student received less aid than the amount earned, the student may receive those funds as a post-withdrawal disbursement. If the student received more aid than the amount earned, the excess funds must be returned by the school and/or the student. Refunds to those programs are required by federal law to be the first priority and must be returned in the following order:

1. Federal Unsubsidized Stafford loan
2. Federal Subsidized Stafford loan
3. Federal Perkins loan
4. Federal PLUS loan
5. Federal Pell Grant
6. Federal SEOG
7. TEACH Grant

In some cases a student may owe a balance to the university after Title IV aid is returned.

More information concerning the detailed application of the refund policy can be obtained by visiting the Student Accounts link in the Student Life section of the Shippensburg University website, www.ship.edu.

Refund policies are subject to change by the Pennsylvania State System of Higher Education.

**Financial Assistance**

Shippensburg University provides financial assistance to graduate students through graduate assistantships, student payroll positions, student life graduate assistantships, graduate residence director appointments, and student loans.
Graduate Assistantships

Graduate assistant appointments provide opportunities to participate in professionally related activities with faculty and administrators. These assignments can extend learning experiences beyond the classroom and enhance professional development. Graduate assistant appointments are awarded on a competitive basis. Assistantships provide a tuition waiver as well as compensation for work performed.

Eligibility

Every graduate student who is not a current Shippensburg University full-time employee may apply for a graduate assistantship. To be eligible to receive a graduate assistant appointment, a student must have an overall 3.0 GPA from their undergraduate institution and be admitted into their first Shippensburg master's degree. Students may not be appointed as graduate assistants while working toward their second Shippensburg University master's degree. Graduate assistantships are awarded for two, consecutive semesters at a time. The appointment and continuation of an assistantship will depend upon good academic standing (3.0 GPA) and recommendation of the Graduate Program Coordinator or worksite supervisor. Those who are ineligible for a graduate assistantship are nondegree students, those working towards certification without a degree, those working towards a graduate certificate, or students in a doctoral program.

International students are eligible for graduate assistantships and should contact the Office of International Studies prior to the beginning of the hiring process.

Probation

It is not possible for a student to continue in a Graduate Assistant position while on academic or disciplinary probation.

How to Apply

Check the Career Development Center's website for available graduate assistantships on campus. Positions are generally posted beginning in April for the following fall semester and in November for the following spring semester, but it is a good idea to check regularly for updates.

Late Appointments to a Graduate Assistantship

Graduate Assistants may be hired for an assistantship through the end of the first week of a semester or, for summer assistantships, through the end of the first week of Summer term A.

Changing Assistantship Work Sites

A Graduate Assistant (GA) who has a satisfactory work history shall not be dismissed because the GA is a poor fit for the duties and requirements of the job for which they were hired. The Graduate School, Graduate Coordinators, and work site supervisors shall work in concert to re-assign a GA to a position for which the GA's skill set is in alignment with the job requirements. Re-assignment of a GA requires the consent of all the respective supervisors and/or departments or programs.

Work Hour Requirement and Pay

There are two types of graduate assistantships: regular assistantships and Student Life assistantships. All graduate assistants are obligated to work for 250 hours per semester and 150 hours for the summer (which includes Summer term A and term B). Once the graduate assistant exhausts their 250 hour work obligation per semester, those assistants classified as Student Life will be contracted to work an additional 50, 100, or 150 hours based on their student employment contract. All graduate assistants currently earn a $10.00 hourly wage and use Et ime to record their hours.

Work Location
All graduate assistantships require Graduate Assistants (GAs) to work face-to-face on campus. The work site supervisor may, in their discretion, allow a GA to work remotely for part or all of their assistantship assignment. Graduate Assistants do not have the right to work remotely.

**Benefits**

With the exception of the tuition waiver and compensation for work performed (including social security and workmen's compensation payments), students in Graduate Assistantships and student payroll positions do not receive any of the benefits provided to regular university employees, such as health benefits, sick leave, special parking passes for vehicles, or paid holidays or vacations.

**Dismissal**

Compensation and tuition waiver policies are the same for dismissal as those for a resignation.

A Graduate Assistant may be dismissed from a position due to poor work performance or an inability to discharge the duties of the assignments. The supervisor must notify their supervisor and the Director of the Graduate School in writing of the decision and justification.

A Graduate Assistant (GA) may be dismissed from a position due to poor work performance or an inability to discharge the duties of the assignments that was not evident during the interview and hiring process. Prior to dismissal, the GA Supervisor must give the student notice that their assistantship is in peril and document instructions for improvement. If within two weeks of the first notification, the GA's performance fails to improve, the GA Supervisor must notify the Graduate School Director of the decision to dismiss the GA and the justification.

At all times, a Graduate Assistant (GA) may be dismissed immediately upon a verified breach of applicable ethical codes and standards. Upon credible allegations of a breach of the university Student Code of Conduct, university policies and procedures, or applicable state or federal civil or criminal codes, a GA will be removed from their assistantship position, yet continue to receive tuition remission until the allegations are resolved. If the applicable adjudicative authority finds the GA responsible for the alleged misbehavior, the GA will be dismissed immediately. If the applicable adjudicative authority finds the GA not responsible for the alleged misbehavior, the GA may return to their GA assignment.

**Academic Load**

During the academic year, full-time graduate assistants usually enroll in nine graduate credits each semester, even though six credits is the minimum for full time status. During the summer sessions, all graduate assistants who get paid for summer graduate assistantship positions must register for and complete at least one graduate course (3 or 4 credits) during one of the summer sessions. The assistantship position will provide for tuition waivers for those students in accelerated graduate programs that require additional credits during the academic year and summer terms. A student who withdraws from classes and no longer meets the academic load requirements will be dismissed from the assistantship.

**Tuition Waiver**

The tuition waiver applies to courses necessary for graduation. Therefore, in most cases, students may not hold graduate assistant positions for more than two years, defined for this purpose as four regular semesters and one summer session. The tuition waiver will cover up to nine credits per semester. Students may use three credits of their nine credit tuition waiver awarded in the fall semester to take one, winter course. The graduate assistantship tuition waiver may cover up to 12 credits per semester for those graduate students in accelerated programs. If a graduate student who has received a tuition waiver withdraws from classes or receives no credit for classes based on the grade earned in the class(es), the student will be responsible for the immediate and full re-payment of all tuition paid by Shippensburg University paid on behalf of the student. Any and all payments required under this section will be pro-rated to the extent possible. Under no circumstances will the Graduate School at Shippensburg award a tuition waiver for a class from which the student previously withdrew (received a W on their transcript) or received a failing grade of F on their transcript, or received a grade which fails to meet academic requirements and the student is repeating the course.
Reimbursement to Shippensburg For Tuition Waivers

Resignation

Compensation and tuition waiver policies for resignation are the same as those for a dismissal.

A graduate assistant may resign from an assistantship position during the course of a semester or a summer. Any hours worked prior to resignation must be recorded on the student payroll and paid to the student.

A student who resigns will have tuition waiver pro-rated based on the number of hours actually worked according to the following schedule.

<table>
<thead>
<tr>
<th>Hours worked</th>
<th>Repayment of Tuition Waiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 - 89 % of contract</td>
<td>Repay Shippensburg 10 % of waiver</td>
</tr>
<tr>
<td>70 - 79 %</td>
<td>Repay Shippensburg 20 % of waiver</td>
</tr>
<tr>
<td>60 - 69 %</td>
<td>Repay Shippensburg 30 % of waiver</td>
</tr>
<tr>
<td>50 - 59 %</td>
<td>Repay Shippensburg 40 % of waiver</td>
</tr>
<tr>
<td>50 or less %</td>
<td>Repay Shippensburg 50 % of waiver</td>
</tr>
</tbody>
</table>

Student Payroll Positions

Student Payroll Positions (SPPs) are administered through the Graduate School. Students working in SPPs earn hourly wages but are not eligible for tuition waivers. Only graduate students qualify for Student Payroll Positions. All SPPs are posted online at the Career, Mentoring, and Professional Development Center's website. Appointments are awarded each semester on a competitive basis and without regard to financial need.

Students may not hold two Student Payroll Positions at one time.

Residence Directors

Residence Directors provide oversight of the residence halls or apartments for students living in campus housing. General responsibilities include supervising undergraduate staff members, responding to student needs and issues, serving as an emergency on-call person, working with camps and conferences, advising student groups, assisting in hall maintenance processes, implementing programs and services, and participating in the adjudication of conduct code violations. Residence Directors also perform a variety of tasks within the Office Housing and Residence Life.

Residence Directors must be enrolled in a graduate program during their period of employment. Previous experience working within a residence hall or some other related aspect of student personnel work is preferred. Strong interpersonal skills, plus an interest in and an understanding of working with undergraduate students are required.

The Residence Director position is a twelve-month appointment. In addition to a salary (contact the Office of Housing and Residence Life for specifics), Residence Directors receive a free apartment and meal plan. Additionally, Residence Directors receive a tuition waiver for six credits per semester and three credits per summer. In order to balance academic and professional success, Residence Directors are not authorized to exceed the aforementioned credit limits, thus limiting them to a maximum of 15 graduate credits per year.

Applications and additional information may be obtained by contacting the Office of Housing and Residence Life.

Loans
Federal Direct Loans are available to matriculated graduate students who are part-time taking at least 3 credits per semester effective summer 2022. In order to qualify, a student must complete the Free Application for Federal Student Aid (FAFSA) and a Federal Direct Loan application.

Graduate students are billed for tuition and fees at the time of registration. If the student has applied for a Federal Direct Stafford Loan to cover those charges, payment may be deferred until the loan funds arrive. The student should indicate on the tuition bill that a loan is pending and return it to the Student Accounts Office.

Students interested in additional financial aid information should visit the Financial Aid website (http://www.ship.edu/financial_aid/).

**Satisfactory Academic Progress Policy (SAP)**

In order to continue to receive federal financial aid, students must be making Satisfactory Academic Progress (SAP). SAP is defined as sufficiently moving toward successful completion of degree requirements. A student's SAP status will be reviewed 3 times a year - at the end of fall term, end of spring term, and after the final summer term. All students who were enrolled on or after the first day of the term will have their Satisfactory Academic Progress calculated at the end of the term.

Federal policies require that SAP be measured 3 ways:

1. **Cumulative GPA**
2. **Percentage of Credits Earned (Pace)**
3. **Maximum Time Frame**

Financial aid recipients must maintain SAP in all three areas whether or not aid was received in the past.

**Graduate Students**

1. **GPA Requirement:** Maintain a 3.0 cumulative GPA.
2. **PACE Requirement:** Complete 67% of credits attempted. (All attempted hours are counted, including transfer hours, classes from which a student withdrew after the drop/add period, and any failed classes. All credits are counted whether or not financial aid was received.)
3. **Maximum Time Frame Requirement:** Federal guidelines state a student can attempt no more than 150% of the number of credits needed to graduate. Students must complete their degree requirements within 150% of the published length of their academic program. For example, if your degree requires 30 graduate credits you may not attempt more than 45 credits (150% of 30) before exceeding the maximum time frame requirement. All attempted hours are counted, including transfer hours, classes from which a student withdrew after the drop/add period, and any failed classes. All credits are counted whether or not financial aid was received.

For complete information on Satisfactory Academic Progress, go to www.ship.edu/Financial_Aid/sap/.

**Housing**

Graduate student housing is offered in Mowrey Hall. This housing is designed for affordability, flexibility, and independence. Students are offered a work option to pay for the housing, can stay during breaks, and do not need to carry a meal plan as a kitchen is provided in the building.

Incoming graduate students confirm housing through the Admission confirmation process. Current graduate students confirm housing through the myShip portal.
Student Services

Director of the Graduate School

The Director of the Graduate School provides leadership in all areas of post-baccalaureate study at Shippensburg University, and their staff helps coordinate graduate assistantships and student payroll positions for graduate students. The Director can be reached at (717) 477-1148, or by email at gradschool@ship.edu/

Graduate Student Association Board

The Graduate Student Association Board (GSAB) was organized to promote harmonious relationships among graduate students, faculty, and administration; to provide a means of expressing to the university as a whole the needs of graduate students; and to insure the rights, privileges and responsibilities of graduate students.

Membership is automatic during the semester or session in which a graduate student is enrolled. Elections for officers are held in April with officers serving from June through May. For more information, contact the GSAB at their office in 131 Mowrey or via email at, GSAB@ship.edu/

Registrar's Office/Transcripts

Shippensburg University has retained Credentials Inc. to accept transcript orders over the Internet. This option allows you to submit transcript requests 24 hours a day, 7 days a week.

Credentials Inc. has been appointed as the designated agent for processing and sending official electronic transcripts on behalf of Shippensburg University. This option is available to anyone attending Shippensburg University in 1992 or later. The PDF transcript that is produced using this service contains the identical information as the printed transcript and can be certified as unaltered by uploading the file to the company's website that is provided during the delivery process. Credentials Inc. has been granted the authority to deliver all such electronic transcript requests on behalf of Shippensburg University and respond to any inquiries regarding the transactions.

Requests for electronic transcripts cost $8 per individual transcript. Requests for paper transcripts cost $10 per individual transcript. Paper transcripts will be mailed within three (3) business days. Additional fees will be incurred if same business day or international mailing is required. All fees are outlined at the Credentials Inc. order site and will be summarized prior to your submission of your request.

Please click on the appropriate link below to enter your order.

- Order Transcripts Online - Current Students (with University ID and Password REQUIRED)
- Order Transcripts Online - Alumni and Former Students (without University ID and Password)

If you are uncomfortable placing an order over the Internet, you can call Credentials Inc. at 847-716-3005 to place your transcript request. There is an additional operator surcharge for placing orders over the telephone.

If you have placed an order through TranscriptsPlus, you may check the status of your order by navigating to the Credential's Self-ServicePlus screen.

Click here to check the status of your order.

Questions regarding this process should be directed to the Registrar's Office, located in Old Main 110. To contact the office call (717) 477-1381.
Counseling Services

The University Counseling Center (UCC) offers free, confidential counseling and psychological services for a wide range of issues, from personal growth and development to mental health concerns. Services provided include individual, couples, and group counseling; crisis intervention; and psychiatric services for undergraduate and graduate students; as well as prevention and consultation services for the entire university community.

Students' more common concerns include the following: depression; anxiety; self-critical feelings; academic concerns including procrastination and time management; sleeping problems; uncertainty about future/life after college; finances; relationships with family, friends, roommates, or romantic partners; problems with body image, eating, or weight; sexual concerns; and alcohol/other drug abuse.

The UCC is accredited by the International Association of Counseling Services, Inc. UCC records are confidential, and do not become a part of students' academic records. Only with a client's written permission will information be released to anyone outside of the UCC, except as required by law. The UCC is located in the Wellness Center in Naugle Hall and is open Monday through Friday, 8:30 a.m. to 5:00 p.m. when classes are in session. Call (717) 477-1481 or visit www.ship.edu/counseling_center/ for more information.

Child Care

The university offers childcare through the Bartos Child and Family Center conveniently located on campus in the Grace B. Luhrs University Elementary School. The center offers developmentally appropriate curriculum, designed and led by four-year degreed teachers, as well as plenty of free play. Classes are tailored to five age ranges which include: Toddler A (12-24 months), Toddler B (24-36 months), Pre-school A (30 months-age 3), Pre-school B (ages 4-6), and School Age. Students enrolled at Shippensburg University are invited to make use of the Child and Family Center. In 2006, the center achieved National Association for the Education of Young Children (NAEYC) accreditation and currently holds a Keystone STARS Four-Star rating. Tuition subsidies may be available for qualified applicants. For information call (717) 477-1792 or visit the Bartos Child and Family Center website at www.sufoundation.org/services/childfamilycenter.

Career, Mentoring and Professional Development Center

The Career, Mentoring, and Professional Development Center (CMPDC), located in the Ceddia Union Building (CUB 108), provides career development and design programs as well as work-based experiential learning opportunities that assist students and alumni in developing and achieving their personal and professional goals.

The Career Center provides resources that help students and alumni explore career options, organize job and internship search programs, and participate in career readiness programming. Career readiness programs include preparing a resume and a cover letter, developing interview skills, and creating professional social media profiles. In addition, the Career Center provides students with career and employer information opportunities through Ship Career Connection, which lists on and off-campus opportunities, internships, and career events.

The Career Center conducts express hours, hosts workshops on career-related topics, delivers workshops for classes and organizations, hosts individual appointments, and holds evening hours. Call the Career Center at (717) 477-1484, email at career@ship.edu, or stop by the office (CUB 108) for more information. Visit our website at career.ship.edu.

Computing and Network Services
The university provides computing and network services for instruction, research, and administration. Students may access university e-mail, file space, and academic records. Students may also create a personal web site. Visit our website at www.ship.edu/technology.

**Computer Labs**

The university maintains four general-purpose computer labs as well as dozens of departmental labs and computer classrooms. All campus labs include access to printing, the complete Microsoft Office suite, SPSS statistical software, and other standard course applications. Internet access for e-mail services, research, and accessing course management systems is available in each facility. The general purpose lab in MCT 054 is open twenty-four hours, seven days per week. Computer workstations and laptops are also available in Ezra Lehman Memorial Library. For a full listing of computer labs and available software, please visit www.ship.edu/microlabs.

**Technology Help Desk**

The university Technology Help Desk provides a single point of contact for students experiencing problems relating to personal computer systems, mobile devices, and/or network connectivity. Services provided to all students include assistance with wireless connectivity, e-mail/file access assistance, computer cleanup (virus, spyware and malware) and help with installation of university-supplied software (such as anti-virus programs). The Technology Help Desk is located in the lobby of the Ezra Lehman Memorial Library, and can be reached at (717) 477-HELP (x4357) or helpdesk@ship.edu.

**Library Services**

The mission of the Ezra Lehman Memorial Library and the Grace B. Luhrs Library is to foster a community of academic success in an environment of personalized service, research mentorship and instruction, and connection to resources. In fulfilling this mission, the Library provides a variety of services, including the following:

- A wide range of print and electronic resources
- Desktop computers, laptops, printing, scanning, and faxing
- Individual and group study spaces, as well as private study rooms
- Individualized assistance in locating resources
- Document delivery of resources housed in the Lehman or Luhrs Libraries and acquired through interlibrary loan services
- Help in evaluating useful Internet resources
- Guidance in citing resources, avoiding plagiarism, and understanding copyright law and fair use guidelines
- Personalized research consultations, for one-on-one research support and mentorship
- Basic support with computer literacy and software applications used at the university
- Technology support in presentation software including video, audio, and image editing
- Equipment check out for digital cameras, digital camcorders, LCD projectors, laptops, calculators, voice recorders, etc.

Visit the library online at library.ship.edu or Luhrs Library online at library.ship.edu/luhrs. For more information or assistance with an information need, call:

- Lehman Library Circulation Desk (717) 477-1465
- Lehman Library Research and Information Desk (717) 477-1474
- Luhrs Library (Juvenile Collection) (717) 477-1003
**Instructional Design & Technology**

Located in the library, Instructional Design & Technology supports face-to-face and online teaching. IDT develops student tutorials and learning materials for programs like D2L Brightspace LMS, Zoom, and Turnitin.

Learn more at Instructional Design & Technology Shippensburg University - Instructional Design & Technology. For more information or assistance call 717-477-1816.

**Media Services & Broadcast Services**

Media Services provides faculty, students and staff with an effective and efficient source of classroom media equipment, media software, media planning and procurement, distance learning, and video/web conferencing.

- Services include
- printing
- 3D printing
- projector & equipment lending
- video/audio production
- media conversion
- management of video conference rooms
- support of the Campus Media & Broadcasting studio, television studio production facilities.

Learn more at Media Services Shippensburg University - Media Services. For more information or assistance call:

- Media Services (717) 477-1646
- Broadcast Services (717) 477-1759

**Learning Center**

The Learning Center, located on the first floor of the Student Success Center in Mowrey Hall, is the university's primary site for academic support. The Learning Center provides Learning Specialist services that can help graduate students improve their academic performance, writing proficiency, and learning abilities. Graduate students can obtain more information about the Learning Center on the Learning Center's webpage: https://www.ship.edu/learning/.

**Learning Specialists**

Learning Specialists are professional staff members who assist students in developing academic skills to help students fulfill their academic goals and potential. Learning Specialists are available to the entire campus community and can:

- Provide strategies to help students improve their study methods
- Help to improve test taking skills, including managing test anxiety
- Assist students in managing their time and class assignments
- Serve as a mentor to students who require ongoing academic support
- Provide support for individuals with learning disabilities
- Conduct a study behavior assessment, which evaluates a student's strengths and challenges with regards to academics
- Guide students on academic probation

**The Graduate Writing Center**
The Shippensburg University Graduate Writing Center fosters graduate students' growth in their written communication abilities. Graduate consultants work alongside graduate writers to offer collaborative, conversational writing consultations and to promote graduate writers' scholarship in a low-stakes environment. Highly trained consultants guide sessions to fit writers' goals and may include brainstorming sessions, argument development, organization of ideas, revision of drafts, improvement of clarity, and citation and documentation of sources. Three appointment options provide scheduling flexibility for busy graduate students: in-person consultations, synchronous consultations via Zoom, and asynchronous sessions that provide written comments, a recorded video that explains feedback, and guidance for revision. Students will discover that working collaboratively with a graduate consultant can help them learn how to improve their writing and strengthen their written communication abilities. For more information, visit the Graduate Writing Center website.

**Multicultural Student Center**

The Office of Multicultural Student Affairs (MSA) serves as a resource for all students. In addition to supporting academic success, the MSA strives to help students develop leadership skills, increase self-awareness, and participate in experiences that will enhance cultural awareness.

Located in Gilbert Hall, the staff members in the MSA office also assist groups such as the African American Organization, Latino Student Organization, Asian American Organization, Building Bridges, along with a host of other groups, with program development and implementation. The MSA works to improve the quality of life for all students enrolled at the university.

MSA is a family who supports, advocates, challenges, and encourages one another to succeed. Our mission is to educate and graduate students who will possess a vision for leadership and a will to excel. MSA touches the lives of people who will shape the future. We hope that you will visit us at our office, utilize our meeting rooms, and attend the events that we sponsor as well as those sponsored by our student groups.

Please feel free to contact Diane Jefferson directly at dljeff@ship.edu if you would like to become involved with MSA or if you have ideas or suggestions.

**Cora I. Grove Spiritual Center**

The Campus Ministry Offices are located in the Cora I. Grove Spiritual Center (Catholic Campus Ministry, room 215, (717) 477-1244; and United Campus Ministry, room 213, (717) 477-1672).

**University Store**

The University Store is located in the Ceddia Union Building.

The store provides textbooks, trade books, school supplies, gift items, imprinted clothing, greeting cards, and book-buy-back. For additional information and hours, call (717) 477-1600, or visit our website http://ship.bkstr.com.

**Veterans Services**

The Veterans Services provides support for students who are veterans or recipients of veteran's benefits. The office coordinates veterans benefits and supports students with academic and personal issues and works to engage military-affiliated learners within the broader campus community.
The Veterans Resource Center, located in the Ceddia Union Building (CUB 235), provides a space to gather, meet, study, and relax on-campus. The university also has an active chapter of Student Veterans of America (SVA), which provides a fellowship of like-minded individuals and creates a network of students and alumni for professional and leadership development. For more information, go to www.ship.edu/veterans/. To contact Veteran Services, email vetaffairs@ship.edu or call 717-477-1165.

**Pride & Gender Equity Center**

Shippensburg University's Pride & Gender Equity (PAGE) Center offers a focal point in making the institution an inclusive and equitable environment for all university community members, including LGBTQIA2S+ students, trans/cis women, trans/cis men, & nonbinary students.

The center offers:

- A welcoming and LGBTQIA2S+ affirming environment
- A commitment to building trusting relationships
- A place of contact for concerns related to LGBTQIA2S+ communities
- A place of contact for concerns related to sexism, misogyny, and misogynoir
- A team dedicated to dismantling systems of inequity
- A physical space with computers, a television, couches, and more
- Confidential counseling for experiences of sexual/gender violence
- Trainings, including Safe Zone Trainings and Healthy Relationships Workshops
- Resources, referrals, and consultation
- All gender restroom
- Lactation space with fridge for breast milk storage
- Free contraceptives, menstrual hygiene items, and pregnancy tests

We encourage students, staff, and faculty, as well as family, friends and supporters, to utilize the resources of our center. We can connect you with events, organizations, and other needs, as well, even if we can't provide them. We are located in CUB 232, and we are open Monday-Friday from 8:00 am - 4:00 pm. Phone: 717-477-1291

**Other Information**

**Fee Waiver for Senior Citizens**

Tuition charges may be waived for senior citizens enrolled in any graduate program providing space is available within the desired courses. Applications for this waiver should be initiated through the Registrar's Office prior to registration for the courses to which it will apply. Application for and approval of the waiver must occur prior to registration for the courses to which it will apply. Requests for retroactive waivers will not be considered. All other fees described in this catalog are due and payable at time of registration.

A senior citizen is defined as a retired United States citizen residing in the Commonwealth of Pennsylvania who is sixty or more years of age. Documentation that the requesting student meets the above eligibility criteria will be required.

**Pennsylvania Residency**

Students applying for graduate study at Shippensburg University will be classified as resident or nonresident for fee purposes by the Office of Graduate Admissions. This classification is based on information furnished by the applicant and all other relevant information. The Office of Graduate Admissions may require written documents, affidavits, verifications, or other evidence necessary to establish the domicile of a student.
Domicile is defined by the regulations of the State System of Higher Education as the place where one intends to reside either permanently or indefinitely and does, in fact, so reside. It is the student's responsibility to present clear and convincing evidence to establish residency for fee purposes.

Evidence

The following factors may be considered as evidence of domiciliary intention: lease or purchase of a permanent, independent residence within Pennsylvania; payment of appropriate state and local taxes; agreement for permanent, full-time employment within the state; registration of a motor vehicle in Pennsylvania; registration to vote in Pennsylvania; possession of a valid Pennsylvania driver's license; and a sworn statement declaring your intention to make Pennsylvania your residence either permanently or for an indefinite period of time.

Each case is decided on the basis of all the facts submitted, with qualitative rather than quantitative emphasis. No given number of factors is required for domicile, since the determination in each case is one of the subjective intention of the student to reside permanently or indefinitely in Pennsylvania.

Change of Domicile

If you change your domicile from Pennsylvania to another state, you must promptly notify the Registrar's Office. You may also be reclassified as a nonresident if the university believes you are no longer a Pennsylvania domiciliary.

Determination of Domicile

Continuous residence in Pennsylvania for a period of twelve months prior to registration creates a presumption of domicile. You are presumed not to be a domiciliary if you have resided for a shorter period, but you may rebut this presumption by clear and convincing evidence.

Students who are not United States citizens, and have nonimmigrant visas or lack a visa, are presumed not to be domiciled in Pennsylvania, but they may rebut this presumption by clear and convincing evidence.

A minor is presumed to have the domicile of his or her parents or guardian. The age of majority for establishing a domicile for tuition purposes is 22. However, a minor may prove financial emancipation and thereby prove Pennsylvania domicile through clear and convincing evidence.

Military - A U.S. government employee or a member of the armed forces who was domiciled in Pennsylvania immediately preceding entry into government service and who has continuously maintained Pennsylvania as his or her declared legal residence, shall be presumed to have a Pennsylvania domicile. Nonresidents stationed in Pennsylvania for military service shall be deemed Pennsylvania domiciliaries.

Shippensburg University's Veteran Verification Office certifies enrollment for graduate students who are eligible for veterans' education benefits. Veterans, reservists, spouses, and children of deceased or disabled veterans should contact the Veteran Verification Office before enrollment. Veteran dependents and reservists must submit the following:

1. Certificate of Eligibility
2. Enrollment Certification Form

The minimum full-time requirement for a graduate student is nine credits. In addition to regular sources of financial aid, veterans and dependents of veterans may be eligible for VA education benefits. Benefit programs may be reviewed at www.gibill.va.gov.

Out-of-state students may qualify for in-state tuition rates if they meet the criteria defined in the Choice Act of 2014. If you have questions about your eligibility, contact the Veteran Verification Office at 717-477-1710.

Procedures for Reclassification

Domicile requests for students who have earned credits at Shippensburg University should be submitted to the Associate Vice President of Student Affairs Office. Documentation must be submitted a minimum of two weeks prior
to the deadline of tuition and fee payment to be considered for the upcoming semester. Domicile requests for new incoming and transfer students should be submitted to the Office of Admissions for review.

If your petition is denied, you may appeal this decision to the Office of the Chancellor of the State System of Higher Education. This written appeal must reach the Office of the Chancellor within thirty days of the date the university's decision was mailed.

University Curricula

Graduate curricula of the university lead to the master’s/doctoral degree or to post-master’s certification.

Graduate Degrees

Shippensburg University provides graduate curricula leading to these degrees:

Master of Arts (M.A.)
Master of Arts in Teaching (M.A.T.)
Master of Business Administration (M.B.A.)
Master of Education (M.Ed)
Master of Public Administration (M.P.A.)
Master of Science (M.S.)
Master of Social Work (M.S.W.)
Doctor of Education (Ed.D.)

These degree programs are offered by the College of Arts and Sciences, the John L. Grove College of Business, and the College of Education and Human Services. The M.S.W. and Doctor of Education in Educational Leadership are offered jointly with Millersville University.

Master of Education Degree

Teacher education programs at Shippensburg University are designed to prepare competent professionals for classroom teaching and for leadership positions in a variety of educational settings and institutions. The teacher as a “reflective co-learner” is the focus of the university's education programs.

Shippensburg University's teacher education programs are accredited by the National Council for Accreditation of Teacher Education (NCATE), with conditions, and by the Pennsylvania Department of Education (PDE).

The following applies to all programs leading to the Master of Education degree.

General Guidelines

1. Each candidate's program leading to the Master of Education degree must include at least 9 semester hour credits of graduate work in professional education.
2. Each candidate's program for the Master of Education degree must include at least 9 semester hour credits of graduate work in the content area of the candidate's teaching field.

3. The department of the candidate's teaching field may not specify more than 18 semester hour credits of required courses in the Master of Education degree program. Of these 18 credits that may be specified, not more than 15 credits may be required in professional studies. The department, however, may require up to 18 credits in the content field.

4. Each candidate for the Master of Education degree must be able to include at least three credits of free electives in the program.

5. Each candidate for the Master of Education degree must complete the departmental course in Elements of Research.

6. Completion of the Master of Education degree does not lead to Instructional I teacher certification. Further information may be found in the section Teacher Certification.

Instructional Certificates

Instructional I provisional certificates (Chapter 49.82*) are issued to applicants who possess a baccalaureate degree, successfully complete a PDE-approved teacher certification program, successfully pass department-prescribed tests, and Pennsylvania Department of Education test requirements (Praxis), and receive recommendation from a college or university.

Instructional II certificates (Chapter 49.83*) are issued to applicants who complete a Pennsylvania Department of Education-approved induction program, complete three to six years of satisfactory teaching on an Instructional I certificate in approved public or non-public schools, and complete 24 semester credit hours of collegiate study or in-service programs approved by the department, as well as any other requirements identified by the Pennsylvania Department of Education.

More detailed information concerning Instructional, Educational Specialist, Supervisory, and Administrative Certificates as well as the Superintendent's Letter of Eligibility is available from the Bureau of Teacher Certification, Department of Education, 333 Market Street, Box 911, Harrisburg, PA 17126.

Students who can qualify for admission to graduate classes are encouraged to take graduate work to earn the credits required to maintain active certification. These credits may also count toward meeting the requirements of the Master of Education degree.

The graduate program also provides opportunities for persons who have a bachelor's degree and a teaching certificate to extend their certification to other areas. The curricula are not designed primarily for this purpose but do provide some courses that may be applied toward certification in specific areas.

*Pennsylvania Code, Chapter 49, Certification of Professional Personnel

Teacher Certification

Certification for educators in Pennsylvania is determined by State Board of Education Regulations, Chapter 49, Certification of Professional Personnel. Revised regulations which became effective June 1, 2011, apply to all candidates who receive an Instructional I certificate after that date. By Department of Education policy, certificates are renewed or made permanent subject to the terms and conditions of the regulations in effect at the time the certificate was initially issued.

K-12 School Principal Certification
The Pennsylvania Department of Education has granted approval to Shippensburg University to offer a graduate program leading to the Master of Education degree in Educational Administration that includes the certification of K-12 school principals and a post-master's degree program leading to the certification of K-12 school principals. Detailed information concerning this program can be found under the Educational Leadership and Special Education Department.

**Supervisory I Certificate**

Shippensburg University offers post-master's degree programs in the following fields leading to the Supervisory I Certificate issued by the Pennsylvania Department of Education:

- Early Childhood Education
- Reading
- Social Studies/Citizenship
- Special Education

**Superintendent's Letter of Eligibility**

Shippensburg University offers a post-master's degree program leading to the Superintendent's Letter of Eligibility. More detailed information on this Department of Education approved program can be found under the Educational Leadership and Special Education Department.

**Responsibility**

All programs in teacher education are the direct responsibility of the Dean of the College of Education and Human Services, who is designated as the official university certification officer. Policies and guidelines for teacher education programs are developed by an all-university Teacher Education Council.

**Shippensburg University**

**College of Arts and Sciences**

James H. Mike, Ph.D., *Dean, College of Arts and Sciences* (717) 477-1151

**Biology Department**

Sherri E. Bergsten, Ph.D., *Chair* (717) 477-1401

Marcie L. Baer-Lehman, Ph.D.

Pablo Delis, Ph.D.

Todd M. Hurd, Ph.D.

Emily B. Kramer, Ph.D.
The Master of Science degree program in biology is designed to provide a strong foundation in biological sciences within the discipline.

All applicants for admission must have completed at least 33 semester hour credits of undergraduate biology or biology-related courses (e.g. forestry, horticulture, environmental studies), and have taken at least three chemistry courses with labs, including both inorganic and organic chemistry or biochemistry. In addition, it is recommended applicants have completed a course in evolution, mathematics through calculus, and one year of physics.

After admission to the graduate program in biology, the student will meet with their graduate advisor to complete a proposed course of study form.

Each candidate for a degree must complete a minimum of 31 semester hour credits. At least 25 of these 31 credits must be earned in biology courses (including courses offered by the Marine Science Consortium at Wallops Island) and must include BIO 593 - Biometry and BIO 515 - Scientific Communication in Biology. The remaining 6 credits may be selected, with advisement, from courses such as chemistry, physics, mathematics, computer science, or geography/earth science. Candidates simultaneously working towards secondary certification may count EDU 440 - Teaching of Science in Secondary Schools and EDU 441 - Curriculum and Evaluation in the Secondary Science Classroom towards these remaining credits. No more than 12 semester hours of 400-level courses may be counted toward the 31 semester hours of credit required for the master's degree.

**Specific Requirements**

**Master of Science in Biology (non-thesis):** In addition to completing BIO 593 and BIO 515, candidates must complete 27 semester hour credits, including at least one capstone experimental course. The capstone course may be either three credits of internship (BIO 609) or three credits of graduate research (BIO 605, BIO 606). This should normally be undertaken during the second year of enrollment for full-time students, or after at least 18 credits have been accumulated in the program. If opting for internship, students are strongly encouraged to complete this during the summer. A maximum of 6 total credits of internship, research, or a combination of internship and research may be
counted toward the degree. For students simultaneously pursuing secondary certification, student teaching (EDU 495) may be counted as the capstone experience, but no credit will be awarded for this toward the M.S. in Biology degree.

**Master of Science in Biology (thesis):** In addition to completing BIO 593 and BIO 515, candidates must complete 27 semester hour credits including six semester hour credits of Thesis I and Thesis II (BIO 612 and BIO 613). Candidates may also elect up to three of these 27 semester hour credits as graduate research (BIO 605, 606) or internship (BIO 609).

**Other Requirements**

1. All candidates must complete 31 semester hour credits with a 3.0 QPA in a program of study and research approved by the student's special committee.
2. The thesis must be written in manuscript style format with any material not appropriate for a scientific manuscript (i.e., voluminous tables) included as appendices. The specific style will depend on the requirements of the individual journal to which the manuscript will be submitted.
3. An oral thesis defense, advertised and open to the university community, is required.
4. A formal seminar based on the thesis research must be presented to the biology department by thesis candidates.
5. One copy of the thesis will be housed in the biology department office.

**Course Requirements**

**Courses**

- BIO 406 - Mammalogy Credits: 3
- BIO 408 - Principles of Virology Credits: 3
- BIO 409 - Immunology Credits: 3
- BIO 412 - Ichthyology Credits: 3
- BIO 417 - Herpetology Credits: 3
- BIO 418 - Molecular Biology Credits: 3
- BIO 419 - Ornithology Credits: 3
- BIO 425 - Biota of Florida Credits: 3
- BIO 430 - Principles of Evolution Credits: 3
- BIO 442 - Aquatic Ecology Credits: 3
- BIO 444 - Conservation Biology Credits: 3
- BIO 448 - Field Botany and Plant Taxonomy Credits: 3
- BIO 450 - Endocrinology Credits: 3
- BIO 461 - Techniques in Biotechnology Credits: 3
- BIO 485 - Biological Microscopy and Imaging Credits: 3
- BIO 491 - Selected Topics in Biology Credits: 1-3
- BIO 492 - Selected Topics in Biology Credits: 3
- BIO 494 - Field Research Techniques Credits: 3
- BIO 495 - Selected Topics in Biology Credits: 3
- BIO 496 - Selected Topics in Biology Credits: 3
- BIO 497 - Selected Topics in Biology Credits: 3
- BIO 498 - Selected Topics in Biology Credits: 3
- BIO 514 - Aquatic Entomology Credits: 3
- BIO 515 - Scientific Communication in Biology Credits: 1
• BIO 520 - Plant Ecology Credits: 3  
• BIO 522 - Community Ecology Credits: 3  
• BIO 524 - Evolutionary Development Credits: 3  
• BIO 526 - Medical Microbiology Credits: 3  
• BIO 428 - Entomology Credits: 3  
• BIO 541 - Ecosystems Credits: 3  
• BIO 545 - Wildlife Diseases Credits: 3  
• BIO 547 - Wetland Ecology Credits: 3  
• BIO 555 - Comparative Environmental Physiology Credits: 3  
• BIO 559 - Evolutionary Ecology Credits: 3  
• BIO 577 - Ecomorphology Credits: 3  
• BIO 592 - Selected Topics in Biology Credits: 3  
• BIO 593 - Biometry Credits: 3  
• BIO 594 - Selected Topics in Biology Credits: 1-3  
• BIO 595 - Selected Topics in Biology Credits: 3  
• BIO 596 - Selected Topics in Biology Credits: 3  
• BIO 598 - Selected Topics in Biology Credits: 3  
• BIO 599 - Independent Study Credits: 3  
• BIO 605 - Graduate Research I Credits: 1-3  
• BIO 606 - Graduate Research II Credits: 1-3  
• BIO 609 - Internship Credits: 3  
• BIO 610 - Internship II Credits: 3  
• BIO 612 - Thesis I Credits: 3  
• BIO 613 - Thesis II Credits: 3  

Note:

BIO 515, BIO 593, BIO 612, BIO 613: Required

Communication, Journalism & Media Department

Carrie A. Sipes, Ph.D., Chair (717) 477-1521

Edward J. (Ted) Carlin, Ph.D.

Dhiman Chattopadhyay, Ph.D.

Michael Drager, Ph.D.

Kyle Heim, Ph.D.

James Lohrey, MA

Master of Science
Strategic Communication, M.S.

A minimum of 30 graduate semester hour credits is required for the completion of the Master of Science degree in Strategic Communication. Applicants who do not have an undergraduate degree in communication/journalism or extensive professional experience in communications may be required to take additional undergraduate courses to make up this deficiency. All applicants must provide a professional resume, three professional references and a typed 400-to 500-word essay on the benefits to be gained by completing this degree. The essay must demonstrate writing skills acceptable to the department. All applicants who do not have an overall undergraduate quality point average of 2.75 or greater will be required to take the Graduate Record Exam (GRE) or the Millers Analogies Test (MAT) or have significant communications work experience. Special rules apply to international students.

All students accepted into the program must apply for candidacy status for the degree after completing at least six semester hours of graduate communications (COM) courses and any graduate deficiency courses specified by the department chair, provided he or she has earned at least a 3.0, B average in all courses completed. Applications for candidacy status may be obtained from the Communication, Journalism & Media Department office and/or website.

The Strategic Communication program is directed to the student seeking a professionally focused program for:

1. The media professional seeking career advancement and further development of strategic public relations skills.
2. The baccalaureate degree holder in another discipline who wishes to prepare for a career in the professional communication field.
3. The student seeking to prepare for further advanced degrees such as a PhD in Strategic Communications/Public Relations.

Degree Requirements (30 crs.)

- **COM 505 - Foundations of Strategic Communication Credits: 3**
- **COM 520 - Strategic Communication Research Credits: 3**
- **COM 523 - Professional Writing & Editing Credits: 3**
- **COM 525 - Social Media Analytics & Strategy Credits: 3**
- **COM 527 - Multimedia Storytelling Credits: 3**
- **COM 529 - Crisis Communication Credits: 3**
- **COM 530 - Social Media Law & Ethics Credits: 3**
- **COM 548 - Global Strategic Communication Credits: 3**
- **COM 565 - Strategic Media Management Credits: 3**
- **COM 603 - Professional Project Credits: 3**

Additional course/skill development opportunities:

- **COM 594 - Selected Topics Communication/Journalism Credits: 1-3 * **
- **COM 599 - Independent Study in Communication/Journalism Credits: 3 * **
- **COM 609 - Internship I Credits: 3 **
- **COM 610 - Internship II Credits: 3 **

*Independent study or 500-level selected topics course can be taken with department approval and alignment with suggested content areas in the PRSA CEPR Guidelines.

**An internship may be substituted for COM 523 Professional Writing & Editing, COM 525 Social Media Analytics & Strategy, or COM 527 Multimedia Storytelling with department approval.
Internships

COM 609 Internship I and COM 610 Internship II may be taken by qualified students. Each internship requires a minimum of 120 hours of work performing strategic communication tasks and related responsibilities. The main objective of the internship is to provide the student with direct experience in public relations/strategic communication, or other approved related profession.

Professional Organizations

A variety of professional organizations supplement instruction. There are active chapter of the Public Relations Student Society of America (PRSSA). The department and many of its faculty belong to the Association for Education in Journalism and Mass Communications (AEJMC), the Broadcast Education Association (BEA), the Public Relations Society of America (PRSA), the Society of Professional Journalists (SPJ), the Pennsylvania Association of Broadcasters, and Pennsylvania Journalism Educators.

Computer Science and Engineering Department

C. Dudley Girard, Ph.D., Chair (717) 477-1178

Alice J. Armstrong Ph.D.

Jeonghwa Lee, Ph.D.

David J. Mooney, Ph.D.

Master of Science

Computer Science, M.S.

Computer science is a fast-moving field that continues to attract professionals who want expertise in computer. This program accommodates students from other fields that have computer science minds and programming skills. The Master of Science in Computer Science degree program is designed to accommodate students who want to have professional skills in a given concentration: software engineering, cybersecurity, IT leadership, and management information systems. Students with a bachelor's degree or at least a minor in computer science will find a traditional M.S. in Computer Science. Students who wish to transition from math, science, or engineering into computer science may be fully enrolled in the program after taking recommended courses based on their background.

Full-time graduate students will take three graduate courses per semester and graduate in a year and half. Students are admitted in any semester. Shippensburg University undergraduates may obtain an advanced degree through a 4+1 B.S./M.S. option. For 4+1 students, the two 500-level courses taken in the spring of their senior year will count as electives in their B.S. program and cannot be substituted for any course in their concentration and these courses cannot replace core courses in the B.S.

Admission Requirements

To gain admission to the Master of Science degree in computer science program, an applicant must satisfy the general admission requirements of the graduate school. Applicants whose overall quality point average is below 2.75 will be required to take the Graduate Record Examination (GRE) prior to admission. All international applicants who have not
graduated from a four-year American university must take the Test of English as a Foreign Language (TOEFL). Additionally, all such applicants must achieve a score of 237 on the TOEFL (computer based).

Graduation Requirements

All students are required to take 30-31 credits consisting of:

Core Courses

The 6 required core courses must be taken with any of the following options:

- 12 Credits of CSC electives or
- IT Leadership Concentration or
- Cybersecurity Concentration or
- Management Information Systems
- CSC 501 - Algorithm Design and Analysis Credits: 3
- CSC 502 - Automata Theory Credits: 3
- CSC 520 - Computer Architecture Credits: 3
- CSC 521 - Operating Systems Credits: 3
- CSC 523 - High Performance Computing Credits: 3
- CSC 570 - Database Management Systems Credits: 3

Electives (12 crs.)

Students can choose either 12 credits of electives, 400-level CSC courses (no more than two) or a concentration as part of the degree requirements.

- CSC 534 - Computer Security Credits: 3
- CSC 550 - Scientific Visualization Credits: 3
- CSC 571 - Data Mining Credits: 3
- CSC 592 - Advanced Topics in Computer Science Credits: 3
- CSC 599 - Independent Study Credits: 3

Computer Science, Cybersecurity Concentration, M.S.

Computer science is a fast-moving field that continues to attract professionals who want expertise in computer. This program accommodates students from other fields that have computer science minds and programming skills. The Master of Science in Computer Science degree program is designed to accommodate students who want to have professional skills in a given concentration: software engineering, cybersecurity, IT leadership, and management information systems. Students with a bachelor's degree or at least a minor in computer science will find a traditional M.S. in Computer Science. Students who wish to transition from math, science, or engineering into computer science may be fully enrolled in the program after taking recommended courses based on their background.

Full-time graduate students will take three graduate courses per semester and graduate in a year and half. Students are admitted in any semester. Shippensburg University undergraduates may obtain an advanced degree through a 4+1 B.S./M.S. option. For 4+1 students, the two 500-level courses taken in the spring of their senior year will count as electives in their B.S. program and cannot be substituted for any course in their concentration and these courses cannot replace core courses in the B.S.
Admission Requirements

To gain admission to the Master of Science degree in computer science program, an applicant must satisfy the general admission requirements of the graduate school. Applicants whose overall quality point average is below 2.75 will be required to take the Graduate Record Examination (GRE) prior to admission. All international applicants who have not graduated from a four-year American university must take the Test of English as a Foreign Language (TOEFL). Additionally, all such applicants must achieve a score of 237 on the TOEFL (computer based).

Graduation Requirements

All students are required to take 30-31 credits consisting of:

Core Courses

The 6 required core courses must be taken with any of the following options:

- 12 Credits of CSC electives or
- IT Leadership Concentration or
- Cybersecurity Concentration or
- Management Information Systems
- CSC 501 - Algorithm Design and Analysis Credits: 3
- CSC 502 - Automata Theory Credits: 3
- CSC 520 - Computer Architecture Credits: 3
- CSC 521 - Operating Systems Credits: 3
- CSC 523 - High Performance Computing Credits: 3
- CSC 570 - Database Management Systems Credits: 3

Cybersecurity Concentration

The cybersecurity concentration is made possible through a collaborative agreement between California University of PA and Shippensburg University. This concentration consists of four courses, three of which are taught online through California's professional science master's cybersecurity program.

- CSC 534 - Computer Security Credits: 3
- CSC 635 - Biometrics Credits: 3
- CSC 645 - Cybersecurity Risk Management and Assessment Credits: 3
- CSC 655 - Wireless Networks and Security Credits: 3

Computer Science, IT Leadership Concentration, M.S.

Computer science is a fast-moving field that continues to attract professionals who want expertise in computer. This program accommodates students from other fields that have computer science minds and programming skills. The Master of Science in Computer Science degree program is designed to accommodate students who want to have professional skills in a given concentration: software engineering, cybersecurity, IT leadership, and management information systems. Students with a bachelor's degree or at least a minor in computer science will find a traditional M.S. in Computer Science. Students who wish to transition from math, science, or engineering into computer science may be fully enrolled in the program after taking recommended courses based on their background.
Full-time graduate students will take three graduate courses per semester and graduate in a year and a half. Shippensburg University undergraduates may obtain an advanced degree through a 4+1 B.S./M.S. option. For 4+1 students, the two 500-level courses taken in the spring of their senior year will count as electives in their B.S. program and cannot be substituted for any course in their concentration and these courses cannot replace core courses in the B.S.

**Admission Requirements**

To gain admission to the Master of Science degree in computer science program, an applicant must satisfy the general admission requirements of the graduate school. Applicants whose overall quality point average is below 2.75 will be required to take the Graduate Record Examination (GRE) prior to admission. All international applicants who have not graduated from a four-year American university must take the Test of English as a Foreign Language (TOEFL). Additionally, all such applicants must achieve a score of 237 on the TOEFL (computer based).

**Graduation Requirements**

All students are required to take 30-31 credits consisting of:

**Core Courses**

The 6 required core courses must be taken with any of the following options:

- 12 Credits of CSC electives or
- IT Leadership Concentration or
- Cybersecurity Concentration or
- Management Information Systems
- CSC 501 - Algorithm Design and Analysis Credits: 3
- CSC 502 - Automata Theory Credits: 3
- CSC 520 - Computer Architecture Credits: 3
- CSC 521 - Operating Systems Credits: 3
- CSC 523 - High Performance Computing Credits: 3
- CSC 570 - Database Management Systems Credits: 3

**IT Leadership Concentration**

- CSC 561 - Agile Development Techniques I Credits: 3
- CSC 503 - Computer Science and Engineering Fundamentals Credits: 4
- SOC 550 - Leadership Theory and Practice Credits: 3
- SOC 560 - Leadership, Change, and Innovation Credits: 3

**Computer Science, Management Information Systems Concentration, M.S.**

Computer science is a fast-moving field that continues to attract professionals who want expertise in computer. This program accommodates students from other fields that have computer science minds and programming skills. The Master of Science in Computer Science degree program is designed to accommodate students who want to have professional skills in a given concentration: software engineering, cybersecurity, IT leadership, and management
information systems. Students with a bachelor's degree or at least a minor in computer science will find a traditional M.S. in Computer Science. Students who wish to transition from math, science, or engineering into computer science may be fully enrolled in the program after taking recommended courses based on their background.

Full-time graduate students will take three graduate courses per semester and graduate in a year and a half. Students are admitted in any semester. Shippensburg University undergraduates may obtain an advanced degree through a 4+1 B.S./M.S. option. For 4+1 students, the two 500-level courses taken in the spring of their senior year will count as electives in their B.S. program and cannot be substituted for any course in their concentration and these courses cannot replace core courses in the B.S.

**Admission Requirements**

To gain admission to the Master of Science degree in computer science program, an applicant must satisfy the general admission requirements of the graduate school. Applicants whose overall quality point average is below 2.75 will be required to take the Graduate Record Examination (GRE) prior to admission. All international applicants who have not graduated from a four-year American university must take the Test of English as a Foreign Language (TOEFL). Additionally, all such applicants must achieve a score of 237 on the TOEFL (computer based).

**Graduation Requirements**

All students are required to take 30-31 credits consisting of:

**Core Courses**

The 6 required core courses must be taken with any of the following options:

- 12 Credits of CSC electives or
- IT Leadership Concentration or
- Cybersecurity Concentration or
- Management Information Systems
- CSC 501 - Algorithm Design and Analysis Credits: 3
- CSC 502 - Automata Theory Credits: 3
- CSC 520 - Computer Architecture Credits: 3
- CSC 521 - Operating Systems Credits: 3
- CSC 523 - High Performance Computing Credits: 3
- CSC 570 - Database Management Systems Credits: 3

**Management Information Systems Concentration**

- ISS 515 - Information Systems Project Management Credits: 3
- ISS 570 - Information Analysis Credits: 3
- MBA 547 - Management Information Systems and Applications Credits: 3
- MBA 548 - IT Management and Innovation Credits: 3

**Information Systems, M.S.**
The Master of Science in Information Systems (MSIS) is a graduate degree that prepares students to become Information Technology managers, analysts, and leaders in a variety of business environments. The curriculum core focuses on systems analysis and design, cyber security, data security, agile software development processes, project management, and data analytics and mining. The U.S. Bureau of Labor Statistics points to a very strong need for managers with technical skills well into the next decade. Graduates will be well positioned to serve in a variety of positions, and to advance into technical management.

**Admission Requirements**

To gain admission to the Master of Science degree in information systems program, an applicant must satisfy the general admission requirements of the graduate school. Applicants whose overall quality point average is below 2.75 will be required to take the Graduate Record Examination (GRE) prior to admission. All international applicants who have not graduated from a four-year American university must take the Test of English as a Foreign Language (TOEFL). Additionally, all such applicants must achieve a score of 237 on the TOEFL (computer based).

**Degree Requirements (32 crs.)**

**Management Information Systems Courses**

- ISS 515 - Information Systems Project Management Credits: 3
- ISS 570 - Information Analysis Credits: 3
- ISS 550 - Database Design Credits: 3
- MBA 547 - Management Information Systems and Applications Credits: 3
- ISS 561 - Business Security Credits: 3
- MBA 548 - IT Management and Innovation Credits: 3
  MBA 548 is a course for students who already have a verified programming background and will not be required to take CSC 504

**Computer Science Courses**

- CSC 561 - Agile Development Techniques I Credits: 3
- CSC 503 - Computer Science and Engineering Fundamentals Credits: 4
- CSC 534 - Computer Security Credits: 3
- CSC 571 - Data Mining Credits: 3
- CSC 504 - Computer Programming for Information Systems Credits: 4

**Certificate**

**IT Leadership Certificate**

IT Leadership Certificate program provides an easy access to a graduate level of IT leadership and software engineering program for the working professionals. In this program, students will learn effective leadership behavior at the individual, organizational and social system level and identify, formulate, and solve engineering problems using current software engineering tools in the development of a product.
Required Courses (12 crs.)

- CSC 503 - Computer Science and Engineering Fundamentals Credits: 4
- CSC 561 - Agile Development Techniques I Credits: 3
- SOC 550 - Leadership Theory and Practice Credits: 3
- SOC 560 - Leadership, Change, and Innovation Credits: 3

Geography/Earth Science Department

Tim Hawkins, Ph.D., Chair (717) 477-1685

Michael Applegarth, Ph.D.

Sean Cornell, Ph.D.

Scott Drzyzga, Ph.D.

Alison Feeney, Ph.D.

Thomas Feeney, Ph.D., Graduate Coordinator (717) 477-1297

Russell Hedberg, Ph.D.

Claire Jantz, Ph.D.

Paul Marr, Ph.D.

George Pomeroy, Ph.D.

Joseph Zume, Ph.D.

Master of Science

Geoenvironmental Science & Sustainability, M.S.

Admission

An applicant must meet the minimum standards of the Graduate School at Shippensburg and must have an undergraduate minimum of:

1. 12 hours in geography or 12 hours in the earth sciences or a combined total of 18 hours in the two fields; or,
2. 15 hours in the social sciences including 6 hours of geography and 15 hours in the natural sciences including 6 hours in the earth sciences.

Admission may be granted by the departmental graduate faculty committee for a student lacking the required level of entrance credits, in which case the department will require the student to take additional courses to make up the deficiencies. Applicants who do not have an overall quality point average of 2.75 or greater will be required to take the Graduate Record Exam (GRE) prior to admission. Each student will plan a program on an individual basis with the graduate faculty ensuring a balanced natural/social science background.
Mission

The Geography-Earth Science Department at Shippensburg University is committed to student learning and personal development through innovative teaching, high quality field application, and use of geotechnology in all aspects of departmental programs. These commitments will deepen student appreciation of geography-earth science, encourage lifelong learning, and prepare graduates to be successful in their future endeavors. The geoenvironmental studies graduate program is designed to be flexible in order to meet the varied needs of a wide range of students. The specific mission of the graduate program can be summarized as follows:

- Develop mastery of theoretical knowledge and provide experience with practical applications from a wide range of environmental and geotechnical disciplines.
- Provide further training and experience to increase competitiveness in the environmental, sustainability, and geotechnical job markets.
- Provide continuing education to fulfill professional development requirements.
- Provide a solid foundation for continued graduate education.

Core Areas

The department has several core areas of teaching and research. While one goal of the program is to provide broad training in environmental and sustainability science, students will align with one or more faculty who will advise the student in course selection and research. As such, students must make contact with faculty members to determine where a student's specific interests lie. Below is a list of core areas:

- Geo-Environmental Science
- Social, Economic, and Environmental Sustainability
- Land Use/Human Geography
- Geo-Techniques
- Geology

Requirements

Students are required to take at least 30 credits to complete the master's degree in geoenvironmental science and sustainability. Listed below are the specific courses and requirements that must be completed to earn the degree:

- Students must take GEO 503 Fundamentals of Geoenvironmental Research during the first semester it is offered.
- Students must take a minimum of 18 credits at the 500 level, including GEO 503.
- Students may take a maximum of 12 credits at the 400-level for credit toward the M.S. degree.
- Students must take a minimum of 3 credits of geotechniques courses at either the 400 or 500 levels.
- Students may take a maximum of 6 credits outside of the department.
- Students must complete a thesis (6 credits) OR a one semester research project (3 credits) and internship (3 credits).
- Students must take and pass the departmental practical exam upon the completion of 18 credits in the MS program.

Deficiencies and Prerequisites
If an incoming student has little or no experience with geography or environmental science, s/he may be required to take undergraduate courses (not for graduate credit) to overcome these deficiencies. The department chair, graduate coordinator, and curriculum committee will establish a list of deficiencies (if any) for all students before they begin the program. Courses from other higher education institutions or appropriate professional experience may fulfill deficiencies.

Facilities

The department has two twenty-computer student labs that are equipped with the latest versions of GIS, image processing, and data analysis software as well as color and black and white laser printers. In addition, there is a small research computer lab that is equipped with specialized software along with a 42-inch plotter for poster printing. Attached to the computer labs is a communal graduate assistant office that also contains computers. Graduate students also have access to the student lounge located between the GIS labs.

The department maintains a soil and water quality lab and owns extensive field equipment that can be used for classroom applications and student research. This equipment includes but is not limited to: digital surveying equipment, hand held and logging hydrologic and meteorological equipment, geophysical instruments, soils and geologic tools, air quality monitoring equipment, maps, and GPS units. The software associated with much of this equipment is available in the student or research computer labs. There is dedicated lab space for processing any samples that are collected for classroom or research field projects. Arrangements also exist for more sophisticated off-site sample processing. The university is also part of the Marine Science Consortium at Wallops Island. Students may take advantage of this facility during their graduate program for classroom, research, and internship opportunities.

Degree Requirements (30 crs.)

Students must take a minimum of 18 credits at the 500-level, and may take a maximum of 12 credits at the 400-level for credit toward the master of science degree. To be awarded a Master of Science in Geoenvironmental Science and Sustainability degree, you must complete a minimum of 30 hours of graduate work distributed as follows:

Required Courses (3 crs.)

- GEO 503 - Fundamentals of Geoenvironmental Research Credits: 3

Geotechniques (3 crs.)

- GEO 425 - Image Processing Credits: 3
- GEO 440 - Field Techniques Credits: 3
- GEO 441 - Quantitative Methods Credits: 3
- GEO 517 - Applied Geographic Information Systems Credits: 3
- GEO 530 - Mapping Sciences Credits: 3
- GEO 568 - GIS3: Advanced Geographic Information Systems Credits: 3

Electives (18 crs.)

- ESS 410 - Sedimentary Geology and Paleoenvironments Credits: 3
- ESS 413 - Mineral and Rock Resources Credits: 3
- ESS 442 - Environmental Geology Credits: 3
- ESS 451 - Coastal Environmental Oceanography Credits: 3
• ESS 504 - Applied Human-Climate Interactions Credits: 3
• GEO 404 - Groundwater and Hydrogeology Credits: 3
• GEO 406 - Sustainable Food Systems from the Soil Up Credits: 3
• GEO 415 - Geography of Africa Credits: 3
• GEO 424 - Soils Credits: 3
• GEO 425 - Image Processing Credits: 3
• GEO 427 - Sustainability Credits: 3
• GEO 440 - Field Techniques Credits: 3
• GEO 441 - Quantitative Methods Credits: 3
• GEO 446 - Water Resources Management Credits: 3
• GEO 450 - Geography-Geology Field Studies Credits: 1-3
• GEO 463 - Applied Geophysical Imaging Credits: 3
• GEO 490 - Selected Topics in Geography Credits: 1-3
• GEO 503 - Fundamentals of Geoenvironmental Research Credits: 3
• GEO 505 - Medical Geography Credits: 3
• GEO 506 - Sustainable Food Systems from the Soil Up Credits: 3
• GEO 517 - Applied Geographic Information Systems Credits: 3
• GEO 522 - Geoenvironmental Hydrology Credits: 3
• GEO 525 - Economic Geography Credits: 3
• GEO 530 - Mapping Sciences Credits: 3
• GEO 531 - Geomorphology Credits: 3
• GEO 532 - Disease and the Environment Credits: 3
• GEO 533 - Science of Land Use Change Credits: 3
• GEO 535 - Karst Hydrology and Geomorphology Credits: 3
• GEO 538 - GIS2: Intermediate Geographic Information Systems Credits: 3
• GEO 542 - Land-Use Regulations Credits: 3
• GEO 543 - Environmental Land Use Planning Credits: 3
• GEO 546 - Geoenvironmental Research I Credits: 3
• GEO 548 - Geoenvironmental Research II Credits: 3
• GEO 553 - Cartography Credits: 3
• GEO 568 - GIS3: Advanced Geographic Information Systems Credits: 3
• GEO 592 - Selected Topics in Geography Credits: 3
• GEO 593 - Selected Topics in Geography Credits: 3
• GEO 594 - Selected Topics in Geography Credits: 1-3
• GEO 599 - Independent Study Credits: 3

Natural/Social Science Electives:

Up to 6 credits may be taken from outside Geography-Earth Science by advisement.

Experiential Requirements (6 crs.)

Thesis I & II

• GEO 612 - Thesis I Credits: 3
• GEO 613 - Thesis II Credits: 3
Research & Internship

- GEO 546 - Geoenvironmental Research I Credits: 3
  OR
- GEO 548 - Geoenvironmental Research II Credits: 3
- GEO 609 - Internship I Credits: 3

Global Languages & Cultures

History/Philosophy Department

David F. Godshalk, Ph.D., Chair (717) 477-1732
John D. Bloom, Ph.D.
Steven Burg, Ph.D.
Allen Dieterich-Ward, Ph.D.
James Edwards, Ph.D.
Kim Klein, Ph.D.
Chandrika Paul, Ph.D.
Gretchen Pierce, Ph.D.
John Quist, Ph.D.
Christine Senecal, Ph.D.
Jonathan Skaff, Ph.D.
Mark E. Spicka, Ph.D.
Allan A. Tulchin, Ph.D.
Brian Ulrich, Ph.D.

Master of Arts

Applied History, M.A.

Shippensburg University's graduate program in Applied History is designed for college graduates seeking advanced historical training and educators seeking professional development opportunities. The program provides all students with a strong grounding in historical scholarship and research. Additionally, our program's focus on applied history prepares our students to share their knowledge with the public in diverse and creative ways, and to use their knowledge and skills to make a meaningful impact on the world. Our graduates apply their historical expertise at museums and historic sites; with state, local, and national government agencies; at non-profit organizations and for-profit businesses; and in high school and college classrooms across the nation.
For students pursuing careers in public history, our program offers specialized courses in museum studies, museum education, oral history, historic preservation, and archival studies. Our program combines classroom instruction with hands-on learning and community-based projects. Students can also pursue professional internships to gain on-the-job training and to prepare them for employment.

For educators, our program offers a diverse array of courses that will enhance their content knowledge and provide additional resources that they can integrated into their own classrooms. Our program also offers a yearly summer teacher's institute on a popular historical theme. At the institute, teachers from across the region can network, share ideas and experiences, and explore new approaches and resources for teaching core history topics. All Shippensburg University graduate classes (including the summer institute) can be used to help satisfy Pennsylvania's Act 48 requirements.

Many graduates have also used this terminal Master's degree as a foundation for future graduate work in history or library science. Shippensburg University's Master's in Applied History degree may be completed simultaneously with the Master's of Library and Information Science degree offered by Clarion University.

The Applied History Master's degree provides students with the greatest degree of flexibility and the opportunity to use coursework from other disciplines to fulfill the degree requirements. It is well suited for the needs of educators and students who wish to develop a broad historical training. Students who wish to specialize in a particular field of public history may pursue one of our two graduate concentrations: Community History and Preservation or Museum Studies. Students in those tracks develop a capstone internship or thesis project that provides additional expertise in the area of specialization.

**Admission Requirements**

To be eligible to pursue a Master of Arts degree in applied history, you must:

- Have a baccalaureate degree from an accredited college or university.
- Present an official transcript showing at least a 2.75 cumulative quality point average for your undergraduate studies.

If you have less than a 2.75 cumulative undergraduate quality point average, you may be accepted following an interview and the submission of a 500-word Statement of Purpose in which you provide additional evidence of your interest in history, your potential as a graduate student, and your reasons for pursuing graduate studies.

**Degree Requirements (30 crs.)**

**Core Requirements (6 crs.)**

- HIS 501 - Introduction to Applied History Credits: 3
- HIS 600 - Historical Research Methods Credits: 3 or
- HIS 601 - Research in Local and Regional History Credits: 3

**Restricted Electives (9 crs.)**

Chosen within the following fields:

I. History of United States (3 crs.)
II. Global Connections and Comparisons (3 crs.)

- HIS 407 - Women in Comparative Perspective Credits: 3
- HIS 423 - Issues in 20th-Century Europe Credits: 3
- HIS 444 - History of Women in Latin America Credits: 3
- HIS 454 - China and the Outside World Credits: 3
- HIS 519 - Seminar in International Relations Credits: 3
- HIS 534 - Seminar in Modern German History Credits: 3
- HIS 535 - Seminar in Medieval Studies Credits: 3
- HIS 543 - Environmental History Credits: 3
- HIS 558 - Seminar in East Asia and the Modern World Credits: 3
- HIS 562 - Seminar in African History Credits: 3

Note:
Selected Topics in History and Readings in History with Departmental Approval.

III. Applied History Skills (3 crs.)

- HIS 433 - Oral History Credits: 3
- HIS 460 - Archives and Public History Credits: 3
- HIS 502 - Introduction to Archives Credits: 3
- HIS 505 - Advanced Topics in Public History Credits: 3
- HIS 539 - Historic Preservation Practice & Advocacy Credits: 3
- HIS 541 - Museum Education Credits: 3
- HIS 542 - Textile History & Museum Methods Credits: 3
- HIS 594 - Selected Topics in History Credits: 1-3

Note:
HIS 594 with advisement

Electives
History Electives (9 Crs.)

Any course not used to satisfy Restricted Electives

Interdisciplinary Electives

With permission of their graduate advisor and the department chair, students may substitute up to two graduate courses (6 crs.) for their history electives. These courses should come from other Shippensburg University departments and help students to fulfill their personal interests and professional objectives.

Required Capstone (6 crs.)

Internship Option:
- HIS 609 - Internship I Credits: 3
- HIS 610 - Internship II Credits: 3

OR

Thesis Option:
- HIS 612 - Thesis I Credits: 3
- HIS 613 - Thesis II Credits: 3

Applied History, Community History and Preservation Concentration, M.A.

Shippensburg University's graduate program in Applied History with a concentration in Community History and Preservation trains students to apply the methods and approaches of professional historians to projects focused on telling the stories of local people, places, sites, organizations, and events. Students learn to use a variety of sources and techniques, including archival research and oral interviews, in order to examine local history. The program also examines diverse ways to share local stories with the public through publications, public programs exhibits, and digital media. This concentration is ideal for librarians, local historians, family and church historians, students wishing to explore community history and pursue advanced training in historical research methods, or individuals seeking a foundation for additional graduate or doctoral studies.

Admission Requirements

To be eligible to pursue a Master of Arts degree in applied history, you must:

- Have a baccalaureate degree from an accredited college or university.
- Present an official transcript showing at least a 2.75 cumulative quality point average for your undergraduate studies.

If you have less than a 2.75 cumulative undergraduate quality point average, you may be accepted following an interview and the submission of a 500-word Statement of Purpose in which you provide additional evidence of your interest in history, your potential as a graduate student, and your reasons for pursuing graduate studies.

Degree Requirements (30 crs.)

Required Core (6 crs.)
• HIS 501 - Introduction to Applied History Credits: 3
• HIS 600 - Historical Research Methods Credits: 3

Restricted Electives (9 crs.)

Chosen within the following fields:

I. History of United States (3 crs.)

• HIS 402 - Revolutionary America Credits: 3
• HIS 413 - Pennsylvania History Credits: 3
• HIS 428 - Issues in the Gilded Age and Progressive Era Credits: 3
• HIS 430 - U.S. Cultural History Credits: 3
• HIS 490 - Selected Topics in History Credits: 1-3
• HIS 513 - Seminar in U.S. Women's History Credits: 3
• HIS 515 - Seminar in 20th Century U.S. Social History Credits: 3
• HIS 516 - Seminar in African American History Credits: 3
• HIS 519 - Seminar in International Relations Credits: 3
• HIS 525 - Seminar in U.S. Regional History Credits: 3
• HIS 526 - Seminar in the Civil War Era Credits: 3
• HIS 592 - Selected Topics in History Credits: 3
• HIS 599 - Readings in History Credits: 3-6
• HIS 601 - Research in Local and Regional History Credits: 3

Note:
HIS 490 HIS 592 HIS 599: With advisement
HIS 601: (If not used to satisfy the research requirement or concentration requirement)

II. Global Connections and Comparisons (3 crs.)

• HIS 407 - Women in Comparative Perspective Credits: 3
• HIS 423 - Issues in 20th-Century Europe Credits: 3
• HIS 444 - History of Women in Latin America Credits: 3
• HIS 454 - China and the Outside World Credits: 3
• HIS 519 - Seminar in International Relations Credits: 3
• HIS 534 - Seminar in Medieval Studies Credits: 3
• HIS 535 - Seminar in Modern German History Credits: 3
• HIS 543 - Environmental History Credits: 3
• HIS 558 - Seminar in East Asia and the Modern World Credits: 3
• HIS 562 - Seminar in African History Credits: 3

Note:
Selected Topics in History and Readings in History with Departmental Approval.

III. Applied History Skills (3 crs.)

• HIS 433 - Oral History Credits: 3
• HIS 460 - Archives and Public History Credits: 3
• HIS 502 - Introduction to Archives Credits: 3
• HIS 505 - Advanced Topics in Public History Credits: 3
• HIS 539 - Historic Preservation Practice & Advocacy Credits: 3
• HIS 541 - Museum Education Credits: 3
• HIS 542 - Textile History & Museum Methods Credits: 3
• HIS 594 - Selected Topics in History Credits: 1-3
  Note: HIS 594 with advisement

Community History Research Concentration (9 crs.)

• HIS 601 - Research in Local and Regional History Credits: 3
• HIS 433 - Oral History Credits: 3
• History Elective at the 400, 500, or 600 level Credits: 3
  With permission of their graduate advisor and the department chair, students may substitute a course (3 crs.) from another Shippensburg University graduate program for their Elective. This course should help students fulfill their personal interests and professional objectives.

Required Capstone (6 crs.)

Internship Option:
• HIS 609 - Internship I Credits: 3
• HIS 610 - Internship II Credits: 3
OR
Thesis Option:
• HIS 612 - Thesis I Credits: 3
• HIS 613 - Thesis II Credits: 3

Applied History, Museum Studies Concentration, M.A.

Shippensburg University's graduate program in Applied History with a concentration in Museum Studies trains students for careers at museums and historic sites. Through classroom instruction, sessions held off-campus at area museums, and extensive hands-on work, students will gain professional training in museum theory and practices. Other museum studies classes meet at the Shippensburg University Fashion Archives and Museum, a campus museum with over 20,000 artifacts specializing in the history of historical textiles, clothing, costume, and popular culture. Through coursework and hands-on activities, students gain expertise in the history, care, handling, storage, exhibition, and management of museum materials. The combination of rigorous classroom instruction, hands-on training, and specialized museum internships produces skilled museum professionals with a rigorous historical training.

Admission Requirements

To be eligible to pursue a Master of Arts degree in applied history, you must:

• Have a baccalaureate degree from an accredited college or university.
• Present an official transcript showing at least a 2.75 cumulative quality point average for your undergraduate studies.
If you have less than a 2.75 cumulative undergraduate quality point average, you may be accepted following an interview and the submission of a 500-word Statement of Purpose in which you provide additional evidence of your interest in history, your potential as a graduate student, and your reasons for pursuing graduate studies.

Degree Requirements (30 crs.)

Required Core (6 crs.)

- HIS 501 - Introduction to Applied History Credits: 3
- HIS 500 - Historical Research Methods Credits: 3 or
- HIS 601 - Research in Local and Regional History Credits: 3

Restricted Electives (9 crs.)

Chosen within the following fields:

I. History of United States (3 crs.)

- HIS 402 - Revolutionary America Credits: 3
- HIS 413 - Pennsylvania History Credits: 3
- HIS 428 - Issues in the Gilded Age and Progressive Era Credits: 3
- HIS 430 - U.S. Cultural History Credits: 3
- HIS 490 - Selected Topics in History Credits: 1-3
- HIS 513 - Seminar in U.S. Women's History Credits: 3
- HIS 515 - Seminar in 20th Century U.S. Social History Credits: 3
- HIS 516 - Seminar in African American History Credits: 3
- HIS 519 - Seminar in International Relations Credits: 3
- HIS 525 - Seminar in U.S. Regional History Credits: 3
- HIS 526 - Seminar in the Civil War Era Credits: 3
- HIS 592 - Selected Topics in History Credits: 3
- HIS 599 - Readings in History Credits: 3-6
- HIS 601 - Research in Local and Regional History Credits: 3
  Note: HIS 490 HIS 592 HIS 599: With advisement
  HIS 601: (If not used to satisfy the research requirement or concentration requirement)

II. Global Connections and Comparisons (3 crs.)

- HIS 407 - Women in Comparative Perspective Credits: 3
- HIS 423 - Issues in 20th-Century Europe Credits: 3
- HIS 444 - History of Women in Latin America Credits: 3
- HIS 454 - China and the Outside World Credits: 3
- HIS 519 - Seminar in International Relations Credits: 3
- HIS 534 - Seminar in Modern German History Credits: 3
- HIS 535 - Seminar in Medieval Studies Credits: 3
- HIS 543 - Environmental History Credits: 3
• HIS 558 - Seminar in East Asia and the Modern World Credits: 3
• HIS 562 - Seminar in African History Credits: 3

Note:
Selected Topics in History and Readings in History with Departmental Approval.

III. Applied History Skills (3 crs.)

• HIS 433 - Oral History Credits: 3
• HIS 460 - Archives and Public History Credits: 3
• HIS 502 - Introduction to Archives Credits: 3
• HIS 505 - Advanced Topics in Public History Credits: 3
• HIS 539 - Historic Preservation Practice & Advocacy Credits: 3
• HIS 541 - Museum Education Credits: 3
• HIS 542 - Textile History & Museum Methods Credits: 3
• HIS 594 - Selected Topics in History Credits: 1-3

Note:
HIS 594 with advisement

Museum Studies Concentration (9 crs.)

• HIS 542 - Textile History & Museum Methods Credits: 3
• HIS 541 - Museum Education Credits: 3
• History Elective at the 400, 500, or 600 level Credits: 3

With permission of their graduate advisor and the department chair, students may substitute a course (3 crs.) from another Shippensburg University graduate program for their Elective. This course should help students fulfill their personal interests and professional objectives.

Required Capstone (6 crs.)

Internship Option:
• HIS 609 - Internship I Credits: 3
• HIS 610 - Internship II Credits: 3

OR

Thesis Option:
• HIS 612 - Thesis I Credits: 3
• HIS 613 - Thesis II Credits: 3

Applied History and Library Science, M.A./M.S.L.S.

Shippensburg University History program and Clarion University's Library Science program participate in a cooperative degree program. Students in this cooperative program earn two degrees: a Master of Arts in Applied History degree, and a Master of Science in Library and Information Science degree. As part of the cooperative agreement, students are allowed to double-count six credits of coursework towards the two degrees. You must apply and be accepted to each program separately to pursue the cooperative degree option. The library science program is offered entirely online. This combination of degrees prepares students for library and research careers in archives, libraries, and with historical organizations.
Master of Public Administration

Public Administration, M.P.A.

MPA Program

The MPA degree prepares students for public-service careers with local, state, and federal government agencies and non-profit organizations. Students may earn their MPA by taking courses on campus, in Harrisburg, or online.

Students applying for the MPA program should have a 2.75 GPA with relevant coursework or professional experience. Applicants who do not meet minimum requirements may be required to take an introductory course. Applications require a resume.

The MPA degree requires students to complete 36 credit hours. Each student's program includes six core courses, four elective courses, and a 6 credit-hour internship. Students who have full-time managerial employment in a relevant profession may apply for an internship waiver when applying to the MPA program. Students obtaining a waiver for the 6 credit-hour internship are required to choose a 3 credit-hour experiential skills course for a total of 33 credit hours.

MPA students should register for PLS 501 Organizational Theory and Behavior during their first semester. PLS 605 Capstone Seminar: Applied Public Management should be taken during students' final semester.

Professional Organizations

Shippensburg University's MPA program is a member of the Network of Schools of Public Policy, Affairs, and Administration (NASPAA). Central Pennsylvania has an active chapter of the American Society for Public Administration (ASPA), the professional association. ASPA regularly hosts educational and networking events in the Harrisburg area, and MPA students often become chapter members, board members, or officers. Shippensburg University's Pi Alpha Alpha public administration academic honor society received the NASPAA National Chapter of Excellence Award in 2014.
Degree Requirements

Required Core Courses (18 crs.)

- PLS 501 - Organizational Theory and Behavior Credits: 3
- PLS 502 - Human Resources Management Credits: 3
- PLS 503 - Public Budgeting and Financial Management Credits: 3
- PLS 601 - Research Methods Credits: 3
- PLS 603 - Public Policy Analysis and Program Evaluation Credits: 3
- PLS 605 - Capstone Seminar: Applied Public Management Credits: 3

Electives (12 crs.)

- PLS 431 - Pennsylvania Local Government Credits: 3
- PLS 491 - Selected Topics in Political Science Credits: 3
- PLS 504 - Ethics for Public Service Managers Credits: 3
- PLS 511 - State Government Credits: 3
- PLS 512 - Intergovernmental Relations Credits: 3
- PLS 521 - Labor Relations in the Public Sector Credits: 3
- PLS 522 - Advocacy in Public Administration Credits: 3
- PLS 523 - Communication for the Public Manager Credits: 3
- PLS 553 - Public Policy Implementation Credits: 3
- PLS 561 - Administrative Law Credits: 3
- PLS 591 - Selected Topics in Political Science Credits: 3
- PLS 623 - Field Research I Credits: 3
- PLS 624 - Field Research II Credits: 3

Experiential Requirements (6 crs.)

- PLS 611 - Internship I Credits: 3
- PLS 612 - Internship II Credits: 3 or

Experiential Skills Electives (for internship waiver - 3 Crs.)

- PLS 491 - Selected Topics in Political Science Credits: 3 or
- PLS 591 - Selected Topics in Political Science Credits: 3
- PLS 521 - Labor Relations in the Public Sector Credits: 3
- PLS 522 - Advocacy in Public Administration Credits: 3
- PLS 523 - Communication for the Public Manager Credits: 3
- PLS 623 - Field Research I Credits: 3
- PLS 624 - Field Research II Credits: 3
- BSN 519 - Essentials of Information Systems Credits: 2
- BSN 520 - Essentials of Economics for Business Administration Credits: 2
- BSN 521 - Essentials of Accounting Credits: 2
- BSN 530 - Essentials of Finance Credits: 2
• GEO 517 - Applied Geographic Information Systems Credits: 3
• ISS 515 - Information Systems Project Management Credits: 3
• ISS 550 - Database Design Credits: 3
• ISS 570 - Information Analysis Credits: 3
• COM 570 - Fund Raising and Association Public Relations Credits: 3
• PLS 491/PLS 591 (if applicable)

Psychology Department

Suzanne M. Morin, Ph.D., Chair (477-1657)

Corrine Bertram, Ph.D.

Jamonn Campbell, Ph.D.

James D. Griffith, Ph.D.

Steven J. Haase, Ph.D.

Robert L. Hale, Ph.D.

Thomas Hatvany, Ph.D.

Amber Norwood, Ph.D.

Kathryn Potoczak, Ph.D., BCBA-D

Toru Sato, Ph.D.

Ashley Seibert, Ph.D.

Kim Weikel, Ph.D.

Master of Science

Applied Psychology, M.S.

The M.S. in Applied Psychology (MAP) emphasizes the application of psychological principles and methodologies to real world problems. The program was designed to provide coursework aimed at three primary purposes for students: 1) career advancement, 2) training to enter a new career/profession, and/or 3) preparation for doctoral study. The coursework offers a balance of theory, application, and methodological skill sets used in the workplace. The program is delivered 100% online in an accelerated format so that it can be completed in 1-year (12 months) of full-time study or 2-years of part-time study. In consideration of students' busy and varying schedules, we have rolling admissions so one can begin and complete the program in any term.

Majors from any field are welcomed to apply as long as the admission requirements are met. In the recent past, students with undergraduate degrees in the following fields have been admitted to our program: biology, business, communications, computer science, criminal justice, education, exercise science, mathematics, philosophy, political science, psychology, and sociology.
Applicants must meet all admission requirements of the Graduate School at Shippensburg and you must:

- Have completed at least 3 semester hours of undergraduate work in psychology.
- Have completed an undergraduate statistics course.
- Submit a Graduate Admissions application including the Goal Statement Form listing your personal and professional goals (300 words or less).

Degree Requirements

A total of 30 semester hour credits of graduate work is required for the master of science degree. **Please note:** 400-level courses **MAY NOT** be taken for graduate credit within this program.

I. Required (12 crs.)

- PSY 500 - Advanced Research Design and Statistics I Credits: 3
- PSY 502 - Program Evaluation Credits: 3
- PSY 503 - Survey Research Credits: 3
- PSY 600 - Capstone Credits: 3

Note:

PSY 500 must be taken from Shippensburg University's Department of Psychology.

II. Core Courses (12 crs.)

(Choose one from each of the following four areas)

Learning and Motivation

- PSY 516 - Motivation Credits: 3
- PSY 518 - Introduction to Behavior Analysis Credits: 3

Developmental and Social

- PSY 517 - Applied Psychology of Women and Gender Credits: 3
- PSY 529 - Adult Development and Aging Credits: 3
- PSY 533 - Applied Social Psychology Credits: 3
- PSY 545 - Child & Adolescent Psychology Credits: 3
- PSY 590 - Introduction to Group Dynamics Credits: 3

Community and Psychopathology

- PSY 530 - Applied Child and Adolescent Psychopathology Credits: 3
- PSY 539 - Community Psychology Credits: 3
Cognitive

- PSY 531 - Cognitive Psychology Applied to the Workplace Credits: 3
- PSY 565 - Human Factors Credits: 3

III. Electives (6 crs.)

Elective courses or additional cluster courses.

- PSY 512 - Theories of Learning Credits: 3
- PSY 535 - Behavioral Assessment Credits: 3
- PSY 536 - Research Design in Behavior Analysis Credits: 3
- PSY 543 - Behavioral Treatment & Systems Support Credits: 3
- PSY 547 - Forensic Psychology Credits: 3
- PSY 595 - Selected Topics in Psychology Credits: 3
- PSY 596 - Selected Topics in Psychology Credits: 3
- PSY 597 - Independent Study in Psychology Credits: 3
- PSY 598 - Independent Study Credits: 3

Note:

Visit our website at www.ship.edu/psychology/ for the most current program information.

Certificate

Behavior Specialist Certificate

The Psychology graduate program also offers a Behavioral Specialist Certificate (BSC) which fulfills some of the requirements for a Behavioral Specialist License (BSL) in Pennsylvania. The BSC can be taken as part of the MAP degree requirements (with no additional courses necessary; can still complete the MAP in 30 credits) or as a postgraduate certificate for those that already have a graduate degree.

In summary, the requirements for a BSL in Pennsylvania are:

- A Master's (or higher) degree or a Post Master's Certificate in certain specified fields
- 90 hours of evidence-based coursework in eight specified content areas
- 1,000 hours of in-person clinical experience
- 1-year of experience involving Functional Behavior Assessments

Required Courses (9 crs.)

- PSY 518 - Introduction to Behavior Analysis Credits: 3
- PSY 539 - Community Psychology Credits: 3
- PSY 543 - Behavioral Treatment & Systems Support Credits: 3

Sociology/Anthropology Department
Master of Science

Organizational Development and Leadership, Business Concentration, M.S.

The Organizational Development and Leadership Program is designed for those students pursuing leadership positions in various career fields. Its objective is to apply the critical view of organizations from social scientific perspectives and enhance students' understanding of how organizations operate and change over time. The performance and role of leadership in formal and informal settings is an integral part of the program. In addition, students will have the opportunity to develop skills and increase their knowledge in selected discipline areas.

The Master of Science in organizational development and leadership is an interdisciplinary program that will provide students with several opportunities:

1. To learn basic principles and theories of organizational development and the role of leadership.
2. To enhance skills and knowledge in specified content areas.
3. To combine theory with practical experience through an internship in the student's concentration.

Admission Requirements

Applicants must have a baccalaureate degree from an accredited college or university and have a minimum cumulative undergraduate quality point average of 2.75. If GPA was below 2.75, an interview may be requested by the program director.

Submit the graduate application along with a current resume, a one-page personal goals statement, an undergraduate transcript, and the non-refundable application fee.

Degree Requirements

Core Courses (12 crs.)

- SOC 550 - Leadership Theory and Practice Credits: 3
- SOC 560 - Leadership, Change, and Innovation Credits: 3
- PLS 501 - Organizational Theory and Behavior Credits: 3
Capstone Experience (6 crs.)

All students must fulfill the capstone experience that requires completion of a 3-credit internship in some administrative capacity within their concentration area. The internship is ideally taken simultaneously with the Applied Leadership and Organizational Analysis course where students will complete an organizational analysis project. It is recommended after 18-21 crs.

- SOC 570 - Applied Organizational and Leadership Analysis Credits: 3
- SOC 609 - Sociology Graduate Internship Credits: 3
- (Internship within concentration area)

Business (12 crs.)

- BSN 511 - Essentials of Business Operations and Analysis Credits: 4
- BSN 519 - Essentials of Information Systems Credits: 2
- BSN 520 - Essentials of Economics for Business Administration Credits: 2
- BSN 521 - Essentials of Accounting Credits: 2
- BSN 530 - Essentials of Finance Credits: 2
- BSN 534 - Essentials of Marketing Credits: 2

Note:

*Concentration is designed for students without a business or business-related undergraduate degree

Organizational Development and Leadership, Higher Education Structure and Policy Concentration, M.S.

The Organizational Development and Leadership Program is designed for those students pursuing leadership positions in various career fields. Its objective is to apply the critical view of organizations from social scientific perspectives and enhance students' understanding of how organizations operate and change over time. The performance and role of leadership in formal and informal settings is an integral part of the program. In addition, students will have the opportunity to develop skills and increase their knowledge in selected discipline areas.

The Master of Science in organizational development and leadership is an interdisciplinary program that will provide students with several opportunities:

1. To learn basic principles and theories of organizational development and the role of leadership.
2. To enhance skills and knowledge in specified content areas.
3. To combine theory with practical experience through an internship in the student's concentration.

Admission Requirements
Applicants must have a baccalaureate degree from an accredited college or university and have a minimum cumulative undergraduate quality point average of 2.75. If GPA was below 2.75, an interview may be requested.

Submit the graduate application along with a current resume, a one-page personal goals statement, an undergraduate transcript, and the non-refundable application fee.

Degree Requirements

Core Courses (12 crs.)

- SOC 550 - Leadership Theory and Practice Credits: 3
- SOC 560 - Leadership, Change, and Innovation Credits: 3
- PLS 501 - Organizational Theory and Behavior Credits: 3
- PLS 601 - Research Methods Credits: 3 or
- COM 520 - Strategic Communication Research Credits: 3

Capstone Experience (6 crs.)

All students must fulfill the capstone experience that requires completion of a 3-credit internship in some administrative capacity within their concentration area. The internship is ideally taken simultaneously with the Applied Leadership and Organizational Analysis course where students will complete an organizational analysis project. It is recommended after 18-21 crs.

- SOC 570 - Applied Organizational and Leadership Analysis Credits: 3
- SOC 609 - Sociology Graduate Internship Credits: 3
- (Internship within concentration area)

Higher Education Structure and Policy

Required (3 crs.)

- SOC 530 - Sociology of Higher Education Credits: 3

Electives (9 crs.)

- CNS 521 - Emotionally Intelligent Leadership Credits: 3
- CNS 565 - The College Student and the College Environment Credits: 3
- COM 594 - Selected Topics Communication/Journalism Credits: 1-3
- PLS 502 - Human Resources Management Credits: 3
- PLS 504 - Ethics for Public Service Managers Credits: 3
- PLS 523 - Communication for the Public Manager Credits: 3
- PLS 591 - Selected Topics in Political Science Credits: 3
- PLS 592 - Selected Topics in Political Science Credits: 3
- PLS 603 - Public Policy Analysis and Program Evaluation Credits: 3
- PSY 516 - Motivation Credits: 3
- PSY 595 - Selected Topics in Psychology Credits: 3
Organizational Development and Leadership, Historical Administration Concentration, M.S.

The Organizational Development and Leadership Program is designed for those students pursuing leadership positions in various career fields. Its objective is to apply the critical view of organizations from social scientific perspectives and enhance students' understanding of how organizations operate and change over time. The performance and role of leadership in formal and informal settings is an integral part of the program. In addition, students will have the opportunity to develop skills and increase their knowledge in selected discipline areas.

The Master of Science in organizational development and leadership is an interdisciplinary program that will provide students with several opportunities:

1. To learn basic principles and theories of organizational development and the role of leadership.
2. To enhance skills and knowledge in specified content areas.
3. To combine theory with practical experience through an internship in the student's concentration.

Admission Requirements

Applicants must have a baccalaureate degree from an accredited college or university and have a minimum cumulative undergraduate quality point average of 2.75. If GPA was below 2.75, an interview may be requested.

Submit the graduate application along with a current resume, a one-page personal goals statement, an undergraduate transcript, and the non-refundable application fee.

Degree Requirements

Core Courses (12 crs.)

- SOC 550 - Leadership Theory and Practice Credits: 3
- SOC 560 - Leadership, Change, and Innovation Credits: 3
- PLS 501 - Organizational Theory and Behavior Credits: 3
- PLS 601 - Research Methods Credits: 3 or
- COM 520 - Strategic Communication Research Credits: 3

Capstone Experience (6 crs.)

All students must fulfill the capstone experience that requires completion of a 3-credit internship in some administrative capacity within their concentration area. The internship is ideally taken simultaneously with the Applied
Leadership and Organizational Analysis course where students will complete an organizational analysis project. It is recommended after 18-21 crs.

- SOC 570 - Applied Organizational and Leadership Analysis Credits: 3
- SOC 609 - Sociology Graduate Internship Credits: 3
- (Internship within concentration area)

**Historical Administration**

- HIS 413 - Pennsylvania History Credits: 3
- HIS 428 - Issues in the Gilded Age and Progressive Era Credits: 3
- HIS 430 - U.S. Cultural History Credits: 3
- HIS 433 - Oral History Credits: 3
- HIS 460 - Archives and Public History Credits: 3
- HIS 482 - Selected Topics in History Credits: 3
- HIS 501 - Introduction to Applied History Credits: 3
- HIS 502 - Introduction to Archives Credits: 3
- HIS 505 - Advanced Topics in Public History Credits: 3
- HIS 513 - Seminar in U.S. Women's History Credits: 3
- HIS 515 - Seminar in 20th Century U.S. Social History Credits: 3
- HIS 516 - Seminar in African American History Credits: 3
- HIS 526 - Seminar in the Civil War Era Credits: 3
- HIS 539 - Historic Preservation Practice & Advocacy Credits: 3
- HIS 541 - Museum Education Credits: 3
- HIS 542 - Textile History & Museum Methods Credits: 3
- HIS 543 - Environmental History Credits: 3
- HIS 592 - Selected Topics in History Credits: 3
- HIS 594 - Selected Topics in History Credits: 1-3
- HIS 599 - Readings in History Credits: 3-6
- HIS 601 - Research in Local and Regional History Credits: 3

**Note:**

(ODL students in this concentration are advised to select HIS 600 in place of PLS 601 in core; an additional concentration course will be necessary if that substitution is made)

Other courses as directed in consultation with the ODL advisor

**Organizational Development and Leadership, Leadership in Society Concentration, M.S.**

**Leadership in Society Concentration**

The new Leadership in Society concentration allows students more flexibility to select interdisciplinary courses that best fit their own leadership goals.
Degree Requirements

Core Courses (12 crs.)

- SOC 550 - Leadership Theory and Practice Credits: 3
- SOC 560 - Leadership, Change, and Innovation Credits: 3
- PLS 501 - Organizational Theory and Behavior Credits: 3
- PLS 601 - Research Methods Credits: 3 or
- COM 520 - Strategic Communication Research Credits: 3

Capstone Experience (6 crs.)

All students must fulfill the capstone experience that requires completion of a 3-credit internship in some administrative capacity within their concentration area. The internship is ideally taken simultaneously with the Applied Leadership and Organizational Analysis course where students will complete an organizational analysis project. It is recommended after 18-21 crs.

- SOC 570 - Applied Organizational and Leadership Analysis Credits: 3
- SOC 609 - Sociology Graduate Internship Credits: 3
- (Internship within concentration area)

Leadership in Society

- CNS 521 - Emotionally Intelligent Leadership Credits: 3
- COM 505 - Foundations of Strategic Communication Credits: 3
- COM 506 - Public Relations Strategies Credits: 3
- COM 527 - Multimedia Storytelling Credits: 3
- COM 570 - Fund Raising and Association Public Relations Credits: 3
- COM 594 - Selected Topics Communication/Journalism Credits: 1-3
- GEO 532 - Disease and the Environment Credits: 3
- GEO 533 - Science of Land Use Change Credits: 3
- GEO 542 - Land-Use Regulations Credits: 3
- GEO 592 - Selected Topics in Geography Credits: 3
- GEO 593 - Selected Topics in Geography Credits: 3
- GEO 594 - Selected Topics in Geography Credits: 1-3
- PLS 502 - Human Resources Management Credits: 3
- PLS 504 - Ethics for Public Service Managers Credits: 3
- PLS 522 - Advocacy in Public Administration Credits: 3
- PLS 523 - Communication for the Public Manager Credits: 3
- PLS 591 - Selected Topics in Political Science Credits: 3
- PLS 592 - Selected Topics in Political Science Credits: 3
- PLS 603 - Public Policy Analysis and Program Evaluation Credits: 3
- PSY 516 - Motivation Credits: 3
- PSY 517 - Applied Psychology of Women and Gender Credits: 3
- PSY 531 - Cognitive Psychology Applied to the Workplace Credits: 3
- PSY 539 - Community Psychology Credits: 3
The Organizational Development and Leadership Program is designed for those students pursuing leadership positions in various career fields. Its objective is to apply the critical view of organizations from social scientific perspectives and enhance students' understanding of how organizations operate and change over time. The performance and role of leadership in formal and informal settings is an integral part of the program. In addition, students will have the opportunity to develop skills and increase their knowledge in selected discipline areas.

The Master of Science in organizational development and leadership is an interdisciplinary program that will provide students with several opportunities:

1. To learn basic principles and theories of organizational development and the role of leadership.
2. To enhance skills and knowledge in specified content areas.
3. To combine theory with practical experience through an internship in the student's concentration.

Admission Requirements

Applicants must have a baccalaureate degree from an accredited college or university and have a minimum cumulative undergraduate quality point average of 2.75. If GPA was below 2.75, an interview may be requested.

Submit the graduate application along with a current resume, a one-page personal goals statement, an undergraduate transcript, and the non-refundable application fee.

Degree Requirements

Core Courses (12 crs.)

- SOC 550 - Leadership Theory and Practice Credits: 3
- SOC 560 - Leadership, Change, and Innovation Credits: 3
- PLS 501 - Organizational Theory and Behavior Credits: 3
- PLS 601 - Research Methods Credits: 3 or
- COM 520 - Strategic Communication Research Credits: 3

Capstone Experience (6 crs.)
All students must fulfill the capstone experience that requires completion of a 3-credit internship in some administrative capacity within their concentration area. The internship is ideally taken simultaneously with the Applied Leadership and Organizational Analysis course where students will complete an organizational analysis project. It is recommended after 18-21 crs.

- SOC 570 - Applied Organizational and Leadership Analysis Credits: 3
- SOC 609 - Sociology Graduate Internship Credits: 3
- (Internship within concentration area)

Management Information Systems

- ISS 515 - Information Systems Project Management Credits: 3
- ISS 550 - Database Design Credits: 3
- ISS 561 - Business Security Credits: 3
- ISS 570 - Information Analysis Credits: 3
- MBA 547 - Management Information Systems and Applications Credits: 3

Organizational Development and Leadership, Public Organizations Concentration, M.S.

The Organizational Development and Leadership Program is designed for those students pursuing leadership positions in various career fields. Its objective is to apply the critical view of organizations from social scientific perspectives and enhance students' understanding of how organizations operate and change over time. The performance and role of leadership in formal and informal settings is an integral part of the program. In addition, students will have the opportunity to develop skills and increase their knowledge in selected discipline areas.

The Master of Science in organizational development and leadership is an interdisciplinary program that will provide students with several opportunities:

1. To learn basic principles and theories of organizational development and the role of leadership.
2. To enhance skills and knowledge in specified content areas.
3. To combine theory with practical experience through an internship in the student's concentration.

Admission Requirements

Applicants must have a baccalaureate degree from an accredited college or university and have a minimum cumulative undergraduate quality point average of 2.75. If GPA was below 2.75, an interview may be requested.

Submit the graduate application along with a current resume, a one-page personal goals statement, an undergraduate transcript, and the non-refundable application fee.

Degree Requirements

Core Courses (12 crs.)

- SOC 550 - Leadership Theory and Practice Credits: 3
- SOC 560 - Leadership, Change, and Innovation Credits: 3
Capstone Experience (6 crs.)

All students must fulfill the capstone experience that requires completion of a 3-credit internship in some administrative capacity within their concentration area. The internship is ideally taken simultaneously with the Applied Leadership and Organizational Analysis course where students will complete an organizational analysis project. It is recommended after 18-21 crs.

- SOC 570 - Applied Organizational and Leadership Analysis Credits: 3
- SOC 609 - Sociology Graduate Internship Credits: 3
  (Internship within concentration area)

Public Organizations

- PLS 431 - Pennsylvania Local Government Credits: 3
- PLS 491 - Selected Topics in Political Science Credits: 3
- PLS 502 - Human Resources Management Credits: 3
- PLS 503 - Public Budgeting and Financial Management Credits: 3
- PLS 504 - Ethics for Public Service Managers Credits: 3
- PLS 512 - Intergovernmental Relations Credits: 3
- PLS 522 - Advocacy in Public Administration Credits: 3
- PLS 523 - Communication for the Public Manager Credits: 3
- PLS 561 - Administrative Law Credits: 3
- PLS 591 - Selected Topics in Political Science Credits: 3
- PLS 603 - Public Policy Analysis and Program Evaluation Credits: 3
- Other courses as directed in consultation with the ODL advisor.

Certificate

Leadership Certificate

This 9 credit certificate program is targeted to working adult learners who want short term leadership skill building from a recognized, accredited and local university; it can be a path to a graduate degree. The certificate combines 2 core classes from the ODL master's program with one elective from the Leadership in Society concentration, which offers a diverse selection of courses to meet learners' interests.

Required Courses (6 crs.)

- SOC 550 - Leadership Theory and Practice Credits: 3
- SOC 560 - Leadership, Change, and Innovation Credits: 3

Electives (3 crs.)
• SOC 435 - Gender, Organizations, and Leadership Credits: 3
• SOC 440 - Global Leadership for Global Society Credits: 3
• SOC 445 - Sexuality and Sexual Orientation: A Social Approach Credits: 3
• COM 505 - Foundations of Strategic Communication Credits: 3
• COM 506 - Public Relations Strategies Credits: 3
• COM 570 - Fund Raising and Association Public Relations Credits: 3
• PLS 504 - Ethics for Public Service Managers Credits: 3
• PLS 522 - Advocacy in Public Administration Credits: 3
• PLS 523 - Communication for the Public Manager Credits: 3

Note:

The third class is to be a graduate elective from Leadership in Society concentration list in ODL master's program; other courses with approval of ODL program director.

John L. Grove College of Business

John G. Kooti, Ph.D., Dean, John L. Grove College of Business (717) 477-1435
Adam Powell, Ph. D., Interim Associate Dean, John L. Grove College of Business (717) 477-1620
William Oberman, Ph.D., Interim MBA Director (717) 477-1483

Amir Aminisedeh, Ph.D., Management
Joseph Beck, Ph.D., Management
Jerry Carbo, Ph.D., Management
Joseph Catanio, Ph.D., Management Information System
Sunhee Choi, Ph.D., Marketing
Michael Coolsen, Ph.D., Marketing
Viet Dao, Ph.D., Management Information Systems
David Hwang, Ph.D., Supply Chain Management
Ian Langella, Ph.D., Supply Chain Management
Yucong Liu, Ph.D, Management Information Systems
Robert Neidigh, Ph.D., Supply Chain Management
William Oberman, Ph.D., Management
Dung Pham, Ph.D., Finance
Edward Pitingolo, Ph.D., Accounting
Robert Setaputra, Ph.D., Supply Chain Management
Robert Stephens, Ph.D., Management
Business Administration Department

Master of Business Administration

Business Administration, M.B.A.

The John L. Grove College of Business is accredited by AACSB International, which certifies the quality of the curriculum, faculty, and support services. The Ship MBA program offers high quality and outstanding value with courses taught by highly qualified faculty, who will help you develop the knowledge and skills you need to succeed in a rapidly changing global economy. Our graduate students find the Ship MBA convenient, reputable, and affordable.

The program consists of ten courses (30 credits), which includes a choice of seven out of eight core courses, two elective courses and a capstone course. The core courses cover critical elements of business management in today's technologically advanced and global business environment. The course sequence is flexible, as most core courses do not have prerequisites beyond the basic requirements to enter the MBA program.

Ship delivers its MBA degree program in three convenient formats: 100% online asynchronous with an optional synchronous component, 100% online with required synchronous class attendance, and face-to-face class attendance with an asynchronous online component. The requirements are the same in each of the three delivery formats.

Part-time or Full-Time

The Ship MBA is a flexible program designed to accommodate the needs of both working professionals and full-time students. Students can complete the program part-time in two years, taking two classes per semester. Full-time students can complete the program in as little as one calendar year, taking four classes per semester. Classes are offered in convenient, accelerated 8-week sessions as well as 6-week summer terms and a 5-week winter term. Most part-time students choose to take only one class in any given session or term, thus allowing for more concentrated study of each topic.

Some exams may be proctored and require students to arrange an appointment at an approved proctoring site at a location convenient to them.

Admission Requirements

Undergraduate coursework and degree, relevant work experience, and essay will be evaluated and form the basis for admission. To be eligible for admission to the MBA program applicants must:

- Have a baccalaureate degree from a regionally accredited college or university.
- Present a current resume.
- Present a goals statement.

In addition, applicants are required to meet the following prerequisites:

- Work experience or undergraduate credits in:
- Quantitative analysis,
- Computer usage, and
- Oral and written communications
These areas are covered in the following courses offered at Shippensburg University:

ENG 114 Writing Intensive First-Year Seminar
SCM 200 Statistical Applications in Business
MIS 142 Business Computer Systems
HCS 100 Human Communication Studies

Business Administration (MBA) - Foundation Courses

Foundation Courses (may be waived based on completed undergraduate coursework). Note: All foundation courses are offered only in a 100% online format.

- BSN 519 - Essentials of Information Systems Credits: 2
- BSN 520 - Essentials of Economics for Business Administration Credits: 2
- BSN 511 - Essentials of Business Operations and Analysis Credits: 4
- BSN 521 - Essentials of Accounting Credits: 2
- BSN 530 - Essentials of Finance Credits: 2
- BSN 531 - Essentials of Organizational Behavior Credits: 2
- BSN 534 - Essentials of Marketing Credits: 2

Business Administration (MBA) - Core and Capstone Courses

Core Courses (21 crs.)

Students must complete any seven of the following eight courses.

- MBA 502 - Managerial Accounting Credits: 3
- MBA 529 - Corporate Financial Management Credits: 3
- MBA 548 - IT Management and Innovation Credits: 3
- MBA 554 - International Business Credits: 3
- MBA 556 - Organizational Leadership Credits: 3
- MBA 565 - Contemporary Decision Making Credits: 3
- MBA 570 - Marketing Management Credits: 3
- MBA 577 - Supply Chain Management Credits: 3

Capstone Course (all students must complete this course)

- MBA 593 - Strategic Management Credits: 3
  Note: Students must complete at least four core courses before taking Strategic Management. It is highly recommended that students complete both MBA 502 and MBA 529 before taking MBA 593.

Elective Courses (6 crs.)

Students must complete any two elective courses (6 crs.) to graduate with the general MBA.

- MBA 506 - Data Mining for Predictive Analytics I Credits: 3
• MBA 507 - Data Mining for Predictive Analytics II Credits: 3
• MBA 511 - Marketing Analytics Credits: 3
• MBA 532 - Marketing Research Credits: 3
• MBA 533 - Business Operations and Logistics Planning Credits: 3
• MBA 534 - Buyer Behavior Credits: 3
• MBA 547 - Management Information Systems and Applications Credits: 3
• MBA 550 - European Business Environment Credits: 3
• MBA 552 - Entrepreneurship Credits: 3
• MBA 557 - Negotiation Credits: 3
• MBA 558 - Ethics and Sustainability Credits: 3
• MBA 559 - The Practical, Legal, Ethical and Strategic Implications of Employment and Labor Regulation Credits: 3
• MBA 571 - International Marketing Management Credits: 3
• MBA 575 - Global Supply Chain Management Credits: 3
• MBA 581 - Health Care Financial Management Credits: 3
• MBA 582 - Health Information Technology Credits: 3
• MBA 583 - Health Care Law Credits: 3
• MBA 584 - Health Care Strategic Management Credits: 3
• MBA 590 - Selected Topics in Master Business Administration Credits: 1-3
• MBA 591 - Selected Topics in Master Business Administration Credits: 3
• MBA 594 - Selected Topics in Master Business Administration Credits: 3
• MBA 595 - Selected Topics in Master Business Administration Credits: 3
• MBA 596 - Business Practicum Credits: 3
• MBA 597 - Selected Topics in Master Business Administration Credits: 3
• MBA 599 - Independent Study in Master Business Administration Credits: 3
• FIN 512 - Investment Analysis Credits: 3
• FIN 520 - Financial Risk Management Credits: 3
• FIN 525 - Multinational Business Finance Credits: 3
• FIN 533 - Applied Financial Analysis Credits: 3
• ISS 515 - Information Systems Project Management Credits: 3
• ISS 550 - Database Design Credits: 3
• ISS 570 - Information Analysis Credits: 3
• SCM 510 - Logistics and Transportation Management Credits: 3
• SCM 515 - Procurement Management Credits: 3
• SCM 555 - Supply Chain Quality Management Credits: 3
• SCM 570 - Supply Chain Management Theory and Practice Credits: 3
• SCM 590 - Warehousing and Distribution Management Credits: 3

Note:

Other Electives from Arts and Science and Education (pending approval of MBA Director)

**Business Administration, Accounting, M.B.A.**

The MBA with an Accounting Concentration is a 30-credit option that is delivered in hybrid format in Harrisburg and Shippensburg.
The John L. Grove College of Business is accredited by AACSB International, which certifies the quality of the curriculum, faculty, and support services. The Ship MBA program offers high quality and outstanding value with courses taught by highly qualified faculty, who will help you develop the knowledge and skills you need to succeed in a rapidly changing global economy. Our graduate students find the Ship MBA convenient, reputable, and affordable.

The program consists of ten courses (30 credits), which includes, six core courses, three concentration courses and a capstone course. The core courses cover critical elements of business management in today's technologically advanced and global business environment. The course sequence is flexible, as most core courses do not have prerequisites beyond the basic requirements to enter the MBA program.

Ship delivers its MBA degree program in three convenient formats: 100% online asynchronous with an optional synchronous component, 100% online with required synchronous class attendance, and face-to-face class attendance with an asynchronous online component. The requirements are the same in each of the three delivery formats.

Part-time or Full-time

The Ship MBA is a flexible program designed to accommodate the needs of both working professionals and full-time students. Students can complete the program part-time in two years, taking two classes per semester. Full-time students can complete the program in as little as one calendar year, taking four classes per semester. Classes are offered in convenient, accelerated 8-week sessions as well as 6-week summer terms and a 5-week winter term. Most part-time students choose to take only one class in any given session or term, thus allowing for more concentrated study of each topic.

Some exams may be proctored and require students to arrange an appointment at an approved proctoring site at a location convenient to them.

Admission Requirements

Undergraduate coursework and degree, relevant work experience, and essay will be evaluated and form the basis for admission. To be eligible for admission to the MBA program applicants must:

- Have a baccalaureate degree from a regionally accredited college or university.
- Present a current resume.
- Present a goals statement.

In addition, applicants are required to meet the following prerequisites:

- Work experience or undergraduate credits in:
  - Quantitative analysis,
  - Computer usage,
  - Oral and written communications.

These areas are covered in the following courses offered at Shippensburg University:

- ENG 114 Writing Intensive First-Year Seminar
- SCM 200 Statistical Applications in Business
- MIS 142 Business Computer Systems
- HCS 100 Human Communication Studies

Business Administration (MBA) - Foundation Courses
Foundation Courses (may be waived based on completed undergraduate coursework). Note: All foundation courses are offered only in a 100% online format.

- BSN 519 - Essentials of Information Systems Credits: 2
- BSN 520 - Essentials of Economics for Business Administration Credits: 2
- BSN 511 - Essentials of Business Operations and Analysis Credits: 4
- BSN 521 - Essentials of Accounting Credits: 2
- BSN 530 - Essentials of Finance Credits: 2
- BSN 531 - Essentials of Organizational Behavior Credits: 2
- BSN 534 - Essentials of Marketing Credits: 2

Core Courses (18 crs.)

- MBA 529 - Corporate Financial Management Credits: 3
- MBA 548 - IT Management and Innovation Credits: 3
- MBA 556 - Organizational Leadership Credits: 3
- MBA 565 - Contemporary Decision Making Credits: 3
- MBA 570 - Marketing Management Credits: 3
- MBA 577 - Supply Chain Management Credits: 3

Capstone Course (all students must complete this course)

- MBA 593 - Strategic Management Credits: 3
  Note: Students must complete at least four core courses before taking Strategic Management. It is highly recommended that students complete both MBA 502 and MBA 529 before taking MBA 593.

Concentration Requirements (9 crs.)

- MBA 502 - Managerial Accounting Credits: 3
- ACC 511 - Financial Accounting Topics Credits: 3
- ACC 512 - Controllership Credits: 3

Business Administration, Business Analytics, M.B.A.

Whether you are ready to advance your career, start your own business, or become a leader within a corporation, Shippensburg University can prepare you for achieving your personal and professional goals. Shippensburg University's John L. Grove College of Business offers you AACSB-accredited programs to help you to succeed in a rapidly changing global economy.

The program consists of twelve courses (36 credits), which includes a choice of seven out of eight core courses, four concentration courses and a capstone course. The core courses cover critical elements of business management in today's technologically advanced and global business environment. The course sequence is flexible, as most core courses do not have prerequisites beyond the basic requirements to enter the MBA program.

Ship delivers its MBA degree program in three convenient formats: 100% online asynchronous with an optional synchronous component, 100% online with required synchronous class attendance, and face-to-face class attendance with an asynchronous online component. The requirements are the same in each of the three delivery formats.
Part-time or Full-time

The Ship MBA is a flexible program designed to accommodate the needs of both working professionals and full-time students. Students can complete the program part-time in two years, taking two classes per semester. Full-time students can complete the program in as little as one calendar year, taking four classes per semester. Classes are offered in convenient, accelerated 8-week sessions as well as 6-week summer terms and a 5-week winter term. Most part-time students choose to take only one class in any given session or term, thus allowing for more concentrated study of each topic.

Some exams may be proctored and require students to arrange an appointment at an approved proctoring site at a location convenient to them.

Admission Requirements

Undergraduate coursework and degree, relevant work experience, and essay will be evaluated and form the basis for admission. To be eligible for admission to the MBA program applicants must:

- Have a baccalaureate degree from a regionally accredited college or university.
- Present a current resume.
- Present a goals statement.

In addition, applicants are required to meet the following prerequisites:

- Work experience or undergraduate credits in:
  - Quantitative analysis,
  - Computer usage,
  - Oral and written communications.

These areas are covered in the following courses offered at Shippensburg University:

- ENG 114 Writing Intensive First-Year Seminar
- SCM 200 Statistical Applications in Business
- MIS 142 Business Computer Systems
- HCS 100 Human Communication Studies

Business Administration (MBA) - Foundation Courses

Foundation Courses (may be waived based on completed undergraduate coursework). Note: All foundation courses are offered only in a 100% online format.

- BSN 519 - Essentials of Information Systems Credits: 2
- BSN 520 - Essentials of Economics for Business Administration Credits: 2
- BSN 511 - Essentials of Business Operations and Analysis Credits: 4
- BSN 521 - Essentials of Accounting Credits: 2
- BSN 530 - Essentials of Finance Credits: 2
- BSN 531 - Essentials of Organizational Behavior Credits: 2
- BSN 534 - Essentials of Marketing Credits: 2

Business Administration (MBA) - Core and Capstone Courses
Core Courses (21 crs.)

Students must complete any seven of the following eight courses.

- MBA 502 - Managerial Accounting Credits: 3
- MBA 529 - Corporate Financial Management Credits: 3
- MBA 548 - IT Management and Innovation Credits: 3
- MBA 554 - International Business Credits: 3
- MBA 556 - Organizational Leadership Credits: 3
- MBA 565 - Contemporary Decision Making Credits: 3
- MBA 570 - Marketing Management Credits: 3
- MBA 577 - Supply Chain Management Credits: 3

Capstone Course (all students must complete this course)

- MBA 593 - Strategic Management Credits: 3

Note: Students must complete at least four core courses before taking Strategic Management. It is highly recommended that students complete both MBA 502 and MBA 529 before taking MBA 593.

Concentration Requirements (12 crs.)

- MBA 506 - Data Mining for Predictive Analytics I Credits: 3
- MBA 507 - Data Mining for Predictive Analytics II Credits: 3
- MBA 511 - Marketing Analytics Credits: 3
- ISS 550 - Database Design Credits: 3

Business Administration, Finance Concentration, M.B.A.

The MBA with Finance concentration is a 36-credit option that is delivered in a 100 percent online format and is available to all MBA students regardless of location or track selection.

The John L. Grove College of Business is accredited by AACSB International, which certifies the quality of the curriculum, faculty, and support services. The Ship MBA program offers high quality and outstanding value with courses taught by highly qualified faculty, who will help you develop the knowledge and skills you need to succeed in a rapidly changing global economy. Our graduate students find the Ship MBA convenient, reputable, and affordable.

The program consists of twelve courses (36 credits), which includes a choice of seven out of eight core courses, four concentration courses and a capstone course. The core courses cover critical elements of business management in today's technologically advanced and global business environment. The course sequence is flexible, as most core courses do not have prerequisites beyond the basic requirements to enter the MBA program.

Ship delivers its MBA degree program in three convenient formats: 100% online asynchronous with an optional synchronous component, 100% online with required synchronous class attendance, and face-to-face class attendance with an asynchronous online component. The requirements are the same in each of the three delivery formats.

Part-time or Full-time
The Ship MBA is a flexible program designed to accommodate the needs of both working professionals and full-time students. Students can complete the program part-time in two years, taking two classes per semester. Full-time students can complete the program in as little as one calendar year, taking four classes per semester. Classes are offered in convenient, accelerated 8-week sessions as well as 6-week summer terms and a 5-week winter term. Most part-time students choose to take only one class in any given session or term, thus allowing for more concentrated study of each topic.

Some exams may be proctored and require students to arrange an appointment at an approved proctoring site at a location convenient to them.

**Admission Requirements**

Undergraduate coursework and degree, relevant work experience, and essay will be evaluated and form the basis for admission. To be eligible for admission to the MBA program applicants must:

- Have a baccalaureate degree from a regionally accredited college or university.
- Present a current resume.
- Present a goals statement.

In addition, applicants are required to meet the following prerequisites:

- Work experience or undergraduate credits in:
  - Quantitative analysis,
  - Computer usage, and
  - Oral and written communications

These areas are covered in the following courses offered at Shippensburg University:

ENG 114 Writing Intensive First-Year Seminar

SCM 200 Statistical Applications in Business

MIS 142 Business Computer Systems

HCS 100 Human Communication Studies

**Business Administration (MBA) - Foundation Courses**

Foundation Courses (may be waived based on completed undergraduate coursework). Note: All foundation courses are offered only in a 100% online format.

- BSN 519 - Essentials of Information Systems Credits: 2
- BSN 520 - Essentials of Economics for Business Administration Credits: 2
- BSN 511 - Essentials of Business Operations and Analysis Credits: 4
- BSN 521 - Essentials of Accounting Credits: 2
- BSN 530 - Essentials of Finance Credits: 2
- BSN 531 - Essentials of Organizational Behavior Credits: 2
- BSN 534 - Essentials of Marketing Credits: 2

**Business Administration (MBA) - Core and Capstone Courses**

Core Courses (21 crs.)
Students must complete any seven of the following eight courses.

- MBA 502 - Managerial Accounting Credits: 3
- MBA 529 - Corporate Financial Management Credits: 3
- MBA 548 - IT Management and Innovation Credits: 3
- MBA 554 - International Business Credits: 3
- MBA 556 - Organizational Leadership Credits: 3
- MBA 565 - Contemporary Decision Making Credits: 3
- MBA 570 - Marketing Management Credits: 3
- MBA 577 - Supply Chain Management Credits: 3

Capstone Course (all students must complete this course)

- MBA 593 - Strategic Management Credits: 3
  
  Note: Students must complete at least four core courses before taking Strategic Management. It is highly recommended that students complete both MBA 502 and MBA 529 before taking MBA 593.

Concentration Requirements (12 crs.)

Before taking any of the finance concentration courses, students must first complete the core courses MBA 529 Corporate Financial Management and MBA 502 Managerial Accounting. All Finance concentration courses are offered only in a 100 percent online format.

- FIN 512 - Investment Analysis Credits: 3
- FIN 520 - Financial Risk Management Credits: 3
- FIN 525 - Multinational Business Finance Credits: 3
- FIN 533 - Applied Financial Analysis Credits: 3

Business Administration, Health Care Management Concentration, M.B.A.

The MBA with Health Care Management concentration is a 36-credit option.

The John L. Grove College of Business is accredited by AACSB International, which certifies the quality of the curriculum, faculty, and support services. The Ship MBA program offers high quality and outstanding value with courses taught by highly qualified faculty, who will help you develop the knowledge and skills you need to succeed in a rapidly changing global economy. Our graduate students find the Ship MBA convenient, reputable, and affordable.

The program consists of twelve courses (36 credits), which includes a choice of seven out of eight core courses, four concentration courses and a capstone course. The core courses cover critical elements of business management in today's technologically advanced and global business environment. The course sequence is flexible, as most core courses do not have prerequisites beyond the basic requirements to enter the MBA program.

Ship delivers its MBA degree program in three convenient formats: 100% online asynchronous with an optional synchronous component, 100% online with required synchronous class attendance, and face-to-face class attendance with an asynchronous online component. The requirements are the same in each of the three delivery formats.

Part-time or Full-time
The Ship MBA is a flexible program designed to accommodate the needs of both working professionals and full-time students. Students can complete the program part-time in two years, taking two classes per semester. Full-time students can complete the program in as little as one calendar year, taking four classes per semester. Classes are offered in convenient, accelerated 8-week sessions as well as 6-week summer terms and a 5-week winter term. Most part-time students choose to take only one class in any given session or term, thus allowing for more concentrated study of each topic.

Some exams may be proctored and require students to arrange an appointment at an approved proctoring site at a location convenient to them.

Admission Requirements

Undergraduate coursework and degree, relevant work experience, and essay will be evaluated and form the basis for admission. To be eligible for admission to the MBA program applicants must:

- Have a baccalaureate degree from a regionally accredited college or university.
- Present a current resume.
- Present a goals statement.

In addition, applicants are required to meet the following prerequisites:

- Work experience or undergraduate credits in:
  - Quantitative analysis,
  - Computer usage, and
  - Oral and written communications

These areas are covered in the following courses offered at Shippensburg University:

- ENG 114 Writing Intensive First-Year Seminar
- SCM 200 Statistical Applications in Business
- MIS 142 Business Computer Systems
- HCS 100 Human Communication Studies

Business Administration (MBA) - Foundation Courses

Foundation Courses (may be waived based on completed undergraduate coursework). Note: All foundation courses are offered only in a 100% online format.

- BSN 519 - Essentials of Information Systems Credits: 2
- BSN 520 - Essentials of Economics for Business Administration Credits: 2
- BSN 511 - Essentials of Business Operations and Analysis Credits: 4
- BSN 521 - Essentials of Accounting Credits: 2
- BSN 530 - Essentials of Finance Credits: 2
- BSN 531 - Essentials of Organizational Behavior Credits: 2
- BSN 534 - Essentials of Marketing Credits: 2

Business Administration (MBA) - Core and Capstone Courses
Core Courses (21 crs.)

Students must complete any seven of the following eight courses.

- MBA 502 - Managerial Accounting Credits: 3
- MBA 529 - Corporate Financial Management Credits: 3
- MBA 548 - IT Management and Innovation Credits: 3
- MBA 554 - International Business Credits: 3
- MBA 556 - Organizational Leadership Credits: 3
- MBA 565 - Contemporary Decision Making Credits: 3
- MBA 570 - Marketing Management Credits: 3
- MBA 577 - Supply Chain Management Credits: 3

Capstone Course (all students must complete this course)

- MBA 593 - Strategic Management Credits: 3
  Note: Students must complete at least four core courses before taking Strategic Management. It is highly recommended that students complete both MBA 502 and MBA 529 before taking MBA 593.

Concentration Requirements

- MBA 581 - Health Care Financial Management Credits: 3
- MBA 582 - Health Information Technology Credits: 3
- MBA 583 - Health Care Law Credits: 3
- MBA 584 - Health Care Strategic Management Credits: 3

Note:

All foundation courses requirements must be completed before taking any of the Health Care concentration courses.

Business Administration, Management Information Systems Concentration, M.B.A.

The MBA with Management Information Systems Concentration is a 36-credit option that is delivered in hybrid format in Harrisburg and Shippensburg.

The John L. Grove College of Business is accredited by AACSB International, which certifies the quality of the curriculum, faculty, and support services. The Ship MBA program offers high quality and outstanding value with courses taught by highly qualified faculty, who will help you develop the knowledge and skills you need to succeed in a rapidly changing global economy. Our graduate students find the Ship MBA convenient, reputable, and affordable.

The program consists of twelve courses (36 credits), which includes a choice of seven out of eight core courses, four concentration courses and a capstone course. The core courses cover critical elements of business management in today's technologically advanced and global business environment. The course sequence is flexible, as most core courses do not have prerequisites beyond the basic requirements to enter the MBA program.
Ship delivers its MBA degree program in three convenient formats: 100% online asynchronous with an optional synchronous component, 100% online with required synchronous class attendance, and face-to-face class attendance with an asynchronous online component. The requirements are the same in each of the three delivery formats.

**Part-time or Full-time**

The Ship MBA is a flexible program designed to accommodate the needs of both working professionals and full-time students. Students can complete the program part-time in two years, taking two classes per semester. Full-time students can complete the program in as little as one calendar year, taking four classes per semester. Classes are offered in convenient, accelerated 8-week sessions as well as 6-week summer terms and a 5-week winter term. Most part-time students choose to take only one class in any given session or term, thus allowing for more concentrated study of each topic.

Some exams may be proctored and require students to arrange an appointment at an approved proctoring site at a location convenient to them.

**Admission Requirements**

Undergraduate coursework and degree, relevant work experience, and essay will be evaluated and form the basis for admission. To be eligible for admission to the MBA program applicants must:

- Have a baccalaureate degree from a regionally accredited college or university.
- Present a current resume.
- Present a goals statement.

In addition, applicants are required to meet the following prerequisites:

- Work experience or undergraduate credits in:
  - Quantitative analysis,
  - Computer usage, and
  - Oral and written communications

These areas are covered in the following courses offered at Shippensburg University:

ENG 114 Writing Intensive First-Year Seminar

SCM 200 Statistical Applications in Business

MIS 142 Business Computer Systems

HCS 100 Human Communication Studies

**Business Administration (MBA) - Foundation Courses**

Foundation Courses (may be waived based on completed undergraduate coursework). Note: All foundation courses are offered only in a 100% online format.

- BSN 519 - Essentials of Information Systems Credits: 2
- BSN 520 - Essentials of Economics for Business Administration Credits: 2
- BSN 511 - Essentials of Business Operations and Analysis Credits: 4
- BSN 521 - Essentials of Accounting Credits: 2
- BSN 530 - Essentials of Finance Credits: 2
Business Administration (MBA) - Core and Capstone Courses

Core Courses (21 crs.)

Students must complete any seven of the following eight courses.

- MBA 502 - Managerial Accounting Credits: 3
- MBA 529 - Corporate Financial Management Credits: 3
- MBA 548 - IT Management and Innovation Credits: 3
- MBA 554 - International Business Credits: 3
- MBA 556 - Organizational Leadership Credits: 3
- MBA 565 - Contemporary Decision Making Credits: 3
- MBA 570 - Marketing Management Credits: 3
- MBA 577 - Supply Chain Management Credits: 3

Capstone Course (all students must complete this course)

- MBA 593 - Strategic Management Credits: 3
  Note: Students must complete at least four core courses before taking Strategic Management. It is highly recommended that students complete both MBA 502 and MBA 529 before taking MBA 593.

Concentration Requirements (12 crs.)

Students take the eight required MBA core courses (24 crs.) plus four management information systems courses (12 crs.). It is recommended that students also complete MBA 548 as a core course choice. All MIS concentration courses are offered only in a 50 percent face-to-face/50 percent online hybrid format. The MIS concentration is not available to 100 percent online students.

- ISS 515 - Information Systems Project Management Credits: 3
- ISS 550 - Database Design Credits: 3
- ISS 570 - Information Analysis Credits: 3
- MBA 547 - Management Information Systems and Applications Credits: 3

Business Administration, Supply Chain Management Concentration, M.B.A.

The MBA with Supply Chain Management concentration is a 36-credit option that is delivered in a 100 percent online format and is available to all MBA students regardless of location or track selection.

The John L. Grove College of Business is accredited by AACSB International, which certifies the quality of the curriculum, faculty, and support services. The Ship MBA program offers high quality and outstanding value with courses taught by highly qualified faculty, who will help you develop the knowledge and skills you need to succeed in a rapidly changing global economy. Our graduate students find the Ship MBA convenient, reputable, and affordable.
The program consists of twelve courses (36 credits), which includes a choice of seven out of eight core courses, four out of five concentration courses and the capstone course. The core courses cover critical elements of business management in today's technologically advanced and global business environment. The course sequence is flexible, as most core courses do not have prerequisites beyond the basic requirements to enter the MBA program.

Ship delivers its MBA degree program in three convenient formats: 100% online asynchronous with an optional synchronous component, 100% online with required synchronous class attendance, and face-to-face class attendance with an asynchronous online component. The requirements are the same in each of the three delivery formats.

**Part-time or Full-time**

The Ship MBA is a flexible program designed to accommodate the needs of both working professionals and full-time students. Students can complete the program part-time in two years, taking two classes per semester. Full-time students can complete the program in as little as one calendar year, taking four classes per semester. Classes are offered in convenient, accelerated 8-week sessions as well as 6-week summer terms and a 5-week winter term. Most part-time students choose to take only one class in any given session or term, thus allowing for more concentrated study of each topic.

Some exams may be proctored and require students to arrange an appointment at an approved proctoring site at a location convenient to them.

**Admission Requirements**

Undergraduate coursework and degree, relevant work experience, and essay will be evaluated and form the basis for admission. To be eligible for admission to the MBA program applicants must:

- Have a baccalaureate degree from a regionally accredited college or university.
- Present a current resume.
- Present a goals statement.

In addition, applicants are required to meet the following prerequisites:

- Work experience or undergraduate credits in:
  - Quantitative analysis,
  - Computer usage, and
  - Oral and written communications

These areas are covered in the following courses offered at Shippensburg University:

ENG 114 Writing Intensive First-Year Seminar
SCM 200 Statistical Applications in Business
MIS 142 Business Computer Systems
HCS 100 Human Communication Studies

**Business Administration (MBA) - Foundation Courses**

Foundation Courses (may be waived based on completed undergraduate coursework). Note: All foundation courses are offered only in a 100% online format.
Business Administration (MBA) - Core and Capstone Courses

Core Courses (21 crs.)

Students must complete any seven of the following eight courses.

- MBA 502 - Managerial Accounting Credits: 3
- MBA 529 - Corporate Financial Management Credits: 3
- MBA 548 - IT Management and Innovation Credits: 3
- MBA 554 - International Business Credits: 3
- MBA 556 - Organizational Leadership Credits: 3
- MBA 565 - Contemporary Decision Making Credits: 3
- MBA 570 - Marketing Management Credits: 3
- MBA 577 - Supply Chain Management Credits: 3

Capstone Course (all students must complete this course)

- MBA 593 - Strategic Management Credits: 3

Note: Students must complete at least four core courses before taking Strategic Management. It is highly recommended that students complete both MBA 502 and MBA 529 before taking MBA 593.

Concentration Requirements (12 crs.)

Students take the eight required MBA core courses (24 crs.) plus four supply chain specific courses (12 crs.). It is recommended that students pursuing the Supply Chain Management concentration also complete MBA 577 as a core course choice. All Supply Chain Management concentration course are offered only in a 100 percent online format.

- SCM 510 - Logistics and Transportation Management Credits: 3
- SCM 515 - Procurement Management Credits: 3
- SCM 555 - Supply Chain Quality Management Credits: 3
- SCM 570 - Supply Chain Management Theory and Practice Credits: 3
- SCM 590 - Warehousing and Distribution Management Credits: 3

Note:

For more information contact: (717) 477-1483; mba@ship.edu.

Certificate
Advanced Studies in Business Certificate

The Certificate of Advanced Studies in Business allows professionals from various backgrounds to learn how management principles can be applied in any business or organization. Professionals will take the 16 credits listed that teach the essentials of business management and cover such topics as financial and operations management, employee and customer relations, external economic environment, and strategic direction and leadership.

These courses will also meet the needs of professionals who wish to earn an MBA but lack the necessary course prerequisites. A 16-credit program designed for working professionals who have an undergraduate degree in an area other than business and wish to gain business knowledge for personal or career advancement.

Each course is:

- Limited to 20-25 students
- 100 percent distance education: 50 percent video-conferencing and 50 percent online.

Admission Requirements

Applicants must:

- Have a bachelor's degree from an accredited institution.
- Submit a completed application.
- Have official undergraduate and graduate (if applicable) transcripts sent to Shippensburg University.

Registration

For registration information please go to http://www.ship.edu/PCDE/Registration_Information/

For tuition information please go to http://www.ship.edu/Student_Accounts.

If you are receiving financial assistance from your employer to pay your tuition and/or fees, please be sure to review and complete the necessary form at: https://www.ship.edu/Student_Accounts/Forms.

Degree Requirements (16 crs)

- BSN 519 - Essentials of Information Systems Credits: 2
- BSN 520 - Essentials of Economics for Business Administration Credits: 2
- BSN 511 - Essentials of Business Operations and Analysis Credits: 4
- BSN 521 - Essentials of Accounting Credits: 2
- BSN 530 - Essentials of Finance Credits: 2
- BSN 531 - Essentials of Organizational Behavior Credits: 2
- BSN 534 - Essentials of Marketing Credits: 2

MBA Option

Option to transfer to MBA program:
Business Analytics Certificate

Graduate Certificate | Online & In-Class Participation

Whether you are ready to advance your career, start your own business, or become a leader within a corporation, Shippensburg University can prepare you for achieving your personal and professional goals. Shippensburg University's John L. Grove College of Business offers you AACSB-accredited programs to help you to succeed in a rapidly changing global economy.

The 12-credit graduate certificate program is blended with online and in-class participation. Courses are offered once each calendar year, so you can easily complete the certificate in one year.

Please note: the Business Analytics courses can be applied to the MBA program as a concentration. For more information, visit ShipMBA Program.

Program Outcomes

Students completing this certificate will develop skills in data mining, data visualization, and will be able to search through large data sets and develop predictive models. They will be able to use tools such as spreadsheets, statistical analysis software, and databases to manage and analyze large data sets. They will also develop skills to enable interaction with other organizational personnel specializing in analytics.

Course Information & Registration

For more information on course scheduling and registration, please see www.ship.edu/PCDE/Registration_Information/

• MBA 506 Data Mining for Predictive Analytics I (Summer A 2018, Online)
• MBA 507 Data Mining for Predictive Analytics II (Summer B 2018, Online)
• MBA 511 Marketing Analytics (Winter 2017, Online)
• ISS 550 Database Design (Fall 2017, Available at Ship)

Course Descriptions

MBA 506 Data Mining for Predictive Analytics

3 credits, Online  |  Professor / Instructor: Dr. Robert O. Neidigh
This course covers the basic concepts of data mining and introduces students to the data mining process. The students will learn data reduction, exploration, and visualization. The primary emphasis of the course will be using the data for
predictive modeling. Time series forecasting methods are introduced. Students will use large data sets to build models in XLMiner.

After course completion, you will be able to:

- Construct charts and heatmaps to visualize data
- Manipulate categorical variables for dimension reduction
- Select variables to include in multiple linear regression
- Use ensembles to boost predictive power
- Construct time series forecasts including trends and smoothing methods
- Use XLMiner to search through large data sets and develop predictive models

MBA 507 Data Mining for Predictive Analytics II

3 credits, Online | Professor / Instructor: David Hwang, Ph.D., MBA, MS

This course is a second level course in managerial data analysis and data mining. The emphasis is on understanding the application of a wide range of modern techniques to specific decision-making situations, rather than on mastering the theoretical underpinnings of the techniques. Upon successful completion of the course, you should possess valuable practical analytical skills that will equip you with a competitive edge in almost any contemporary workplace. The course covers methods that are aimed at prediction evaluation, classification, association rules, and clustering. It also introduces cutting edge interactive data-visualization tools, as well as data reduction techniques. Students will use large data sets to build models in XLMiner.

- Understand second level statistical and data mining techniques
- Understand the uses and limitations of various techniques
- Implement major techniques using Excel add-ins and improve spreadsheet skills
- Become smart/skeptical consumers of statistical and data mining techniques
- Enable interaction with personnel specializing in analytics

MBA 511 Marketing Analytics

3 credits, Online | Professor / Instructor: Dr. Michael K. Coolsen

This course is designed to expose MBA students to the use of analytics in marketing strategy decision-making. Understanding the marketplace has now become an intense data-driven process, as many global companies have increasingly shifted their priorities in measuring strategic effectiveness to combine traditional marketing research efforts (e.g., descriptive survey analysis and focus groups) with advanced data science practices and marketing dashboard analytics.

After course completion, you will be able to:

- Expose and facilitate understanding of how companies can use data to create analytics that drive marketing strategy decision
- Understand how linear regression, logistic regression, and cluster analysis are conducted to create marketing dashboard analytic
- Use real-life cases and their respective data to learn how to create three aspects of marketing analytics: statistical analysis, experiments, and managerial intuition

ISS550 Database Design

3 credits, Online & face-to-face class component | Professor / Instructor: Azim Danesh, Ph.D.

This course is designed for students to learn the fundamentals of a database environment and address data and information management issues in a global multi-user business environment. Students will develop an understanding of the various roles within the data administration function of an organization.

Admissions
To be eligible for admission to the program, applicants must:

- Have earned a bachelor's degree from a regionally accredited institution
- Complete the graduate certificate application
- Submit official undergraduate and graduate (if applicable) transcripts documenting the earned degree

Required Courses (12 crs.)

- MBA 506 - Data Mining for Predictive Analytics I Credits: 3
- MBA 507 - Data Mining for Predictive Analytics II Credits: 3
- MBA 511 - Marketing Analytics Credits: 3
- ISS 550 - Database Design Credits: 3

Note:

Students must complete all four courses to receive the certificate. MBA 506, 507, 511 are taught 100% online. ISS 550 is taught in the evening using video-conferencing and a hybrid format.

Health Care Management Graduate Certificate

The post-baccalaureate Graduate Certificate in Health Care Management program is designed for working professionals in and out of health care industries who are in need of an in-depth education in the field for enhanced career opportunities. The program is open to individuals who have earned at least a bachelor's degree from an accredited institution and have an interest in the health care management certificate.

This program will be useful for professionals who seek to advance their knowledge in health care management either because they are currently working in the field of health care, yet have academic qualifications outside of health care, and would like a formal credential in health care to strengthen their marketability in the field or those who wish to begin a career in the field to advance their career possibilities.

The program can be completed in one to two years, by taking one to two courses per summer or winter term, depending upon students' schedule and availability. Students interested in pursuing an MBA degree at Shippensburg University can apply any two of the four health care management courses toward meeting the MBA elective requirement.

Registration

For registration information please go to http://www.ship.edu/PCDE/Registration_Information/

For tuition information please go to http://www.ship.edu/Student_Accounts.

If you are receiving financial assistance from your employer to pay your tuition and/or fees, please be sure to review and complete the necessary form at: https://www.ship.edu/Student_Accounts/Forms.

Health Care Management Certificate
Required Courses (12 crs.)

Students are required to have fundamental business knowledge prior to taking the certificate courses. Students may fulfill the requirement by taking the four MBA foundation courses (BSN 510, BSN 511, BSN 512, and BSN 513), or by having completed equivalent undergraduate courses.

- MBA 581 - Health Care Financial Management Credits: 3
- MBA 582 - Health Information Technology Credits: 3
- MBA 583 - Health Care Law Credits: 3
- MBA 584 - Health Care Strategic Management Credits: 3

Accounting/Information Systems & Analytics Department

Certificate

Management Information Systems (MIS) Graduate Certificate

The Management Information Systems Graduate Certificate is a post-bachelor's program for working professionals seeking to upgrade their management and technical skill sets to become more fluent in a technologically challenging environment.

This program is designed to meet the needs of working professionals and can be completed in one to two years, by taking one to two courses per semester, depending upon students' schedule and availability. Students may take the program at Shippensburg University or at Central Penn in Harrisburg. Videoconferencing technology links students and faculty at these two locations in real time. Approximately one-third of each course is completed online. Each class is limited to twenty-five students, allowing students to interact directly with their faculty member on a regular basis.

Students interested in pursuing an MBA degree at Shippensburg University can apply two of the concentration courses toward meeting the MBA elective requirement.

To be eligible for admission to the graduate certificate in management information systems, applicants must:

- Have a bachelor's degree from an accredited institution.
- Complete a non-degree graduate application online by following the directions posted at https://www.ship.edu/pcde/non_degree/.
- Submit official undergraduate AND graduate (if applicable) transcript.

MIS Certificate

The Management Information Systems Certificate is a 12-credit program with four required courses.

Required Courses (12 crs.)

- ISS 515 - Information Systems Project Management Credits: 3
- ISS 550 - Database Design Credits: 3
- ISS 570 - Information Analysis Credits: 3
M.A.T. with Teacher Certification

Professionals or recent college graduates who already hold a business degree and are interested in teaching business in either a middle school or high school, please refer to this program in the College of Education and Human Services.

Finance/Supply Chain Management Department

Master of Science

Supply Chain Analytics, M.S.

The John L. Grove College of Business offers a 30-credit Master of Science in Supply Chain Analytics. The program is 100% online to accommodate working professionals. This program would serve those working professionals in supply chain who want to optimize their supply chains through the use of "big data" and analytics.

The program will combine the analytical decision-making tools used in supply chain with the data analytic tools used to analyze big data to form a supply chain analytics program. The students will then have the capability of analyzing data to determine trends, forecast, and analyze performance yet also have the skills available to aide in decision making. Analytical techniques can be grouped into three categories: descriptive, predictive, and prescriptive. Our courses will provide students with the capabilities of performing each of the three.

Admission and Degree Requirements

In order to be admitted to the master program, you must have a baccalaureate degree from an accredited college or university. Applicants will be evaluated on grade point average, course content, work experience, and job level. Applicants must submit a current resume.

Core & Capstone Courses (24 crs.)

- MBA 506 - Data Mining for Predictive Analytics I Credits: 3
- MBA 507 - Data Mining for Predictive Analytics II Credits: 3
- MBA 565 - Contemporary Decision Making Credits: 3
- SCM 515 - Procurement Management Credits: 3
- SCM 555 - Supply Chain Quality Management Credits: 3
- SCM 592 - Simulation Models for Supply Chain Design Credits: 3
- SCM 595 - Demand Management Credits: 3
- SCM 598 - Corporate Applications of Supply Chain Analytics Credits: 3

Electives (6 crs.)

- MBA 533 - Business Operations and Logistics Planning Credits: 3
- MBA 575 - Global Supply Chain Management Credits: 3
- MBA 577 - Supply Chain Management Credits: 3
- SCM 510 - Logistics and Transportation Management Credits: 3
- SCM 570 - Supply Chain Management Theory and Practice Credits: 3
- SCM 590 - Warehousing and Distribution Management Credits: 3

Certificate

Advanced Supply Chain and Logistics Management Certificate

Shippensburg University offers an online program for professionals seeking to upgrade their supply chain and logistics skill sets in order to become more competitive in a global marketplace: Advanced Supply Chain and Logistics Management Certificate.

This program is offered by the Supply Chain faculty from the Department of Finance and Supply Chain Management. Shippensburg University has a long-established supply chain program, the first in Pennsylvania's System of Higher Education and one of the first in Pennsylvania. Our faculty are both expert teachers and publishing scientists, ensuring that the program contains cutting-edge knowledge in the craft and delivered in a manner that maximizes retention and knowledge transfer. Many of our faculty members have years of industrial experience.

Admission Requirements

Applicants must:
- Have a bachelor's degree from a regionally accredited institution.
- Possess at least two years of full-time work experience.
- Submit a completed application
- Have official undergraduate and graduate (if applicable) transcripts sent to Shippensburg University

Applications must be submitted no later than the completion of 6 credits in the program. A student must earn a minimum GPA of 3.0 to be awarded the certificate.

Advanced Supply Chain and Logistics Management

The Advanced Supply Chain and Logistics Management Certificate program is designed for working professionals in and out of supply chain and logistics management who are in need of an in-depth education in the field for enhanced career opportunities. In some instances, individuals with little or no educational background have had successful careers within the field and require a formal education. Others may wish to begin a career in the field and the program is designed to provide coverage of a wide variety of subject areas central to the profession.

The program is also appropriate for individuals who have education or experience in science, engineering, or liberal arts, have employment in SCM or logistics management (LM) related fields, and wish to strengthen their marketability in the fields of SCM or LM. Finally, many individuals in the armed forces worked in the area of logistics for the military. While this has excellent practical experience, these individuals may wish a formal education in SCM or LM to enhance their career opportunities.

This graduate certificate has been specifically designed to meet the needs of working professionals. It is offered completely online and can be completed within one year. Students can expect to be exposed to the latest theories, illustrated with case studies and experiential learning activities that make the learning atmosphere applicable and fun. Students complete four to five courses.
For registration information please go to ship.edu/PCDE/Registration_Information/.

For tuition information please go to ship.edu/Student_Accounts.

If you are receiving financial assistance from your employer to pay your tuition and/or fees, please be sure to review and complete the necessary form at: ship.edu/Student_Accounts/Forms.

Required Courses

Required courses provide a comprehensive overview of contemporary theory and practice of Supply Chain Management and Logistics Management. Students complete four to five courses for 12-16 credits.

- SCM 510 - Logistics and Transportation Management Credits: 3
- SCM 570 - Supply Chain Management Theory and Practice Credits: 3
- SCM 515 - Procurement Management Credits: 3
- SCM 555 - Supply Chain Quality Management Credits: 3
- SCM 590 - Warehousing and Distribution Management Management Credits: 3
- BSN 511 - Essentials of Business Operations and Analysis Credits: 4

Note:

BSN 511 - Essentials of Business Operations and Analysis Credits: 4 is required for individuals with an undergraduate degree in a non-business major. However, with appropriate work experience in the fields of supply chain or logistics management, BSN 511 may be waived.

Finance Graduate Certificate

Shippensburg University's graduate certificate in Finance is designed for working professionals with a convenient, fully online program. Taught by expert faculty, the graduate certificate in Finance can help you develop a wide-variety of analytical skills that will help increase your job marketability, further advancement in your current position, or transition into another career within the finance-field.

The program can be completed in one to two years, by taking one to two courses per semester, depending upon students’ schedule and availability. Students interested in pursuing an MBA degree at Shippensburg University can also apply any two of the four finance (FIN) courses toward meeting the MBA elective requirement.

Upon successful completion of Finance graduate certificate, students will have the ability, skills, and knowledge to:

- Make value-creating decisions for a corporation in a business environment
- Analyze the effects of international influences on various aspects of firm's financial management
- Measure and hedge market risks, liquidity risks, credit risks, and operation risks of a financial institution
- Evaluate different investment instruments and investment strategies to achieve investor's financial goals
- Discuss and analyze a wide variety of real-world financial situations

Registration

For registration information please go to http://www.ship.edu/PCDE/Registration_Information/

For tuition information please go to http://www.ship.edu/Student_Accounts.
If you are receiving financial assistance from your employer to pay your tuition and/or fees, please be sure to review and complete the necessary form at: https://www.ship.edu/Student_Accounts/Forms.

Finance Certificate

Required Courses (15 crs.)

- MBA 529 - Corporate Financial Management Credits: 3
- FIN 512 - Investment Analysis Credits: 3
- FIN 520 - Financial Risk Management Credits: 3
- FIN 525 - Multinational Business Finance Credits: 3
- FIN 533 - Applied Financial Analysis Credits: 3

Note:

Students are required to have fundamental accounting knowledge prior to taking the finance courses. Students may fulfill the requirement by taking MBA 502 - Managerial Accounting Credits: 3 or graduating with a bachelor's degree in accounting from an AACSB-accredited school in the last three years. The requirement may also be waived for those who took an equivalent course before.

Management/Marketing/Entrepreneurship Department

College of Education and Human Services

Nicole R. Hill, Ph.D., LPC Dean
College of Education and Human Services (717) 477-1373

Department of Counselor Education

Clifford Wilson Brooks Jr., Ed.D.
Marcy J. Douglass, Ph.D.
Kurt L. Kraus, Ed.D.
Kathryn Newton, Ph.D.
Matthew R. Shupp, Ed.D
Todd K. Whitman, Ph.D., Chair (717) 477-1668

Department Mission and Student Learning Goals

The mission of the Department of Counselor Education, as an entity of Shippensburg University, its Graduate School, and the College of Education and Human Services, is to develop students' academic and personal potential through a
comprehensive counselor education program for graduate counseling and college student personnel students and through multi-faceted counseling services for all university students. The department's mission integrates the principles of a meaningful learning environment, professionalism, and individual responsibility. It strives to be a respected leader in the promotion of dignity, acceptance, and collaboration within the Shippensburg University campus environment.

Specifically, it seeks to graduate highly skilled practitioners in counseling and college student personnel by utilizing experiential learning opportunities in an atmosphere of intellectual, investigative, and creative scholarly curiosity. The department nurtures students to become congruent lifelong learners, noble practitioners, and leaders in the profession who embrace scientific inquiry, technology, and innovative practices. Through authentic relationships with invested faculty who model intentional practice based firmly in theory and cultural advocacy, students develop the knowledge and skills necessary to be purposeful, effective practitioners with a strong sense of personal and professional identity.

Goals:

- Students will become professionally oriented and practice ethically.
- Students will become knowledgeable about the cultural context of the practice of counseling and college student personnel and advocate for its inherent value in practice.
- Students will comprehend the importance of theories and models of growth and development across the lifespan in the counseling and college student personnel professions.
- Students will become knowledgeable of the lifelong career development process and its relationship with wellness, identity, and life satisfaction.
- Students will become skilled counselors and college student personnel professionals who counsel, supervise, advocate, consult, collaborate, and coordinate.
- Students will develop theoretical and experiential understandings of group purpose, development, dynamics, counseling theories, and methods and skills pertinent to facilitating groups (i.e., task/work groups, psychoeducation groups, and counseling and psychotherapeutic groups).
- Students will become competent in the ethical use of individual, group, and environmental approaches to assessment, measurement, and evaluation.
- Students will understand and apply research methods, quantitative and qualitative analysis, needs assessments, and program evaluations.
- Students will learn how to integrate technology into the professional practices of counseling, supervision, and college student personnel.
- Students will be effective professional communicators.

Accreditation

In addition to the accreditations shared with the university, the College Student Personnel, School Counseling, Mental Health Counseling, and School Counseling programs are approved by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), a specialized accrediting body recognized by the Council on Postsecondary Accreditation (COPA). CACREP approval is a professional standards accreditation that validates the quality of education of counseling and related programs. Accreditation in counseling is closely related to the credentialing process established by the National Board for Certified Counselors (NBCC). Upon successful completion of the National Counselor Exam, graduates of CACREP approved programs are eligible to become Nationally Certified Counselors.

Programs Offered

The Department of Counselor Education offers master's degree programs leading to (a) a 60-hour Master's of Education degree in School counseling (K-12, PDE certificate), (b) a 60-hour Master's of Science degree in College Counseling and Student Personnel, (c) a 60-hour Master's of Science degree in Clinical Mental Health Counseling, (d) a 48-hour
non-accredited Master of Science Degree in College Student Personnel and (e) a 57-hour Doctoral Degree in Counselor Education and Supervision.

Admission to Program

All applicants for admission to the Department of Counselor Education program must begin by applying to graduate programs in SLATE which is the online application process. Once an application is complete and all materials have been submitted, the admissions coordinator for the department will review the applicant's materials and a decision will be made for admission.

Applicants for admission to the program must meet the requirements for the specialization and for the Department of Counselor Education in addition to the general requirements for admission to graduate study.

1. Applicants to the School Counseling concentration are expected to have relevant experience working with children (for example, as a teacher, probation officer, child protective services worker, etc.), and a 3.0 GPA in undergraduate degree work as required by the Pennsylvania Department of Education.

2. If the applicants to Clinical Mental Health, College and Student Personnel, and Student Affairs in Higher Education Programs have less than a 2.75, they may opt to complete the Graduate Record Exam (GRE) or Miller Analogies Test (MAT) to show their academic potential, but these additional tests are not required.

Because counseling and personnel work include a variety of experiences in practicum, internship, or other clinical experiences, the student's effectiveness and suitability for the program will be subject to an ongoing and broad-based evaluation by faculty and/or field supervisors. Decisions regarding continuance of studies will be predicated on a combination of factors such as demonstrated clinical skills and other relevant professional competencies in addition to grades in coursework.

Under certain conditions, a counseling department committee may ask students to do one or more of the following:

1. Interrupt their program for a specified period of time.
2. Engage in a therapeutic relationship with a qualified mental health specialist for the purpose of remediation or for the purpose of decreasing behaviors that detract from the ability to provide a constructive helping relationship with others.
3. Submit for review additional supportive evidence that demonstrates competence in the skill areas deemed deficient via presentations of skills.
4. Limit enrollment to those courses that do not have a significant experiential component for a specified period of time.

Admission to Candidacy

1. All students must apply through the department for admission to candidacy. This should be done during the semester CNS 585 - Practicum in Counseling Credits: 3 is scheduled and in conjunction with advisement.

2. The purposes of candidacy are to ensure students are integrating material from the classroom to real-life experiences, to verify professional goals are specific and focused, to determine if students have formulated a realistic view of what they need to do to become effective professionals, and to ensure students can express themselves regarding controversial issues in the field.

3. Candidates are evaluated with respect to aptitude, competency, and potential for completing the requirements of their requested program.

4. Specific procedures for admission to candidacy are outlined in the Department of Counselor Education’s Student Manual made available online at www.ship.edu/counsel/.

Practicum and Field Internships
The Department of Counselor Education offers a 60-hour graduate curriculum that enables students to become eligible for licensure as a professional counselor in Pennsylvania. Practicum and field students must complete all required paperwork the semester prior to their intended practicum or field. Missed deadlines will delay students' enrollment in practicum and field.

**Doctor of Education**

**Counselor Education and Supervision, Ed.D.**

**Doctoral Program in Counselor Education and Supervision**

Shippensburg University's CACREP Accredited doctorate in counselor education is designed to provide professional counselors with the advanced knowledge, skills, and abilities to successfully design and develop clinical and administrative programs, teach at the graduate level, and provide clinical supervision in a variety of practice settings. Our doctoral program is uniquely designed to prepare career professionals to provide clinical supervision, engage in program development and enhancement, and deliver advanced clinical practice. Clinical supervision is a cornerstone in the training and development of ethical and competent professional counselors. Throughout their advanced education, each doctoral candidate will work in collaboration with department faculty, a team of field-based expert practitioners, and employer mentors, to study and advance ways in which the profession of counseling empowers diverse individuals, families, and groups to accomplish mental health, wellness, education, and career goals. The program will emphasize counselor education, advanced counseling, clinical supervision, leadership and advocacy in the profession of counseling (regionally, nationally, and internationally). Graduates of our doctoral program will be prepared through the CACREP standards to serve in a variety of educational, clinical, and administrative settings and provide competent care including crisis and disaster response and trauma informed care. In addition, our consistent focus on advocacy and social justice as leaders in the counseling profession evidences the department's values and commitments placed upon these complex constructs and will be an integral part of your training. Resoundingly, our geographic location will provide our doctoral students with access to a host of agencies and organizations where doctoral-level internships take place. Coursework will be delivered synchronously online with some asynchronous components.

Our doctoral program requires successful completion of 57 graduate credits including coursework, qualifying examination, competency examination, dissertation research, and advanced clinical internships built upon an already conferred master's degree in counseling or related field. Internships will consist of a minimum of one 100 clock-hour practicum and two internships at 300 clock hours each. These educational opportunities with direct experience under faculty and site-based supervision are CACREP requirements which will increase local counseling and/or college student personnel services provided within the communities where doctoral-level internships take place. Coursework will be delivered synchronously online with some asynchronous components.

The program design allows for students to complete approximately six 3-credit courses per calendar year. In the students' first academic year, they will sit for a qualifying examination. Successful completion of this will allow students to transition into year two. Beginning in the third semester of doctoral study, field placements, the practicum (3 credits) and two internships (total 6 credits), will be taken with one additional course per semester. Following students' successful completion of their comprehensive examinations students will begin earning dissertation credits. Matriculated students will advance through their course work as a cohort. We anticipate the length of time required for successful completion of coursework, internship, comprehensive examinations, the dissertation and its defense will be 3.5 years to graduate. Three one-credit research seminars, which will be taken in sequence over the three calendar years, prepare students to present their dissertation proposals in timely a fashion. Students, with their doctoral advisors' permission and recommendation to the Graduate Dean, may be granted transfer credit of recently earned, advanced post-master's coursework (500 level and above). In addition to this scenario, students who elect to take their 9-credits (cognate) at another PASSHE institution may be able to shorten the total time required to complete their degree.
Mission

The mission of the Department of Counselor Education, as an entity of Shippensburg University, its Graduate School, and the College of Education and Human Services, is to develop students' academic and personal potential through a comprehensive counselor education program for graduate counseling and college student personnel students.

The Department's mission integrates the principles of a meaningful learning environment, professionalism, and individual responsibility. It strives to be a respected leader in the promotion of dignity, acceptance, and collaboration within the Shippensburg University campus environment.

Specifically, for this doctoral program, it seeks to graduate highly skilled educators, practitioners, supervisors and researchers in counselor education by utilizing supervised experiences, significant research preparation and investigation and creative scholarly curiosity. As a faculty we strive to challenge the doctoral student to continue as lifelong learners, scholars, noble practitioners and supervisors, and leaders in the profession who embrace scientific inquiry, technology, and innovative practices. Through authentic relationships with invested faculty who model intentional practice grounded firmly in theory and cultural advocacy, students develop the knowledge and skills necessary to be purposeful, effective practitioners, supervisors, researchers, instructors and leaders with a strong sense of personal and professional counselor identity.

Program Objectives

- Leading students to assume leadership and advocacy roles in the profession of counseling across a broad range of professional specializations and settings.
- Utilizing the most current, ethical, and innovative technologies for supervision, counseling and education.
- Emphasizing contemporary competencies in all aspects of professional practice with the overarching goal of mitigating social injustices and inequities.
- Preparing advanced professionals to offer exceptional clinical supervision for counselors and student affairs professionals at all stages of their development.
- Generating new insights and developing innovative approaches in clinical supervision.
- Consulting with their academic advisor, students design a multi-disciplinary "cognate" focus to distinguish their academic program.
- Increasing the knowledge base of the counseling profession in both physical and virtual scholarly environments.
- Preparing a doctoral-level community of practitioner/scholars to create and disseminate results of scholarly practice and research.

Course Sequencing-Ed.D. Counselor Education and Supervision

Fall

- CNS 781 CES Research Epistemology and Methods
- CNS 721 CES Advanced Counseling Theories and Practice
- CNS 725 CES Developing, Leading and Evaluating Programs in Mental Health

Spring

- CNS 785 CES Advanced Quantitative Research Methods and Statistics II (course 1)
- CNS 705 CES Theories, Models and Practice of Clinical Supervision
- CNS 820 CES Research Seminar I

Summer

- CNS 790 CES Advanced Quantitative Research Methods and Statistics III (course 2)
• Cognate I (Trauma, Advanced D&A, MCFC certification, TBD)

Fall

• CNS 795 CES Qualitative Theories and Methodologies
• CNS 800 CES Doctoral Practicum in Counselor Education
• Qualifying Examination

Spring

• CNS 710 CES Instructional Theories and Pedagogy
• CNS 801 CES Doctoral Internship I (Field 1)
• CNS 821 CES Research Seminar II

Summer

• CNS 760 CES Advanced Assessment and Evaluation
• Cognate 2 (Trauma, Advanced D&A, MCFC certification, TBD)
• CNS 802 CES Doctoral Internship II (summer option)

Fall

• CNS 700 CES Counseling Leadership and Advocacy
• CNS 802 CES Doctoral Internship II (Field 2)
• CNS 822 CES Research Seminar III

Spring

• Comprehensive Examinations
• CNS 897 CES Dissertation I
• Cognate 3 (Trauma, Advanced D&A, MCFC certification, TBD)

Summer

• CNS 898 CES Dissertation II

Fall

• CNS 899 CES Dissertation III (continuous enrollment - optional)

Requirements (57 crs.)

Core Foundational Courses (33 crs.)

• CNS 700 - CES Counseling Leadership and Advocacy Credits: 3
• CNS 705 - CES Theories, Models and Practice of Clinical Supervision Credits: 3
• CNS 710 - CES Instructional Theories and Pedagogy Credits: 3
• CNS 721 - CES Advanced Counseling Theories and Practice Credits: 3
• CNS 725 - CES Developing, Leading and Evaluating Programs in Mental Health Credits: 3
• CNS 760 - CES Advanced Assessment and Evaluation Credits: 3
• CNS 781 - CES Research Epistemology and Methods Credits: 3
• CNS 785 - CES Advanced Quantitative Research Methods and Statistics II Credits: 3
• CNS 790 - CES Advanced Quantitative Research Methods and Statistics III Credits: 3
• CNS 795 - CES Qualitative Theories and Methodologies Credits: 3
• CNS 820 - CES Research Seminar I Credits: 1
• CNS 821 - CES Research Seminar II Credits: 1
• CNS 822 - CES Research Seminar III Credits: 1

Cognate Focus Courses (9 crs.)

Select one of the post-masters certificates programs to fulfill the cognate requirements.

Complex Trauma-Informed Counseling

• CNS 605 - Introduction to Complex/Developmental Trauma: Research, Theory & Practice Credits: 3
• CNS 606 - Complex/Developmental Trauma: Best Practices for Children, Adolescents and Caregivers Credits: 3
• CNS 607 - Developmental/Complex Trauma: Best Practices for Adult Survivors Credits: 3

Advanced Drug & Alcohol Counseling

• CNS 514 - Relapse Prevention and Opiate Treatment Methods Credits: 3
• CNS 518 - Treatment and Challenges with Families Impacted by Addiction Credits: 3
• CNS 532 - Advanced Drug and Alcohol Counseling: Clinical Approaches with Co-Occurring Disorders Credits: 3

Marriage, Couples, & Family Counseling

• CNS 526 - Brief Therapy for Marital, Family & Couples Counseling Credits: 3
• CNS 527 - Models & Techniques in Couples, Marital and Family Therapy Credits: 3
• CNS 528 - Assessment from A Family Systems Perspective Credits: 3

Professional Practice-Practicum & Internships (9 crs.)

• CNS 800 - CES Doctoral Practicum in Counselor Education Credits: 3
• CNS 801 - CES Doctoral Internship I Credits: 3
• CNS 802 - CES Doctoral Internship II Credits: 3

Dissertation Research Courses (6 crs.)

• CNS 897 - CES Dissertation I Credits: 3
• CNS 898 - CES Dissertation II Credits: 3
• CNS 899 - CES Dissertation III Credits: 1-3 (Required only if extension for Dissertation is needed)

Master of Education

Counseling, K-12 School Counseling, M.Ed. and Certification
Between 51-60 credit hours is required for completion of the Master of Education degree with specialization in school counseling. Students who are already Pennsylvania certified teachers may be exempt from nine credits.

Required Courses (51-60 crs.)

Courses are organized into three phases and should be taken in that order. The sequence with each phase should be adhered to as closely as possible. Consultation with an advisor on a regular basis is required as a student progresses through the program. A student must apply for admission to candidacy during the semester he or she is enrolled in Practicum.

Phase I - 27 crs.

• CNS 504 - Introduction to School Counseling Credits: 3
• CNS 559 - Introduction to the Helping Services Credits: 3
• CNS 515 - Career Development Credits: 3
• CNS 519 - Implications for Human Development for Counseling Credits: 3
• CNS 578 - Pre-practicum in Counseling Credits: 3
• CNS 600 - Research and Statistics Credits: 3
• EEC 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except Credits: 3
• ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3
• RDG 413 - Teaching Reading to English Language Learners Credits: 3

Note:

EEC 526, ELP 516, RDG 413: Students who are already PA-certified teachers and have this coursework completed may be exempt from this coursework.

Phase II - 24 crs.

• CNS 585 - Practicum in Counseling Credits: 3
• CNS 573 - Theories of Counseling Credits: 3
• CNS 522 - Assessment Techniques Credits: 3
• CNS 512 - Group Counseling and Leadership Skills Credits: 3
• CNS 509 - Multicultural Counseling Credits: 3
• CNS 505 - Organization and Administration of School Counseling Services Credits: 3
• CNS 588 - Counseling Strategies and Techniques Credits: 3
• CNS 567 - Counseling Children Credits: 3

Note:

CNS 585: Mandatory attendance at Practicum/Field Orientation the prior semester and pre-registration

Phase III - 6 crs.

• CNS 580 - Clinical Field Experience I Credits: 3
Electives - 3 crs.

Choose one from the following:

- CNS 508 - Marital, Couple, and Family Counseling Credits: 3
- CNS 510 - Drug and Alcohol Counseling Credits: 3
- CNS 520 - Counseling and Spirituality Credits: 3
- CNS 524 - The DSM and Psychopathology for a CNS Perspective Credits: 3
- CNS 564 - Grief and Loss Issues in Counseling Credits: 3
- CNS 570 - Working with Dreams, Sandtrays, and Music in Counseling Credits: 3

Note:

Certification as a School Counselor by the PA Dept. of Education requires successful completion of the School Counseling PRAXIS Exam (#0420).

Students should register for and take this test toward the end of their course of study, ideally following CNS 589 and CNS 505.

Please note: Not all courses are offered each semester. Check the master schedule to determine offerings and availability found at http://www.ship.edu/counsel.

Minimum = 51-60 hours

Supervisor of School Guidance

For information concerning the post-master's degree program leading to Pennsylvania certification as a supervisor of school guidance services, refer to the Department of Educational Leadership and Special Education.

Master of Science

Counseling, Clinical Mental Health Counseling Concentration, M.S.

Required Courses (60 crs.)

Courses are organized into three phases and should be taken in that order. The sequence within each phase should be followed as closely as possible. Consultation with an advisor on a regular basis is required as a student progresses through the program. Students must apply for admission to candidacy the semester they are enrolled in Practicum.

Phase I 18 crs.

- CNS 559 - Introduction to the Helping Services Credits: 3
- CNS 578 - Pre-practicum in Counseling Credits: 3
- CNS 568 - Professional Orientation to Mental Health Counseling Credits: 3
• CNS 573 - Theories of Counseling Credits: 3
• CNS 512 - Group Counseling and Leadership Skills Credits: 3
• CNS 524 - The DSM and Psychopathology for a CNS Perspective Credits: 3

Phase II 27 crs.

The following courses must be taken prior to enrolling in Clinical Field Experience I:

• CNS 585 - Practicum in Counseling Credits: 3
• CNS 600 - Research and Statistics Credits: 3
• CNS 588 - Counseling Strategies and Techniques Credits: 3
• CNS 510 - Drug and Alcohol Counseling Credits: 3
• CNS 508 - Marital, Couple, and Family Counseling Credits: 3

The following courses must be taken anytime during the program:

• CNS 509 - Multicultural Counseling Credits: 3
• CNS 515 - Career Development Credits: 3
• CNS 519 - Implications for Human Development for Counseling Credits: 3
• CNS 522 - Assessment Techniques Credits: 3

Electives 6 crs.

Two of the following electives may be taken at anytime during Phase II or III in the program:

• CNS 520 - Counseling and Spirituality Credits: 3
• CNS 564 - Grief and Loss Issues in Counseling Credits: 3
• CNS 567 - Counseling Children Credits: 3
• CNS 570 - Working with Dreams, Sandtrays, and Music in Counseling Credits: 3

Phase III 9 crs.

Clinical Field Experiences I and II must be taken sequentially in the Mental Health Counseling concentration.

• CNS 580 - Clinical Field Experience I Credits: 3
• CNS 589 - Clinical Field Experience II Credits: 3
• CNS 603 - Advanced Practice Seminar Credits: 3

Note:

Minimum = 60 crs

Counseling, College Student Personnel Concentration, M.S.
Required Courses (48 crs.)

Courses are organized into three phases and should be taken in that order. The sequence within each phase should be followed as closely as possible. Consultation with an advisor on a regular basis is required as a student progresses through the program. Students must apply for admission to candidacy during the semester they are enrolled in Practicum.

While it is possible to complete the program as a part-time student, several of the advanced courses meet in the late afternoon, and most of the practicum and Field Experience sites require the student to be available during the day.

Phase 1 12 crs.

- CNS 559 - Introduction to the Helping Services Credits: 3
- CNS 600 - Research and Statistics Credits: 3
- CNS 515 - Career Development Credits: 3
- CNS 578 - Pre-practicum in Counseling Credits: 3

Phase II 21 crs.

- CNS 585 - Practicum in Counseling Credits: 3
- CNS 522 - Assessment Techniques Credits: 3
- CNS 509 - Multicultural Counseling Credits: 3
- CNS 512 - Group Counseling and Leadership Skills Credits: 3
- CNS 560 - Principles of College Student Personnel Credits: 3
- CNS 565 - The College Student and the College Environment Credits: 3
- CNS 587 - Assessment Strategies & Program Evaluation in Student Affairs Credits: 3

Phase III 15 crs.

- CNS 562 - Student Personnel Work in Higher Education Credits: 3
- CNS 580 - Clinical Field Experience I Credits: 3
- CNS 589 - Clinical Field Experience II Credits: 3
- CNS Elective - Course selected with approval of advisor
- Leadership Elective - Courses selected with approval of advisor

Note:

Minimum = 48 crs.

In addition to the for credit courses, each student majoring in College Student Personnel is required to complete a research project during the program. The proposal for the study is completed during the CNS 600 research course that should be taken during the first semester of full-time study. Work on the project will be continued in CNS 587 Assessment Strategies & Program Evaluation in Student Affairs Credits: 3. The completed project must be submitted to the student's advisor one month prior to graduation.

The 48-credit College Student Personnel (CSP) concentration is not accredited by CACREP, but the 60-hour College Counseling & Student Affairs program (see below) is accredited by CACREP.
Counseling, College Counseling & Student Affairs, M.S.

Required Courses (60 crs.)

Courses are organized into three phases and should be taken in that order. The sequence within each phase should be followed as closely as possible. Consultation with an advisor on a regular basis is required as a student progresses through the program.

Phase I 21 crs.

- CNS 559 - Introduction to the Helping Services Credits: 3
- CNS 568 - Professional Orientation to Mental Health Counseling Credits: 3
- CNS 560 - Principles of College Student Personnel Credits: 3
- CNS 515 - Career Development Credits: 3
- CNS 519 - Implications for Human Development for Counseling Credits: 3
- CNS 600 - Research and Statistics Credits: 3
- CNS 578 - Pre-practicum in Counseling Credits: 3

Phase II 27 crs.

- CNS 585 - Practicum in Counseling Credits: 3
- CNS 573 - Theories of Counseling Credits: 3
- CNS 562 - Student Personnel Work in Higher Education Credits: 3
- CNS 565 - The College Student and the College Environment Credits: 3
- CNS 521 - Emotionally Intelligent Leadership Credits: 3
- CNS 522 - Assessment Techniques Credits: 3
- CNS 512 - Group Counseling and Leadership Skills Credits: 3
- CNS 509 - Multicultural Counseling Credits: 3
- CNS Elective

Phase III 12 crs

- CNS 524 - The DSM and Psychopathology for a CNS Perspective Credits: 3
- CNS 580 - Clinical Field Experience I Credits: 3
  (clinical or SA experience)
- CNS 588 - Counseling Strategies and Techniques Credits: 3
  Taken concurrently with CNS 580
- CNS 589 - Clinical Field Experience II Credits: 3
  (clinical or SA experience)

Note:

Additional classes may be taken with approval of advisor.

Certificate
Clinical Mental Health Counseling Certificate

The 12-15 credits post-master's certificate in Clinical Mental Health Counseling provides in-depth clinical coursework for clinicians, school counselors, students affairs professionals, and educators.

Primarily intended for students who have graduated from *CACREP-accredited counseling programs (48+ credits), this certificate provides additional coursework necessary for Pennsylvania counseling licensure.

*Initial transcript review will dictate course selection and sequencing.

Required Courses (12-15 crs.)

- CNS 568 - Professional Orientation to Mental Health Counseling Credits: 3
- CNS 519 - Implications for Human Development for Counseling Credits: 3 or
- CNS 510 - Drug and Alcohol Counseling Credits: 3
- CNS 524 - The DSM and Psychopathology for a CNS Perspective Credits: 3
- CNS 573 - Theories of Counseling Credits: 3
- CNS 590 - Advanced Clinical Field Experiences Credits: 3 *
  * Waived if CNS 580 or CNS 589 occurred in a clinical setting (advisor's approval)

Couple and Family Counseling Certificate

Program Description

- The post-master's graduate certificate, offered at Central Penn College in Summerdale, was developed by faculty in the Department of Counselor Education to meet the ongoing continuing education needs of community, mental health, and college and school counselors.
- The four courses in the program, which focus on couples and family therapy, were designed to be flexible in order to accommodate the demanding schedules as well as geographic locations of counselors and mental health practitioners.
- Enhancing the theory-based classroom discussions is a clinical component providing practice in couples/family therapy. These sessions will help serve clients in the SU community clinic, Growing Edges. Under direct faculty supervision, students will practice basic and advanced counseling skills, while crafting and delivering end of session messages.
- To earn a Couples and Family Counseling Certificate, students must have a master's degree in counseling or an allied mental health field and complete the following four courses with at least a 3.00 GPA. The successful completion of each course will be denoted on the student's official Shippensburg University graduate transcript.

Requirements

Required Courses

- CNS 528 - Assessment from A Family Systems Perspective Credits: 3
- CNS 527 - Models & Techniques in Couples, Marital and Family Therapy Credits: 3
Drug and Alcohol Certificate

This three course certificate addresses the needs of counselors already in the field of counseling who possess a Master's degree in counseling or a related discipline and are in need of specific information and education on relapse prevention-opiate addiction and treatment methods, issues of concomitant mental health and addiction, and family issues/adult children of alcoholics, relationship impairment due to addiction. For those students who need coursework for recertification or licensure needs, these courses can be utilized for those purposes.

These three courses are offered in a blended format over the course of a year (Summer/Winter/Summer) and meet twice for each class face-to-face (one at the beginning and one at the end) with five weeks online in between. The face-to-face classes are offered on weekends which appeals to the full-time practitioner. Upon completion of the third course students will be granted a certificate in alcohol and drug studies by the University. Students may also decide to enroll in all three courses or just one course, the option is available for any combination.

Required Courses (9 crs.)

- CNS 514 - Relapse Prevention and Opiate Treatment Methods Credits: 3
- CNS 518 - Treatment and Challenges with Families Impacted by Addiction Credits: 3
- CNS 532 - Advanced Drug and Alcohol Counseling: Clinical Approaches with Co-Occurring Disorders Credits: 3

Complex/Developmental Trauma Certificate

This 9-credit post-master's certificate provides advanced professional training in the area of complex/developmental trauma and is suitable for professionals in the fields of counseling, social work, corrections, and education. Complex, or developmental, trauma is associated with acute or chronic exposure to adverse childhood experiences (ACEs) which may lead to lifelong implications for physical and mental health, and is often an underlying condition for at-risk or high-risk individuals and families. Content covered includes: contributing factors, impact on physical and behavioral health across the lifespan, differentiation and assessment, individual and systemic interventions, and professional resiliency. Attention is given to intergenerational, historical and race-based trauma as primary or contributing factors. Students learn flexible conceptual frameworks and a broad range of interventions to support development and integration across neurophysiological, cognitive, behavioral, and social areas of functioning. All courses will emphasize applied practice for both personal and professional development. The first course provides an introduction to complex/developmental trauma research, theory and practice. Subsequent courses focus on evidence-based practices for children and adolescents, and for adult survivors. These courses are designed for full-time working professionals with a combination of face-to-face or synchronous class meetings (scheduled evenings and weekends), and self-guided reading and practice.

Flexible format: All three courses may be taken together as the post-master's advanced certificate, or separately as stand-alone professional training (however, note that CNS 605 is a prerequisite for either CNS 606 or CNS 607). The courses are also designed to serve as a cognate for students enrolled in our Ed.D. in Counselor Education and Supervision (CES).

To enroll in this certificate, students must have a master's degree or higher in counseling or related field pertaining to behavioral/mental health services. To earn the certificate, students must complete all three courses with a 3.00 or higher GPA.
Required Courses (9 crs.)

- CNS 605 - Introduction to Complex/Developmental Trauma: Research, Theory & Practice Credits: 3
- CNS 606 - Complex/Developmental Trauma: Best Practices for Children, Adolescents and Caregivers Credits: 3
- CNS 607 - Developmental/Complex Trauma: Best Practices for Adult Survivors Credits: 3

Criminal Justice Department

Cynthia A. Koller, Ph.D., Chair, (717) 477-1599
Laura O. Beckman, Ph.D.
Matthew D. Fetzer, Ph.D.
Stephanie A. Jirard, J.D.
Arelys Madero, Ph.D.
Melissa L. Ricketts, Ph.D.
Carlos Rojas, Ph.D.

Master of Science

Administration of Juvenile Justice, M.S.

ADDITION REQUIREMENTS

The program is available to full-time county juvenile probation officers in Pennsylvania who graduated from an accredited college or university with at least 18 credits in the behavioral or social sciences, and who have been, or will be, employed in the Juvenile Justice System for at least two years prior to admission. As space allows, county juvenile detention staff (and other juvenile justice professionals) may be admitted to the program upon the recommendation of the Juvenile Court Administrative Judge.

CONDITIONS OF ADMISSION

Students agree to attend the program continuously for 1.5 academic years, and to maintain their current employment status for the duration of the program and for at least two years after graduation. Students who fail to meet these
conditions will be required to reimburse the Commonwealth of Pennsylvania for all, or a portion of, tuition and boarding costs paid on their behalf.

There are three primary requirements for admission to the Graduate Education Program:

- Acceptance into the Shippensburg University School of Graduate Studies.
- Successful completion of an interview.
- Endorsement by the Juvenile Court Judges Commission (JCJC)

Applicants must meet all requirements of Shippensburg University's School of Graduate Studies as defined in the current Graduate Catalog. Applicants should have a baccalaureate degree in criminal justice, or a closely-related social science field from a regionally accredited college or university. Shippensburg University takes a holistic approach to graduate admissions. While previous academic success is required, the Graduate School also considers previous work experience, life experience, and your vision for how an advanced degree will help you personally prosper and serve your profession and community.

APPLICATION PROCESS

Interested applicants must follow application procedures for both the Center for Juvenile Justice Training and Research (CJJT&R) and Shippensburg University. The application process is facilitated online through Shippensburg University. For your reference, below is the list of required materials:

- A completed Graduate Education Program Application (see JCIC Website: www.jcjc.pa.gov or Admissions Application for the Shippensburg University, Graduate School).
- A letter of Interest for Endorsement and Admission to the Administration of Juvenile Justice JCJC Graduate Education Program and the Shippensburg University the Graduate School. This letter should address the following issues: a) why you are a strong candidate for endorsement; b) any reasons why you may still be a strong candidate despite having an undergraduate GPA below 2.75/4.00; c) complete description of juvenile justice work experience; and, d) how you expect to use the graduate education experience to improve practices in the county from which application is made.
- The Recommendation Form is to be completed and signed by the Chief Juvenile Probation Officer in your county. (Note: Applicants who are employed at county-administered detention facilities will also need a letter of endorsement from both the detention center administrator and the county's Juvenile Court Administrative Judge).
- A copy of your résumé.
- A copy of your undergraduate and graduate (if applicable) transcripts. Official transcripts are required.
- A copy of your official GRE/MAT scores (applicable only if your undergraduate GPA is below 2.75/4.00).

APPLICATION TIMELINE

Since there are a limited number of positions available for each class, admission is on a competitive basis. The timeline for enrollment and the application process is as follows:

March: Application deadline each year to begin in the fall semester. Interested applicants must follow application procedures for both the CJJT&R and Shippensburg University as outlined above.

April: JCJC Interviews

May: JCJC Endorsement; the Commission members endorse candidates at the May meeting. Prospective students receive Endorsement letters from CJJT&R and instructions for registering for classes.

August: Administration of Juvenile Justice JCJC Graduate Education Program Orientation and classes begin.
MISSION STATEMENT

The Master of Science in Administration of Juvenile Justice (MAJJ) Program at Shippensburg University provides a quality graduate program that promotes advanced inquiry and application of new knowledge. One of the core values of Shippensburg University is to inspire and guide students to become successful leaders in their professions and their communities. The program aims to serve the juvenile justice educational and research needs in the Commonwealth of Pennsylvania. The emphasis of the program is scientific, because it is assumed that graduates will be better qualified to participate in the profession if they are prepared as research-oriented students of juvenile crime and delinquency.

Program faculty participate in research and service activities that benefit criminal and juvenile justice and social service agencies locally, statewide, and nationally. The faculty's involvement in research and community affairs enhances the classroom experience, as faculty members are able to engage students in discussions of current dilemmas and controversies. In most of our coursework, juvenile crime and delinquency are viewed as social phenomena and are analyzed with methodologies developed in the social and behavioral sciences.

EDUCATIONAL OBJECTIVES

The program's major strengths are its applied perspective and strong emphasis on theory, policy, research, and analysis. Philosophy, format, and implementation stress the practical application of a higher level of knowledge, skills, and strategies.

The curriculum is guided by the following assessment objectives which are evaluated on a yearly basis:

**OBJECTIVE 1: Comprehensive Knowledge of Juvenile Justice:** Students will understand more readily the operations of both the juvenile and criminal justice system and the many issues (both theoretical and practical) that confront the administration of justice in a democratic society.

**OBJECTIVE 2: Critical Analysis:** Students will understand more readily how to interpret, analyze, and evaluate issues of importance in the field of juvenile justice.

**OBJECTIVE 3: Communication:** Students will be able to more readily express their knowledge and critical analysis ability through both written work and oral presentation.

**OBJECTIVE 4: Exposure to Human and Cultural Diversity:** Faculty will expose students to the issues of diversity in the juvenile justice system and provide opportunities for students to participate in experiences that promote diversity.

**OBJECTIVE 5: Exposure to Ethical Problem Solving:** Faculty will expose students to the nature of ethics in general and the role of normative ethics in the juvenile justice system and provide opportunities for students to participate in juvenile justice-related situations (hypothetical or actual) that deal with ethical issues.
OBJECTIVE 6: Exposure to Technology: Faculty will expose students to the use of technology in the field of criminal justice in general and provide opportunities for students to participate in juvenile justice related situations that deal with technological issues.

Degree Requirements (33 crs.)

Required Courses (21 crs.)

- AJJ 501 - Seminar in Juvenile Justice and Delinquency Credits: 3
- AJJ 502 - Advanced Criminological Theory Credits: 3
- AJJ 503 - Leadership in Juvenile Justice Credits: 3
- AJJ 504 - Advanced Research Methods Credits: 3
- AJJ 505 - Quantitative Analysis Credits: 3
- AJJ 506 - Strategic Planning, Budgeting & Finance Credits: 3
- AJJ 507 - Seminar in Policy Analysis Credits: 3

Criminal Justice Capstone Course (6 crs.)

- AJJ 551 - Practicum I Credits: 3
- AJJ 552 - Practicum II Credits: 3

Criminal Justice Electives (6 crs.)

- AJJ 520 - Advanced Studies in Policing Credits: 3
- AJJ 521 - Seminar in Victimology Credits: 3
- AJJ 522 - Seminar in Social Justice Credits: 3
- AJJ 523 - Mental Health and the Administration of Justice Credits: 3
- AJJ 524 - Anatomy of Violence Credits: 3
- AJJ 525 - Intimate Partner & Family Violence Credits: 3
- AJJ 540 - Selected Topics in Juvenile Justice Credits: 3
- AJJ 541 - Selected Topics in Juvenile Justice Credits: 3
- AJJ 550 - Independent Study Credits: 3

Criminal Justice, M.S.

ADMISSION REQUIREMENTS

Applicants for admission to graduate study with specialization in criminal justice will be expected to have completed an undergraduate program in criminal justice or a closely related allied field. Admission is based on a 2.75 or better undergraduate quality point average or satisfactory scores on the Graduate Record Exam (GRE) or Miller Analogies test (MAT). Shippensburg University takes a holistic approach to graduate admissions. While previous academic success is required, the Graduate School also considers previous work experience, life experience, and your vision for how an advanced degree will help you personally prosper and serve your profession and community.

MISSION STATEMENT
The Master of Science degree program in Criminal Justice provides students with an advanced program of study needed for career advancement in criminology and criminal justice. The program's major strengths are its applied perspective and emphasis on theory, research, and policy analysis. The curriculum's philosophy, format, and implementation stress the practical application of a higher level of knowledge, skills, and strategies relevant to the study of the causes, consequences, and responses to crime. The methodological and theory components are suitable for students planning advanced graduate studies in criminology and criminal justice. The program also serves working professionals who enhance their understanding of theory and conduct research related to their organizations.

EDUCATIONAL OBJECTIVES

The program's major strengths are its applied perspective and strong emphasis on theory, policy, research, and analysis. Philosophy, format, and implementation stress the practical application of a higher level of knowledge, skills, and strategies.

The curriculum is guided by the following assessment objectives which are evaluated on a yearly basis:

OBJECTIVE 1: Comprehensive Knowledge of Criminal Justice: Students will understand more readily the operations of the criminal justice system and the many issues (both theoretical and practical) that confront the administration of justice in a democratic society.

OBJECTIVE 2: Critical Analysis: Students will understand more readily how to interpret, analyze and evaluate issues of importance in the field of criminal justice.

OBJECTIVE 3: Communication: Students will be able more readily to express their knowledge and critical analysis ability through both written work and oral presentation.

OBJECTIVE 4: Exposure to Human and Cultural Diversity: Faculty will expose students to the issues of diversity in the criminal justice system and provide opportunities for students to participate in experiences that promote diversity.

OBJECTIVE 5: Exposure to Ethical Problem Solving: Faculty will expose students to the nature of ethics in general and the role of normative ethics in the criminal justice system and provide opportunities for students to participate in criminal justice-related situations (hypothetical or actual) that deal with ethical issues.

OBJECTIVE 6: Exposure to Technology: Faculty will expose students to the use of technology in the field of criminal justice in general and provide opportunities for students to participate in criminal justice related situations that deal with technological issues.

Degree Requirements (33 crs.)
Required Core Courses (18 crs.)

- CRJ 501 - Legal Trends and Issues Credits: 3
- CRJ 520 - Leadership in Criminal Justice Credits: 3
- CRJ 560 - Advanced Criminological Theory Credits: 3
- CRJ 590 - Seminar in Policy Analysis Credits: 3
- CRJ 600 - Advanced Research Methods Credits: 3
- CRJ 610 - Quantitative Analysis Credits: 3

Criminal Justice Electives (12 crs.)

- CRJ 571 - Contemporary Issues in Corrections Credits: 3
- CRJ 572 - Advanced Studies in Policing Credits: 3
- CRJ 573 - Seminar in Victimology Credits: 3
- CRJ 574 - Seminar in Social Justice Credits: 3
- CRJ 575 - Mental Illness and the Administration of Justice Credits: 3
- CRJ 576 - Anatomy of Violence Credits: 3
- CRJ 577 - Intimate Partner and Family Violence Credits: 3
- CRJ 580 - Seminar in Juvenile Justice & Delinquency Credits: 3
- CRJ 591 - Selected Topics in Criminal Justice Credits: 3
- CRJ 592 - Selected Topics in Criminal Justice Credits: 3
- CRJ 617 - Internship I Credits: 3

Criminal Justice Capstone (3 crs.)

- CRJ 595 - Practicum I Credits: 3

Interdisciplinary Course(s) (3-9 crs.)

With Department of Criminal Justice approval, and providing the student meets the requirements of the department offering the course, courses numbered 500 and above can be taken from one or more of the following: Counseling and College Student Personnel, Educational Leadership and Policy, Geography, History, Political Science, Psychology and Special Education. These may be substituted for Criminal Justice electives up to a maximum of nine (9) credits.

**Educational Leadership and Special Education Department**

Thomas C. Gibbon, Ed.D., Chair (717) 477-1591

David F. Bateman, Ph.D.

Rhonda Brunner, Ed.D.

Jacquelyn Chovanes, Ph.D.

Wendy L. Kubasko, Ed.D.
Programs Offered

The Department of Educational Leadership and Special Education offers graduate programs leading to the Doctorate of Educational Leadership, Master of Education degree in Educational Leadership, and the Master of Education in Special Education.

The Master's degree programs in Educational Leadership include programs leading to certification of K-12 principals and Post-Master's degree programs leading to the certification of K-12 principals.

The Department also offers Post-Master's degree programs leading to the Supervisory I Certificate and a Post-Master's degree program leading to the Superintendent's Letter of Eligibility (LOE). LOE courses comprise the content core of the Doctorate of Educational Leadership.

There are four concentrations in the Masters in Special Education programs. The Comprehensive Concentration leads to Pennsylvania certification in Special Education at the PreK-12 levels. Additionally, the other three concentrations comprise advanced study in learning disabilities, behavioral disorders, and intellectual disabilities.

Students may take courses as non-degree graduate students, but candidates should not take more than nine credit hours before being accepted for admission into one of the Department's programs.

Students matriculating for a degree and/or certification in Educational Leadership or Special Education at Shippensburg University shall be given preference for class seats over students not enrolled in a graduate program in Educational Leadership or Special Education when the demand for a particular class exceeds the class enrollment.

Program plans are designed for each student by Department faculty as part of the admissions process. Each student should check with their advisor prior to scheduling.

In the Educational Leadership and Special Education programs, each student's effectiveness and suitability for recommendation to PDE for school service will be given a broad-based evaluation by faculty and/or field experience supervisors. In addition to grades, final decisions regarding continuance in either program will be predicated on a combination of factors such as demonstrated clinical competence, personal interaction skills, judgment, and other relevant issues related to professionalism.

The Department reserves the right to discontinue students who, in the opinion of the majority of the program faculty, do not possess the dispositions or competence for certification.

Admission Requirements for Educational Leadership Programs

In addition to the regular requirements for admission to graduate study, the applicant for admission to the graduate program in Educational Leadership must have an Instructional or Educational Specialist certificate. The applicant must obtain an application and two reference forms from the Department of Educational Leadership and Special Education. One recommendation must be completed by a chief school officer (district superintendent or intermediate unit executive director) in the school in which the candidate is currently employed or has been most recently employed. The second reference must be either from a principal or the applicant's immediate supervisor. In addition, a signed copy of
the Memorandum of Understanding for Practicum and Mentoring must be signed by the chief school officer and submitted with the application.

After the review of the applicant's credentials and supporting materials, a decision on admission to graduate study will be made by the Educational Leadership faculty and/or the Department chair. Admission to graduate study does not guarantee subsequent admission to candidacy for the Master's degree.

In order to complete a program of study leading to the Master of Education degree, the student must apply for and be admitted to candidacy for the degree. Candidacy decisions will be made during each student's first practicum.

**Doctor of Education**

**Educational Leadership, Ed.D.**

The doctoral program is delivered in partnership with Millersville University and leverages the expertise from the faculty and resources of these two NCATE-accredited institutions to provide school administrators with the knowledge, skills, and dispositions to develop and implement programs that support the Commonwealth's children in realizing their full academic potential.

The part-time nature of the program and the accessible delivery make it a great option for school personnel who are currently employed in leadership positions. The coursework is delivered in blended online and face-to-face and residency-based instruction. Residency courses are field based and require candidates to work in their school districts and/or organizations with group seminars and professional learning community sessions as needed.

**Program Highlights**

**Poverty and Digital Learning Focus**

62 credit program (includes 9 dissertation-related credits). All Shippensburg University Letter of Eligibility completers qualify for advanced standing. Those from other institutions may request a transcript review to determine if some of their credits may be applied to the Ed.D. program.

Cohort Driven (14-16 students per cohort)

Approximately four years to complete (less for Advanced Standing Qualifiers)

Candidates will work with University Faculty, Leadership Fellows who are currently practicing experts in the field, as well as District-Level Mentors

Includes approximately 27 credits of foundational and research-related courses combined with 24 credits of Letter of Eligibility field-based residencies in home districts (minimum 360 hours of field work)

Upon completion of the residencies, candidates will be eligible for the Superintendent's Letter of Eligibility in PA provided that they also meet the experience and state exam requirements. Please visit the Doctoral Program Application Process webpage to gain more information.

**Application Requirements**

Graduate application and application fee

Transcripts from all previous colleges and universities including any additional certification program(s)
Current resume or curriculum vitae including current/past leadership positions, specific leadership responsibilities and experiences

Applicants must hold administrative and/or supervisory positions in education

Three letters of recommendation, one of which should be from a school district superintendent or chief organization administrator if not employed at a school district

500-1,000-word goal statement addressing applicant's goals and objectives for doctoral study in educational leadership and how this program will assist in achieving those outcomes

Teaching certifications and endorsements currently held (optional)

Requirements

Foundations (12 crs)

- ELP 832 - Introduction to Executive Leadership Credits: 3
- ELP 822 - Communication Theory for School District Administrators Credits: 3
- ELP 828 - Emergent Technologies and Instructional Practices Credits: 3
- ELP 829 - Political/Social Context for Educational Leadership Credits: 3

Research (12 crs)

- ELP 808 - Qualitative Research in Educational Leadership Credits: 3
- ELP 820N - Introduction to Research in Educational Leadership Credits: 3
- ELP 831 - Educational Statistics Credits: 3
- ELP 830N - Quantitative Research in Educational Leadership Credits: 3

Residency Core (24 crs)

- ELP 721R - Residency: Strategic Leadership in District Governance Credits: 4
- ELP 723R - Residency: Negotiations and Personnel Strategic Decision Making Credits: 4
- ELP 724R - Residency: Ethical and Legal Decision-making at the District Level Credits: 4
- ELP 725R - Residency: The Impact of Facilities and Plant Management Decisions on School Effectiveness Credits: 4
- ELP 726R - Residency: Optimizing Financial Resources to Support District Level Achievement Credits: 4
- ELP 727R - Residency: Instructional and Technology Leadership at the Executive Level Credits: 4

Other (2 crs)

- ELP 890 - Research in Educational Leadership Part I Credits: 1
- ELP 891 - Research in Educational Leadership Part II Credits: 1

Dissertation Core (9 crs)

- ELP 897 - Dissertation Seminar Educational Leadership Credits: 3
• ELP 898 - Dissertation I - Educational Leadership Credits: 3
• ELP 899 - Dissertation II - Educational Leadership Credits: 3

Suggested Cognate Courses (3 crs)

• ELP 510 - Special Education Law Credits: 3
• ELP 617 - Survey Development and Measurement Credits: 3
• ELP 634 - Legal and Ethical Issues in Online Instruction Credits: 3
• CNS 509 - Multicultural Counseling Credits: 3
• SWK 515 - Social Welfare Policy Credits: 3

Master of Education

Educational Leadership, M.Ed. includes Principal Certification

Courses do not follow a strict prerequisite model but must be scheduled using Approved Individual Student Program Plans. Minimum 33 semester hour credits required for a Master's degree.

Requirements (33 crs.)

Required Educational Leadership Core Courses

• ELP 515 - The Role of Research and Data Informed Decision-Making for School Leaders Credits: 3
• ELP 517 - Leadership in Technology and Effective Program Delivery Credits: 3
• ELP 569 - Seminar: Diversity in Education Credits: 3

Required Pennsylvania Inspired Leadership Core Courses

• ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3
• ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3
• ELP 519 - Advanced Leadership and the School Principal PK-12 Credits: 3
• ELP 520 - School Finance and Student Learning Credits: 3
• ELP 521 - Legal and Ethical Issues that Impact on Student Learning Credits: 3
• ELP 522 - Practicum II Advanced Leadership Field Experiences at the Building Level Credits: 3
• ELP 514 - Practicum I Leadership Field Experiences at the Building Level Credits: 3

Electives (3 crs.)

Electives

The master of education degree program requires 33 total credits hours, which includes 360 hours of school-based apprenticeship and internship practicum. ELP 510 Special Education Law is the standard elective for the program. Adviser pre-approval is required for any electives.
Note:

The Master of Education degree program requires 33 total credit hours, which includes 360 apprenticeship hours. Student must advance to candidacy upon completion of 6 and not more than 12 semester hour credits of graduate work at Shippensburg University.

Special Education and Certification, M.Ed.

Applicants are required to present evidence of previous successful experience working with people with disabilities. A maximum of nine graduate credits in special education from an accredited institution may be accepted when non-matriculate students apply to the Special Education Program. Each student is required to have a program-planning sheet approved by their advisor on file. Students select from one of four concentration areas to earn the MEd in Special Education.

The Department offers the following concentrations in Special Education:

- Comprehensive Certification (PK-12)
- Emotional and Behavioral Disorders
- Learning Disabilities
- Intellectual and Developmental Disabilities

Requirements (39 crs.)

Prerequisites (Introduction to Exceptionalities, Assessment, Inclusion and English Language Learners) must be taken if transcripts do not show evidence of prior completion.

- EEC 535 - Special Education Processes in a Standards Aligned System Credits: 3
- EEC 545 - Applied Behavior Analysis/Positive Behavior Supports Credits: 3
- EEC 446 - Transition to Adult Life for Students with Disabilities Credits: 3
- EEC 548 - Direct Instruction Credits: 3
- EEC 550 - Instruction for Students with High Incidence Disabilities Credits: 3
- EEC 551 - Subject Area Content Access for Students with Learning Disabilities in a Standards Aligned System Credits: 3
- EEC 561 - Instruction for Students with Low Incidence Disabilities Credits: 3
- EEC 565 - Instruction for Students with Autism Spectrum Disorders Credits: 3
- EEC 571 - Instruction for Students with Social, Emotional, and Behavior Disorders Credits: 3
- EEC 600 - Research in Special Education Credits: 3
- EDU 495 - Student Teaching and Professional Practicum Credits: 6-15

Note:

This program will include a sixteen-week student teaching experience.

Special Education Supervisor
For information concerning the post-master's program leading to Pennsylvania certification as a Special Education Supervisor, refer to Supervisory Certification Programs.

**Special Education, Behavioral Disorders Concentration, M.Ed.**

This is a graduate program that leads to a Master of Education degree in Special Education. Applicants are required to present evidence of previous successful experience in working with students and a commitment to teaching students with disabilities.

A maximum of 9 credits in special education may be accepted when non-matriculated students make application to the special education program.

Each student is required to have a program-planning sheet approved by their advisor on file. A candidate is required to obtain a minimum grade of B in each course. Courses with a grade less than B must be repeated. A grade of F in any course will automatically dismiss that student from the program.

Applicants interested in special education certification must present transcripts that demonstrate that the following courses or their equivalents have been taken at an undergraduate or graduate level:

- Introduction to Exceptionalities: EEC273
- Effective Instructional Strategies for Students with Exceptionalities: EEC 423
- Teaching Reading to English Language Learners: RDG 413

If the applicant's transcript does not show evidence of having taken these or comparable courses, the courses will be treated as a deficiency (i.e., required background course that must be taken before receiving full admission to the program).

**Requirements (33 crs.)**

*Prerequisites (Introduction to Exceptionalities, Assessment, Inclusion and English Language Learners) must be taken if transcripts do not show evidence of prior completion.*

- EEC 535 - Special Education Processes in a Standards Aligned System Credits: 3
- EEC 545 - Applied Behavior Analysis/Positive Behavior Supports Credits: 3
- EEC 548 - Direct Instruction Credits: 3
- ELP 510 - Special Education Law Credits: 3
- EEC 565 - Instruction for Students with Autism Spectrum Disorders Credits: 3
- EEC 571 - Instruction for Students with Social, Emotional, and Behavior Disorders Credits: 3
- EEC 590 - Practicum I in Special Education Credits: 3
- EEC 600 - Research in Special Education Credits: 3
- Electives Credits: 9

**Note:**

Electives chosen based on advisement.

**Special Education Supervisor**
For information concerning the post-master's program leading to Pennsylvania certification as a Special Education Supervisor, refer to Supervisory Certification Programs.

**Special Education, Intellectual Disabilities/Developmental Disabilities Concentration, M.Ed.**

This is a graduate program that leads to a Master of Education degree in Special Education. Applicants are required to present evidence of previous successful experience in working with students and a commitment to teaching students with disabilities.

A maximum of 9 credits in special education may be accepted when non-matriculated students make application to the special education program.

Each student is required to have a program-planning sheet approved by their advisor on file. A candidate is required to obtain a minimum grade of B in each course. Courses with a grade less than B must be repeated. A grade of F in any course will automatically dismiss that student from the program.

Applicants interested in special education certification must present transcripts that demonstrate that the following courses or their equivalents have been taken at an undergraduate or graduate level:

- Introduction to Exceptionalities: EEC273
- Effective Instructional Strategies for Students with Exceptionalities: EEC 423
- Teaching Reading to English Language Learners: RDG 413

If the applicant's transcript does not show evidence of having taken these or comparable courses, the courses will be treated as a deficiency (i.e., required background course that must be taken before receiving full admission to the program).

**Requirements (33 crs.)**

*Prerequisites (Introduction to Exceptionalities, Assessment, Inclusion and English Language Learners) must be taken if transcripts do not show evidence of prior completion.*

- EEC 535 - Special Education Processes in a Standards Aligned System Credits: 3
- EEC 545 - Applied Behavior Analysis/Positive Behavior Supports Credits: 3
- EEC 548 - Direct Instruction Credits: 3
- EEC 561 - Instruction for Students with Low Incidence Disabilities Credits: 3
- ELP 510 - Special Education Law Credits: 3
- EEC 590 - Practicum I in Special Education Credits: 3
- EEC 600 - Research in Special Education Credits: 3
- Electives Credits: 12

**Note:**

Electives chosen based on advisement.

**Special Education Supervisor**
Special Education, Learning Disabilities Concentration, M.Ed.

This is a graduate program that leads to a Master of Education degree in Special Education. Applicants are required to present evidence of previous successful experience in working with students and a commitment to teaching students with disabilities.

A maximum of 9 credits in special education may be accepted when non-matriculated students make application to the special education program.

Each student is required to have a program-planning sheet approved by their advisor on file. A candidate is required to obtain a minimum grade of B in each course. Courses with a grade less than B must be repeated. A grade of F in any course will automatically dismiss that student from the program.

Applicants interested in special education certification must present transcripts that demonstrate that the following courses or their equivalents have been taken at an undergraduate or graduate level:

- Introduction to Exceptionalities: EEC273
- Effective Instructional Strategies for Students with Exceptionalities: EEC 423
- Teaching Reading to English Language Learners: RDG 413

If the applicant's transcript does not show evidence of having taken these or comparable courses, the courses will be treated as a deficiency (i.e., required background course that must be taken before receiving full admission to the program).

Requirements (33 crs.)

Prerequisites (Introduction to Exceptionalities, Assessment, Inclusion and English Language Learners) must be taken if transcripts do not show evidence of prior completion.

- EEC 535 - Special Education Processes in a Standards Aligned System Credits: 3
- EEC 545 - Applied Behavior Analysis/Positive Behavior Supports Credits: 3
- EEC 548 - Direct Instruction Credits: 3
- EEC 550 - Instruction for Students with High Incidence Disabilities Credits: 3
- EEC 551 - Subject Area Content Access for Students with Learning Disabilities in a Standards Aligned System Credits: 3
- ELP 510 - Special Education Law Credits: 3
- EEC 590 - Practicum I in Special Education Credits: 3
- EEC 600 - Research in Special Education Credits: 3
- Electives Credits: 9

Note:

Electives chosen based on advisement.

Special Education Supervisor
For information concerning the post-master's program leading to Pennsylvania certification as a Special Education Supervisor, refer to Supervisory Certification Programs.

Certificate

Post-Master's Degree Certification Program for School Principals

Admissions Policies

A candidate who has completed a master's degree other than the Master of Education degree in educational leadership at Shippensburg University will not be required to complete a second master's degree; however, his or her program may need to include additional courses identified as necessary to attain the required competencies. Students who have earned an M.Ed. in Educational Leadership, or a related area (i.e. Reading, Curriculum & Instruction, Early Childhood, etc.) and need only K-12 Principal Certification may apply to the Dean of Admissions for the Post-Master's K-12 Principal Certification Program.

1. The applicant shall present a copy of the applicant's teaching certificate and evidence of three years of successful teaching experience in elementary, middle, or secondary schools.
2. Applicants who did not complete the Master of Education degree at Shippensburg University shall also provide official transcripts sent to the Dean of Admissions by any institution at which the applicant has taken undergraduate or graduate work. Applicants must obtain two reference forms from the Department of Educational Leadership and Special Education. These forms are available at http://www.ship.edu/ELSE/Educational_Leadership/Forms/. One recommendation must be completed by a chief school officer (district superintendent or intermediate unit executive director) in the school or intermediate unit in which the candidate is currently employed or has been most recently employed. The second reference must be either from the applicant's principal or immediate supervisor.
3. Applicants must submit a completed Practicum application between their school district and the Educational Leadership program. This should be completed one year in advance of the first practicum.
4. Recommendation for admission to the certification program will be determined by the faculty in the Department of Educational Leadership and Special Education.

Policies for the Principal Certification Program

1. The Pennsylvania Department of Education requires a minimum of three years of professional school experience in order to be eligible for the Administrative I certificate.
2. A B average must be maintained for the credits required for certification, with not more than one C grade included.
3. Courses or prescribed experiences may be repeated only with the approval of the student's advisor, the chair of the Department of Educational Leadership and Special Education, and the Dean of the College of Education and Human Services.
4. Prescribed experiences for the certification program must be completed within a three-year period. This requirement will apply unless an extension is granted for extenuating circumstances by the Department and the Dean.
5. Individuals pursuing principal certification who have not gone through a candidacy review for the Master's degree with the Department of Educational Leadership and Special Education at Shippensburg University may be required to complete an interview. If required, this review must be conducted after completion of six to nine hours of coursework.
6. It is essential the student work closely with his or her advisor throughout the program. A student is required to complete 15 credit hours at Shippensburg University in order for the Department to recommend him/her for certification.

7. The practicum experiences will be individually prescribed programs based upon Pennsylvania Department of Education mandated competencies and the experiences of the candidate. Arrangements for practicum should be made one year in advance.


Requirements (21 crs.)

Required Pennsylvania Inspired Leadership Core Courses for Principal Certification

- ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3
- ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3
- ELP 519 - Advanced Leadership and the School Principal PK-12 Credits: 3
- ELP 520 - School Finance and Student Learning Credits: 3
- ELP 521 - Legal and Ethical Issues that Impact on Student Learning Credits: 3
- ELP 514 - Practicum I Leadership Field Experiences at the Building Level Credits: 3
- ELP 522 - Practicum II Advanced Leadership Field Experiences at the Building Level Credits: 3

Supervisory I Certification

Students who have earned an M.Ed. in Educational Leadership, or a related area (i.e. Reading, Curriculum & Instruction, Early Childhood, Special Education etc.) and need only Special Education Supervisory Certification may apply to the Dean of Admissions for the Post-Master's Special Education Supervisory Certification Program.

1. The applicant shall present a copy of the applicant's teaching certificate and evidence of five years of successful special education teaching in elementary, middle, or secondary schools.

2. Applicants who did not complete the Master of Education degree at Shippensburg University shall also provide official transcripts sent to the Dean of Admissions by any institution at which the applicant has taken undergraduate or graduate work. Applicants must obtain two reference forms from the Department of Educational Leadership and Special Education. These forms are available at http://www.ship.edu/ELSE/Educational_Leadership/Forms/. One recommendation must be completed by a chief school officer (district superintendent or intermediate unit executive director) in the school or intermediate unit in which the candidate is currently employed or has been most recently employed. The second reference must be either from the applicant's principal or immediate supervisor.

3. Applicants must submit a completed Practicum application between their school district and the Educational Leadership program. This should be completed one year in advance of the first practicum.

4. Recommendation for admission to the certification program will be determined by the faculty in the Department of Educational Leadership and Special Education.

Policies for the Special Education Supervisory Certification Program

1. The Pennsylvania Department of Education requires a minimum of five years of successful special education teaching in elementary, middle, or secondary schools in order to be eligible for the Special Education Supervisory certificate.
2. A B average must be maintained for the credits required for certification, with not more than one C grade included.

3. Courses or prescribed experiences may be repeated only with the approval of the student's advisor, the chair of the Department of Educational Leadership and Special Education, and the Dean of the College of Education and Human Services.

4. Prescribed experiences for the certification program must be completed within a three-year period. This requirement will apply unless an extension is granted for extenuating circumstances by the Department and the Dean.

5. Individuals pursuing principal certification who have not gone through a candidacy review for the Master's degree with the Department of Educational Leadership and Special Education at Shippensburg University may be required to complete an interview. If required, this review must be conducted after completion of six to nine hours of coursework.

6. It is essential the student work closely with his or her advisor throughout the program. A student is required to complete 15 credit hours at Shippensburg University in order for the Department to recommend him/her for certification.

7. The practicum experiences will be individually prescribed programs based upon Pennsylvania Department of Education mandated competencies and the experiences of the candidate. Arrangements for practicum should be made one year in advance.


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**Early Childhood Education, Reading, Social Studies, and Special Education**

- ELP 500 - General School Administration Credits: 3
- ELP 510 - Special Education Law Credits: 3
- ELP 514 - Practicum I Leadership Field Experiences at the Building Level Credits: 3
- ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3
- ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3
- ELP 521 - Legal and Ethical Issues that Impact on Student Learning Credits: 3

  - ELP 517 - Leadership in Technology and Effective Program Delivery Credits: 3 or
  - ELP 520 - School Finance and Student Learning Credits: 3

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**Superintendent's Letter of Eligibility**

**Superintendent's Letter of Eligibility Certification**

Upon completion of the residencies, candidates will be eligible for the Superintendent's Letter of Eligibility in PA provided that they also meet the experience and state exam requirements.

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**Application Requirements**
Graduate application and application fee

Transcripts from all previous colleges and universities including any additional certification program(s)

Current resume or curriculum vitae including current/past leadership positions, specific leadership responsibilities and experiences

Applicants must hold administrative and/or supervisory positions in education

Three letters of recommendation, one of which should be from a school district superintendent or chief organization administrator if not employed at a school district

500-1,000-word goal statement addressing applicant's goals and objectives for Superintendent Letter of Eligibility Program and how this program will assist in achieving those outcomes

Teaching certifications and endorsements currently held (optional)

Policies for Completing the Superintendent's Letter of Eligibility Program

1. Maintain at least a B average in all coursework, with not more than one C grade included in this average. Obtaining a second grade of C will cause the students to be dismissed from the university.
2. Enroll for a minimum of six graduate credit hours per year.
3. Work closely with advisor.
4. Each student, in addition to completing the course requirements specified on his or her individual program of studies, must demonstrate, through appropriate practicum activities, field experiences, and a written/oral competency exam (Exit Defense), that he/she has acquired the knowledge, skills, and competencies to render effective leadership in schools and educational institutions. The student's leadership, scholarship, and interpersonal skills shall be monitored most carefully throughout his/her program of studies and during his/her practicum and field experiences.
5. Satisfy all final evaluation policies and procedures established by the Department of Educational Leadership and Special Education for students in the Letter of Eligibility program.

Student Advisement for the Leadership Residency Program

1. The Department of Educational Leadership and Special Education assigns a faculty advisor for each applicant.
2. The faculty advisor is responsible for reviewing the applicant's academic records, degrees, and certification held along with past and present professional experiences. After consulting with the applicant, the advisor shall construct an individualized program of study for each applicant designed to meet the professional needs of the applicant as well as satisfying the requirements for certification by the Pennsylvania Department of Education and the Department of Educational Leadership and Special Education.
3. It shall be the joint responsibility of the student and the advisor to consult with one another on a regular basis while the student is enrolled in the Residency Leadership Program.
4. The student should seek the advice and counsel of his/her faculty advisor when the need arises. The faculty advisor is the contact person for any questions or concerns the student may have relating to his/her graduate program at Shippensburg University.
5. Faculty members shall be invited to participate in an Exit Defense panel at the completion of the program.
6. The faculty advisor shall continually review his/her advisee's progress, academic work, and general overall standing and report any concerns to both the student and the Educational Leadership and Special Education Department.
7. The faculty of the Department of Educational Leadership and Special Education shall review all students' academic records prior to recommending a student to the Pennsylvania Department of Education for the Superintendent's Certification.

Requirements

- ELP 721R - Residency: Strategic Leadership in District Governance Credits: 4
- or
- ELP 622 - The Superintendent as a School and Community Leader Credits: 3
- ELP 724R - Residency: Ethical and Legal Decision-making at the District Level Credits: 4
- ELP 723R - Residency: Negotiations and Personnel Strategic Decision Making Credits: 4
- ELP 726R - Residency: Optimizing Financial Resources to Support District Level Achievement Credits: 4
- ELP 727R - Residency: Instructional and Technology Leadership at the Executive Level Credits: 4
- ELP 725R - Residency: The Impact of Facilities and Plant Management Decisions on School Effectiveness Credits: 4

Note:

A minimum of 15 semester hour credits must be completed at Shippensburg University. Also, upon completion of the program, students must meet the six years of qualified educational experiences of which three must be in administrative position(s) as part of the requirement to receive the Superintendent's Letter from the Pennsylvania Department of Education.

Military Science Department

Army Reserve Officers Training Corps (ROTC)

Army ROTC is a program which combines courses in military science with summer training opportunities to transform students into U.S. Army officers. Upon successful completion of the program and graduation, Cadets are awarded a commission as a second lieutenant in either the U.S. Army, the Army National Guard, or the U.S. Army Reserve.

Scholarships

Army ROTC scholarships are offered for two, three, and four years. The four-year scholarships are awarded on a worldwide competitive basis to U.S. citizens who will be entering an institution as a freshman. Military science-enrolled or non-enrolled students may compete for three-year (starts in sophomore year) and two-year (starts in junior year) scholarships. Recipients receive full tuition, academic fees, book and supply expenses (not room and board), and a monthly stipend. Scholarship recipients incur a service commitment for active or reserve forces duty.

Financial Assistance
Books and equipment for military science courses and the ROTC program are provided free of charge to all students. All juniors and seniors in the ROTC program (advanced course) and scholarship Cadets are paid a tax-free stipend and receive other benefits.

**Academic Advisement**

Students are encouraged to contact the Department of Military Science for information concerning the ROTC program. The military science department is available to discuss the program with interested students at 717-477-1896.

**The Four-Year Program**

The Four-Year Army ROTC program is divided into two parts called the basic course and the advanced course.

The basic course (MIL 131/ MIL 132 and MIL 231/ MIL 232) is usually taken during the first two years of college and covers such subjects as customs, traditions and organizations of the service, national defense, military history, and leadership development. In addition, a variety of outside social and professional enrichment activities are available. ROTC textbooks, uniforms, and other essential materials for the basic course are furnished to students at no cost. After they have completed the basic course, students who have demonstrated the potential to become an officer and who have met the physical and scholastic standards are eligible to enroll in the advanced course. There is no military obligation incurred by students completing the basic course.

The advanced course (MIL 331/ MIL 332 and MIL 350/ MIL 351) is usually taken during the final two years of college. It includes instruction in management, tactics, ethics, and professionalism, and further leadership development. Textbooks and uniforms in the advanced course are also furnished to students at no cost.

During the summer between their junior and senior years of college, advanced course Cadets attend a paid four-week training session called Advance Camp at Fort Knox, Kentucky. Advance Camp provides Cadets the chance to practice what they’ve learned in the classroom and introduces them to Army life in a field environment.

Students may utilize up to the maximum number of credits in the core curriculum received through completions of Military Science (ROTC) classes as free electives which are credited towards graduation. All credits are computed into QPA and overall credits completed.

**The Two-Year Program**

The Two-Year program is designed for junior and community college graduates, students at four-year colleges who did not take ROTC during their first two years and students entering a two-year postgraduate course of study.

To enter the Two-Year program, students must first attend the paid four-week Basic Course, held during the summer between their sophomore and junior years of college. At the Basic Course, students learn to challenge themselves physically and mentally and to build their confidence and self-respect.

After they have successfully completed the Basic Course, students who meet all the necessary enrollment requirements are enrolled in the advanced course.

**Basic Course Practicum**

The Military Science Leadership Practicum is a paid, four-week course conducted at Fort Knox, Kentucky, during the summer. It is designed primarily for junior and community college graduates entering Shippensburg University seeking hands-on experiences in the U.S. Army.
The practicum prepares students for 300-level military science courses, but there is no obligation to continue in military science for attending the practicum. Students who successfully complete the leadership practicum may continue on in the advanced ROTC program. Exceptional performance during this program may qualify the student for a scholarship. Participants receive room, board, travel expenses, medical care, and are paid approximately $700 for the four-week period.

**Advance Course Practicum**

The four-week summer training program, conducted at Fort Knox, Kentucky, stresses the application of military skills to rapidly changing situations. Participants are evaluated on their ability to make sound decisions, to direct team efforts toward the accomplishment of common goals, and to meet mental and physical challenges. Completion of this practicum is required prior to commissioning and is normally attended between the junior and senior years. Participants receive room, board, travel expenses, medical care, and are paid approximately $700 for the four-week period.

**Military Science Career Possibilities**

Individuals who complete the ROTC program earn a commission as a Second Lieutenant upon graduation and serve in the active Army or Reserve components.

In addition to the core requirements, Cadets must complete a course in military history. Students are also encouraged to better enhance their education in courses such as anthropology, written communication, human behavior, management, and international studies.

**Social Work/Gerontology Department**

Elizabeth A. Fisher, Ph.D., *Chair* (717) 477-1365  
Sam Benbow, Ed.D.  
Dara Bourassa, Ph.D.  
Jennifer Clements, Ph.D.  
Jayleen Galarza, Ph.D.  
Michael J. Lyman, Ph.D.  
Dorlisa Minnick, Ph.D.

**Master of Social Work**

**Social Work, M.S.W.**

**Collaboration**

Shippensburg University jointly offers with Millersville University a Master of Social Work (MSW) degree program. An MSW permits graduates to work in a variety of human service programs and agencies in an advanced clinical and/or administrative capacity. The flexibility of the social work degree provides graduates with many options as they pursue their careers in helping fields.

**MU-SU MSW Program Mission**
The mission of the joint MU-SU MSW Program is to provide accessible social work graduate education in the South-Central region of Pennsylvania. We prepare students to be effective advanced generalist practitioners, committed to the purpose and values of the social work profession.

**Advanced Generalist Perspective**

The advanced generalist approach to direct and indirect practice is characterized by the practitioner's ability to address complex situations within multiple roles and levels. This strengths-based orientation is grounded in a liberal arts foundation and guided by a systems approach incorporating core social work values and ethics and respect for diversity. Using research-informed practice, the advanced generalist social worker promotes positive change in the social, political, and economic arenas to advance human rights.

**MU-SU Program Goals**

1. Prepare students for competent advanced generalist practice through the acquisition and demonstration of social work competencies consistent with CSWE educational policy and accreditation standards.
2. Prepare students with the specialized knowledge and skills for social work practice with client systems to facilitate change within the boundaries of ethical practice and with attention to the profession's commitment to social justice and human rights.
3. Encourage students' commitment to continued professional development and lifelong learning by providing opportunities for community engagement and real-life learning experiences.

**MU-SU Program Core Competencies**

Upon completion of the Master of Social Work degree, students will be able to:

1. Demonstrate Ethical and Professional Behavior
2. Engage in 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

**Program Structure**

The program is designed for students who have no previous social work education and for those who want to build upon their baccalaureate social work education. Students may enroll in the face-to-face or online program. Classes are designed for working professionals with workplace internship options.

Courses in the face-to-face program are offered evenings with some Saturday classes, which are electives. Some electives are offered online asynchronously and/or with synchronous meetings. Students will take all courses on the campus where they are enrolled, while benefiting from the quality faculty and resources of both universities.

Courses in the online program are offered synchronously in the evenings or asynchronously. Courses are taught by faculty from both universities.
Accreditation

The MU-SU MSW program is fully accredited by the Council on Social Work Education (CSWE).

Admissions Classifications

Students may apply for regular or advanced standing admission. Students may apply for advanced standing admission if they graduated from a CSWE-accredited social work program within the past eight years and meet the QPA requirements as described in the admission guidelines. They must also have a reference from the BSW program director. Regular standing admission is for students who completed a baccalaureate degree with a major other than social work. Students who graduated from a CSWE-accredited social work program within the past eight years but did not meet the QPA requirements for advanced standing, will be admitted to the regular program. They may exempt courses as described in the Admission Guidelines.

Admission Guidelines

Campus candidates apply through Shippensburg University. Please refer to the SU Graduate Admissions page for the latest admission guidelines and information.

Exemption from Generalist (First-Year) Courses

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 some first-year generalist courses other than practice and field instruction 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 notify the applicant of the exemptions.

Entrance Examination

Only applicants whose QPA falls below the minimum standard of 2.8 need to take either the Miller Analogies Test (MAT) or the General Graduate Record Exam (GRE) as part of the admission process. Scores should not be more than five years old at the time of application.

Personal Qualifications

Applicants must present evidence of a combination of professional and personal experiences, qualities, and values that are considered essential for the practice of social work. A current resume is required. Three professional references are required with a minimum of one from faculty and one from a current or recent agency employer or supervisor. The third reference must be from another faculty or employer/supervisor. No personal references or co-worker references will be accepted.

Applicants will complete a written personal statement. Information is available through the Graduate Admissions website.
The program may request a personal interview or additional information when necessary to make a fully informed admissions decision. Persons who have criminal records are not eligible to work in many human service fields. Applicants with criminal records should contact the MSW program director for additional information.

Transfers

Students may transfer credits earned at other regionally accredited institutions prior to admission which are equivalent of the MSW courses. Graduate credits earned more than five years prior to admission do not qualify for transfer. Students may only transfer credits provided 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 MU-SU MSW program director and the faculty advisor and as part of a planned program, a student may transfer credits from other graduate programs at MU or SU.

Experience

The program does not grant academic credit for life or work experience.

Degree Requirements

Students enrolling in the regular program must complete 60 credits of graduate study including: 12 credits of field practicum, 9 credits of electives, and 39 credits of required coursework. BSW graduates in the Regular Program may receive exemption for some coursework, as per admission guidelines.

Students enrolled in the advanced standing program must complete 36 credits of graduate study including: 6 credits of field practicum, 12 credits of electives, and 18 credits of required coursework including a summer "bridge" course.

Due to the cohort nature of this program, all courses must be taken in sequence. The Regular Program can be completed in two years, three years or four years. The Advanced Standing Program can be completed in one year or two years. Both programs are year-round and include summer courses.

Courses

Students enroll in either the regular (60 credits) or the advanced (36 credits) program. Students in the regular program take both the required generalist year and the specialization year courses including three elective courses. Students in the advanced program take the required integrative seminar, the specialization year courses, and four elective courses. All courses are three credits each.

Generalist Courses

- SWK 501 - Principles and Philosophies of Social Work Credits: 3
- SWK 505 - Understanding Social Work Practice with Diverse Populations Credits: 3
- SWK 510 - Human Behavior in the Social Environment I Credits: 3
- SWK 511 - Human Behavior in the Social Environment II Credits: 3
- SWK 515 - Social Welfare Policy Credits: 3
- SWK 520 - Micro/Mezzo Social Work Practice Credits: 3
- SWK 521 - Macro Social Work Practice Credits: 3
- SWK 525 - Research Methods Credits: 3
• SWK 530 - Field Practicum I Credits: 3
• SWK 531 - Field Practicum II Credits: 3

Advanced Standing

• SWK 601 - Integrative Seminar Credits: 3

Specialization Courses

• SWK 610 - Advanced Micro Practice and Assessment Credits: 3
• SWK 615 - Advanced Social Welfare Policy Credits: 3
• SWK 620 - Advanced Practice with Groups and Families Credits: 3
• SWK 621 - Advanced Macro Social Work Practice Credits: 3
• SWK 625 - Advanced Research Methods Credits: 3
• SWK 630 - Advanced Field Practicum I Credits: 3
• SWK 631 - Advanced Field Practicum II Credits: 3

Electives - 9-12 credits required

• SWK 602 - Behavioral Health Care Settings Credits: 3
• SWK 603 - Gender Issues Credits: 3
• SWK 604 - Health Care Settings Credits: 3
• SWK 605 - Child Welfare Settings Credits: 3
• SWK 606 - School Settings Credits: 3
• SWK 607 - Emergency Mental Health and Trauma Credits: 3
• SWK 608 - Social Work Administration and Supervision Credits: 3
• SWK 609 - Introduction to Art Therapy Credits: 3
• SWK 611 - Children and Youth at Risk Credits: 3
• SWK 612 - Social Work and the Law Credits: 3
• SWK 613 - Mediation in Social Work Practice Credits: 3
• SWK 614 - Social Work Surveys Development and Measurement Credits: 3
• SWK 616 - Leadership Dynamics in Social Work Practice Credits: 3
• SWK 617 - Social Work Practice in the Field of Addictions Credits: 3
• SWK 618 - Human Rights in Social Work Credits: 3
• SWK 619 - Global Perspectives in Social Work Credits: 3
• SWK 622 - Military Social Work Credits: 3
• SWK 623 - Narrative Therapy in Social Work Practice Credits: 3
• SWK 640 - Selected Topics in Social Work Credits: 3

Certificate

School Social Work Certificate

The purpose of the program is to prepare school social workers who meet the requirements for CSPG 87 School Social Worker, Educational Specialist Certificate PK-12. The School Social Worker, who is required to have a Master’s degree in social work (MSW), provides schools with the knowledge and competence required to provide school social
work services for all students in grades PK-12 with a focus on preventative and/or problem-solving tools. The program will follow the PK-12 School Social Worker Education Specialist Program Preparation Guidelines issued by the Pennsylvania Department of Education for this purpose. Students interested in receiving the certificate will have a MSW, have a field practicum in a school setting and take existing specific classes in the departments of Teacher Education and Educational Leadership and Special Education. This certificate can be taken concurrently with the MSW program.

Social Work Requirements (12-18 crs.)

As part of their MSW course work, students will take (or will have taken) the following courses which are needed for the certification by PDE.

- SWK 611 - Children and Youth at Risk Credits: 3
- SWK 606 - School Settings Credits: 3

Field Experience in a School Setting:

- SWK 530 - Field Practicum I Credits: 3 AND
- SWK 531 - Field Practicum II Credits: 3
OR
- SWK 630 - Advanced Field Practicum I Credits: 3 AND
- SWK 631 - Advanced Field Practicum II Credits: 3

Education Policy (3 crs.)

- SWK 615 - Advanced Social Welfare Policy Credits: 3
- ELP 510 - Special Education Law Credits: 3
- ELP 521 - Legal and Ethical Issues that Impact on Student Learning Credits: 3

Accommodations & Adaptations for Students with Disabilities (9 crs.)


Select two of the following:

- EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3
- EEC 550 - Instruction for Students with High Incidence Disabilities Credits: 3
- EEC 571 - Instruction for Students with Social, Emotional, and Behavior Disorders Credits: 3

Meeting the Instructional Needs of English Learners (3 crs.)

Select one of the following:

- TESL 450 - Foundations of English Language Learner Credits: 3
- RDG 413 - Teaching Reading to English Language Learners Credits: 3
- TESL 520 - Literacy and Linguistically Diverse Cultures and Communities Credits: 3
Note: Any required education courses taken towards the School Social Work Certificate count as MSW electives.

Teacher Education Department

Lynn Baynum, Ph.D, Chair (717) 477-1688
Rebecca Blahus, Ph. D
Gwendolyn Brown Jackson, Ed.D.
Christopher Keyes, Ph.D.
Han Liu, Ph.D.
Andrea Malmont, Ed.D.
Eucabeth Odhiambo, Ed.D.
Donald Philpot, Ph.D.
Jennifer Pyles, Ph.D.
Christine Royce, Ed. D
Cheryl Slattery, Ed.D.

Programs Offered

The Department of Teacher Education offers graduate programs leading to the Master of Education degree in two areas: Curriculum and Instruction, and Literacy/Technology/Reading.

The Curriculum and Instruction degree includes the following cluster choices: early childhood education, elementary education, middle level education as well as biology, English, geography/earth science, history, mathematics, and modern languages secondary education.

The Early Childhood cluster includes three options: M.Ed. only; M.Ed. with state certification and M.Ed. with ESL program specialist certification.

The M.Ed. in Literacy/Technology/Reading has two tracks: Reading Specialist and Literacy Specialist tracks.

Admission to Teacher Education Programs

All applications for admission to our Teacher Education programs must begin with application to the Graduate School at Shippensburg. The Teacher Education department will supply the applicant with required program application forms after notification the individual has met the requirements for the graduate school.

Important admission information follows:

1. Applicants must have a baccalaureate degree from an accredited college or university.

2. Applicants must present an official transcript showing at least a 2.75 cumulative quality point average for undergraduate studies. Those who do not qualify will be required to take either the Graduate Record Exam (GRE) or the Miller Analogies Test (MAT) prior to admission. Applicants for certification programs must have a 3.0 cumulative quality point average for undergraduate students.

3. Applicants to the Reading Specialist program are expected to have prior certification in either elementary or secondary education.

4. It is strongly recommended applicants possess relevant experience prior to admission to graduate study.
5. With the application to the graduate school, the applicant will receive a packet of materials containing reference forms, a personal data form, and a request for a resume.

6. Submit all the above materials to the Graduate Admissions Office as requested. When all documents have been returned, program faculty will invite the applicant to the next scheduled interview session.

7. Appear for an interview with one of the faculty.

8. Following the interview each applicant will be assessed by the program with regard to relevant life/work/academic experiences as well as overall impression from the on-campus interview and applicant's references.

Program Requirements

In order to be approved for graduation, each student is required to have a planning sheet on file in the graduate office, approved by the assigned academic advisor. The courses for a student who enrolls in a certification program along with a Master's degree may include undergraduate coursework. There may be from two to four semesters of these courses that will be identified on an individual basis. Candidates for initial certification must demonstrate competency in student teaching.

Master of Arts in Teaching

STEM Education, M.A.T. with Certification

The Master of Arts in Teaching (M.A.T.) in STEM Education is designed for professionals and recent college graduates who already hold a degree in science, mathematics, or information technology/business discipline and who wish to teach science in either a middle school or high school. Completion of the program will result in both a master's degree and teacher certification through the Pennsylvania Department of Education.

Students will complete a sequence of six courses that are grounded in research-based principles and focus on teaching instructional best practices in the STEM fields followed by a seventh class which is comprised of a twelve-week student teaching practicum. Students will also design, complete, and present a research project and comprehensive teaching portfolio.

Program Delivery

The 30-credit M.A.T. is designed to meet the needs of working professionals and can be completed in 18 months. Cohorts of 10-15 students will complete a sequence of six modules using a combination of monthly face-to-face meetings, online interactions, and video-conferencing. Each module will be 3 credits. At the beginning of the program, students will be assigned an experienced cooperating teacher in their certification area in a local school as a mentor and approximately 25 hours of observation and co-teaching per module will be required.

During the 12-week student teaching practicum (12 crs.), students will implement principles from the modules and assume responsibilities for planning, instruction, and assessment. Two capstone projects, a professional portfolio and the results of a research project, will be presented at the end of the program. The sequence for completing the M.A.T. is as follows:

- One module during the first summer. (3 crs.)
- Four modules during the first academic year. (12 crs.)
- One module during the second summer (3 crs.)
- Student teaching during the fall semester of second academic year. (12 crs.)
• Presentation of professional portfolio and research project during December of fall semester of second academic year.
• Assistance with job placement during the spring semester of the second academic year.

**M.A.T. Admission Requirements**

• Bachelor's degree in a science, mathematics or information technology/business discipline from a regionally accredited institution.
• Official undergraduate and graduate (if applicable) transcripts sent to Shippensburg University.
• Completed application including a statement of intent summarizing their motivations and goals for entering the teaching profession.
• Two letters of recommendation.
• Passing scores on two teacher certification exams required by the Commonwealth of Pennsylvania: Praxis I Pre-Professional Skills Test and Praxis II Subject Assessment. More information can be found at the Educational Testing Services website (www.ets.org).

The M.A.T. is designed for students who already have content expertise in a science, mathematics, or information technology/business discipline that is consistent with one or more of the secondary (grades 7-12) licensure areas in Pennsylvania: biology, chemistry, physics, earth and space science, environmental science, and general science, mathematics, or information technology/business.

Applicants may also pursue Middle Level (grades 4-8) certification. The M.A.T. directors will review each applicant's transcripts and Praxis examination scores as part of the admissions process. Applicants are encouraged to register for the Praxis examinations as soon as possible to ensure that scores are available by the application deadline. Final M.A.T. program admission is contingent upon passing the Praxis examinations.

**Course Requirements**

**All students then complete (12 crs)**

• STEM 590 - Student Teaching in STEM Practicum Credits: 1-12

**Program Core (15 crs.)**

• STEM 510 - Foundations of STEM Education in the United States Credits: 3
• STEM 520 - Research & Contemporary Issues in STEM Education Credits: 3
• STEM 530 - Instructional Strategies and Technology in the STEM Education Credits: 3
• STEM 540 - Assessment in STEM Education Credits: 3
• STEM 560 - Accommodating all Students in STEM Education Credits: 3

**Choose appropriate course based on certification area (3 crs)**

• SCED 550 - Safety and Welfare in Science Education Credits: 3
• STEM 555 - Foundations of Teaching Business and Technology Credits: 3

For More Information
Master of Education

Curriculum and Instruction, Early Childhood Concentration, M.Ed.

Curriculum and Instruction (M.Ed.)

The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:

- Early Childhood
- Elementary Education
- Middle School
- Middle School with Certification
- Secondary Biology
- Secondary Geography/Earth Science
- Secondary History
- Secondary Mathematics
- Secondary Modern Language

Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 - Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

Core Requirement (18 crs.)

Focus on Curriculum and Assessment

- ECH 577 - Early Childhood Curriculum and Assessment Credits: 3

Focus on Effective Teaching and Leadership

- TCH 501 - Instructional Strategies Credits: 3 or
- TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3

Focus on Learner

- ECH 563 - Leadership in Early Childhood Education Credits: 3
- TCH 575 - Advanced Child Development Credits: 3
- ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3

Focus on Research
• TCH 600 - Elements of Research Credits: 3

Early Childhood Core Courses (12 crs.)

• ECH 520 - Social and Emotional Development in Early Childhood Credits: 3
• ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3
• ECH 540 - Families and Early Childhood Education Credits: 3
• TCH 609 - Research Informed Practices Credits: 3

Electives with Advisement (6 crs.)

• ECH 410 - Physical, Motor, and Sensory Development in Early Childhood Credits: 3
• ECH 490 - Selected Topics in Early Childhood Credits: 3
• TCH 490 - Selected Topics in Teacher Education Credits: 1-3
• RDG 528 - Foundations of Literacy Development Credits: 3
• Or other electives with advisement

Note:

TCH 600 and TCH 609 are required to complete the master's degree in Early Childhood Education.

Curriculum and Instruction, Early Childhood with PreK-4th Grade Certification, M.Ed.

Curriculum and Instruction (M.Ed.)

The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:

• Early Childhood
• Elementary Education
• Middle School
• Middle School with Certification
• Secondary Biology
• Secondary Geography/Earth Science
• Secondary History
• Secondary Mathematics
• Secondary Modern Language
Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 - Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

Program Core (18 crs.)

Focus on Curriculum and Assessment
- ECH 577 - Early Childhood Curriculum and Assessment Credits: 3

Focus on Effective Teaching and Leadership
- ECH 563 - Leadership in Early Childhood Education Credits: 3

Focus on Learner
- TCH 575 - Advanced Child Development Credits: 3
- ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3
- RDG 528 - Foundations of Literacy Development Credits: 3

Focus on Research
- TCH 600 - Elements of Research Credits: 3

Early Childhood Core Courses (12 crs.)

- ECH 520 - Social and Emotional Development in Early Childhood Credits: 3
- ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3
- ECH 540 - Families and Early Childhood Education Credits: 3
- TCH 609 - Research Informed Practices Credits: 3

Courses for ADD-ON PreK-4 Certification (PDE Approved)

Courses must be completed prior to graduation from program. Courses may be substituted with other courses with exact competency-based elements - advisor approval required. Field hours are required during certification coursework; proper clearances must be current according to University guidelines to be in the field.

- RDG 383 - English Language Learners in PK-4 Credits: 4
- RDG 443 - Reading Measures and Interventions in PK-4 Credits: 4
- TCH 560 - Making Social Studies Dynamic Credits: 3
- TCH 546 - Teaching Science in the Elementary School Credits: 3
- TCH 542 - Modern Elementary School Mathematics Credits: 3
- EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3
- EEC 483 - Assessing Children with Exceptionalities for Curricular Decision-Making Credits: 3
- ECH 415 - Professional Practicum in PK-4 Credits: 3
- ECH 489 - Early Childhood Student Teaching Credits: 1-12

Pass the PECT Exam

Curriculum and Instruction, Elementary Education Concentration, M.Ed.

Curriculum and Instruction (M.Ed.)
The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:

- Early Childhood
- Elementary Education
- Middle School
- Middle School with Certification
- Secondary Biology
- Secondary Geography/Earth Science
- Secondary History
- Secondary Mathematics
- Secondary Modern Languages

Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

**Program Core (18 crs.)**

**Curriculum and Assessment (3 crs.)**

- ECH 577 - Early Childhood Curriculum and Assessment Credits: 3
- TCH 511 - Framework for Teaching and Learning Credits: 3
- TCH 524 - Middle School Curriculum and Assessment Credits: 3
- ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3

**Effective Teaching and Leadership (6 crs.)**

**Effective Teaching (3 crs.)**

- TCH 501 - Instructional Strategies Credits: 3
- TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3

**Leadership (3 crs.)**

- ECH 563 - Leadership in Early Childhood Education Credits: 3
- ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3

**The Learner (6 crs.)**

**Development (3 crs.)**
• TCH 575 - Advanced Child Development Credits: 3
• ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3

Individual Differences (3 crs.)

• ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3
• EEC 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except Credits: 3
• EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3

Focus on Research (3 crs.)

• TCH 600 - Elements of Research Credits: 3
• BIO 605 - Graduate Research I Credits: 1-3
• GEO 546 - Geoenvironmental Research I Credits: 3
• HIS 600 - Historical Research Methods Credits: 3
• HIS 601 - Research in Local and Regional History Credits: 3

Note:

(TCH 609 does not meet this core requirement)

Cluster Requirement (18 crs.)

Student will choose the program cluster most closely related to their personal/educational needs.

Elementary Education Cluster

Elementary Content Area (9 crs.)

• RDG 528 - Foundations of Literacy Development Credits: 3
• TCH 542 - Modern Elementary School Mathematics Credits: 3
• TCH 546 - Teaching Science in the Elementary School Credits: 3
• TCH 560 - Making Social Studies Dynamic Credits: 3

Elementary Electives (6 crs.)

• TCH 445 - Strategies for Effective Classroom Management Credits: 3
• TCH 490 - Selected Topics in Teacher Education Credits: 1-3
• TCH 505 - Designing Blended and Online Learning Environments Credits: 3
• TCH 620 - Curricular Decision Planning: Standards, Assessment & Accountability Credits: 3

Required Internship

• TCH 609 - Research Informed Practices Credits: 3
Curriculum and Instruction, Middle School Concentration with Certification, M.Ed.

Curriculum and Instruction (M.Ed.)

The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:

- Early Childhood
- Elementary Education
- Middle School
- Middle School with Certification
- Secondary Biology
- Secondary Geography/Earth Science
- Secondary History
- Secondary Mathematics
- Secondary Modern Languages

Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

Program Core (18 crs.)

Curriculum and Assessment (3 crs.)

- ECH 577 - Early Childhood Curriculum and Assessment Credits: 3
- TCH 511 - Framework for Teaching and Learning Credits: 3
- TCH 524 - Middle School Curriculum and Assessment Credits: 3
- ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3

Effective Teaching and Leadership (6 crs.)

Effective Teaching (3 crs.)

- TCH 501 - Instructional Strategies Credits: 3
- TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3

Leadership (3 crs.)
• ECH 563 - Leadership in Early Childhood Education Credits: 3
• ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3

The Learner (6 crs.)

Development (3 crs.)

• TCH 575 - Advanced Child Development Credits: 3
• ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3

Individual Differences (3 crs.)

• ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3
• EEC 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except Credits: 3
• EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3

Focus on Research (3 crs.)

• TCH 600 - Elements of Research Credits: 3
• BIO 605 - Graduate Research I Credits: 1-3
• GEO 546 - Geoenvironmental Research I Credits: 3
• HIS 600 - Historical Research Methods Credits: 3
• HIS 601 - Research in Local and Regional History Credits: 3

Note:

(TCH 609 does not meet this core requirement)

Cluster Requirement (18 crs.)

Student will choose the program cluster most closely related to their personal/educational needs.

Middle Level Post Bac Certification

Core Courses

Focus on Curriculum (3 crs.)

• TCH 524 - Middle School Curriculum and Assessment Credits: 3

Focus on Teaching and Leadership (6 crs.)

• TCH 501 - Instructional Strategies Credits: 3 or
• TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3
• TCH 581 - Leadership at the Classroom, Teaching, and School Level Credits: 3

Focus on Learner (6 crs.)

• TCH 575 - Advanced Child Development Credits: 3
• EEC 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except Credits: 3

Focus on Research (3 crs.)

• TCH 600 - Elements of Research Credits: 3

Middle School Required Competency Areas (9 crs.)

• EEC 483 - Assessing Children with Exceptionalities for Curricular Decision-Making Credits: 3
• EEC 551 - Subject Area Content Access for Students with Learning Disabilities in a Standards Aligned System Credits: 3
• RDG 413 - Teaching Reading to English Language Learners Credits: 3

Student Teaching Practicum (12 crs.)

• TCH 597 - Student Teaching Practicum and Integrated Action Research Credits: 1-12

Curriculum and Instruction, Middle School Concentration, M.Ed.

Curriculum and Instruction (M.Ed.)

The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:

- Early Childhood
- Elementary Education
- Middle School
- Middle School with Certification
- Secondary Biology
- Secondary Geography/Earth Science
- Secondary History
- Secondary Mathematics
- Secondary Modern Languages
Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

Program Core (18 crs.)

Curriculum and Assessment (3 crs.)

- ECH 577 - Early Childhood Curriculum and Assessment Credits: 3
- TCH 511 - Framework for Teaching and Learning Credits: 3
- TCH 524 - Middle School Curriculum and Assessment Credits: 3
- ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3

Effective Teaching and Leadership (6 crs.)

Effective Teaching (3 crs.)

- TCH 501 - Instructional Strategies Credits: 3
- TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3

Leadership (3 crs.)

- ECH 563 - Leadership in Early Childhood Education Credits: 3
- ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3

The Learner (6 crs.)

Development (3 crs.)

- TCH 575 - Advanced Child Development Credits: 3
- ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3

Individual Differences (3 crs.)

- ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3
- EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3

Focus on Research (3 crs.)

- TCH 600 - Elements of Research Credits: 3
- BIO 605 - Graduate Research I Credits: 1-3
- GEO 546 - Geoenvironmental Research I Credits: 3
- HIS 600 - Historical Research Methods Credits: 3
- HIS 601 - Research in Local and Regional History Credits: 3

Note:

(TCH 609 does not meet this core requirement)

Cluster Requirement (18 crs.)

Student will choose the program cluster most closely related to their personal/educational needs.

Focus on Curriculum (3 crs.)

- TCH 511 - Framework for Teaching and Learning Credits: 3
- TCH 524 - Middle School Curriculum and Assessment Credits: 3
- ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3

Focus on Teaching and Leadership (6 crs.)

Select one of the following: (3 crs.)
- TCH 501 - Instructional Strategies Credits: 3
- TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3
  Select one of the following: (3 crs.)
- TCH 581 - Leadership at the Classroom, Teaching, and School Level Credits: 3
- ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3

Focus on the Learner (3 crs.)

- TCH 575 - Advanced Child Development Credits: 3

Individual Differences (3 crs.)

Select one of the following:

- EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3

Focus on Research (3 crs.)

- TCH 600 - Elements of Research Credits: 3

Middle School Content Area (9 crs.)

- TCH 423 - Integrating Literature in Middle Grades Credits: 3
- TCH 445 - Strategies for Effective Classroom Management Credits: 3
Middle School Electives (6 crs.)

6 credits from any content area; i.e., biology, English, geography/earth science, history, mathematics.

Required Internship (3 crs)

- TCH 609 - Research Informed Practices Credits: 3

Curriculum and Instruction, Secondary Biology Concentration, M.Ed.

Curriculum and Instruction (M.Ed.)

The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:

- Early Childhood
- Elementary Education
- Middle School
- Middle School with Certification
- Secondary Biology
- Secondary Geography/Earth Science
- Secondary History
- Secondary Mathematics
- Secondary Modern Languages

Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

Program Core (18 crs.)

Curriculum and Assessment (3 crs.)

- ECH 577 - Early Childhood Curriculum and Assessment Credits: 3
- TCH 511 - Framework for Teaching and Learning Credits: 3
- TCH 524 - Middle School Curriculum and Assessment Credits: 3
• ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3

Effective Teaching and Leadership (6 crs.)

Effective Teaching (3 crs.)

• TCH 501 - Instructional Strategies Credits: 3
• TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3

Leadership (3 crs.)

• ECH 563 - Leadership in Early Childhood Education Credits: 3
• ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3

The Learner (6 crs.)

Development (3 crs.)

• TCH 575 - Advanced Child Development Credits: 3
• ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3

Individual Differences (3 crs.)

• ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3
• EEC 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except Credits: 3
• EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3

Focus on Research (3 crs.)

• TCH 600 - Elements of Research Credits: 3
• BIO 605 - Graduate Research I Credits: 1-3
• GEO 546 - Geoenvironmental Research I Credits: 3
• HIS 600 - Historical Research Methods Credits: 3
• HIS 601 - Research in Local and Regional History Credits: 3

Note:

(TCH 609 does not meet this core requirement)

Cluster Requirement (18 crs.)

Student will choose the program cluster most closely related to their personal/educational needs.

Secondary Biology Cluster
18 credits in biology from 400- and 500-level courses including those courses offered by the Marine Science Consortium at Wallops Island. Students may structure their coursework to meet individual sub-disciplinary interests. At least 12 credits must be taken in the Biology Department. With approval of the biology advisor, a maximum of 6 credits may be selected from geography, earth science, physics, and chemistry.

For further information, contact Dr. Tim Maret, Department of Biology at (717) 477-1401 or tjmare@ship.edu.

**Curriculum and Instruction, Secondary Geography/Earth Science Concentration, M.Ed.**

**Curriculum and Instruction (M.Ed.)**

The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:

- Early Childhood
- Elementary Education
- Middle School
- Middle School with Certification
- Secondary Biology
- Secondary Geography/Earth Science
- Secondary History
- Secondary Mathematics
- Secondary Modern Languages

Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

**Program Core (18 crs.)**

**Curriculum and Assessment (3 crs.)**

- ECH 577 - Early Childhood Curriculum and Assessment Credits: 3
- TCH 511 - Framework for Teaching and Learning Credits: 3
- TCH 524 - Middle School Curriculum and Assessment Credits: 3
- ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3

**Effective Teaching and Leadership (6 crs.)**

**Effective Teaching (3 crs.)**
• TCH 501 - Instructional Strategies Credits: 3
• TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3

Leadership (3 crs.)

• ECH 563 - Leadership in Early Childhood Education Credits: 3
• ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3

The Learner (6 crs.)

Development (3 crs.)

• TCH 575 - Advanced Child Development Credits: 3
• ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3

Individual Differences (3 crs.)

• ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3
• EEC 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except Credits: 3
• EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3

Focus on Research (3 crs.)

• TCH 600 - Elements of Research Credits: 3
• BIO 605 - Graduate Research I Credits: 1-3
• GEO 546 - Geoenvironmental Research I Credits: 3
• HIS 600 - Historical Research Methods Credits: 3
• HIS 601 - Research in Local and Regional History Credits: 3

Note:

(TCH 609 does not meet this core requirement)

Cluster Requirement (18 crs.)

Student will choose the program cluster most closely related to their personal/educational needs.

Secondary Geography/Earth Science Cluster

18 credits in geography/earth science from 400- and 500-level courses. While there are numerous 400-level courses available, students must adhere to the university policy regarding the maximum number of 400-level credits that may be taken.

Technique Courses (minimum of 3 crs.)
Students may take more than 3 credits.

- GEO 425 - Image Processing Credits: 3
- GEO 440 - Field Techniques Credits: 3
- GEO 441 - Quantitative Methods Credits: 3
- GEO 450 - Geography-Geology Field Studies Credits: 1-3
- GEO 517 - Applied Geographic Information Systems Credits: 3
- GEO 530 - Mapping Sciences Credits: 3

Note:

GEO 517, GEO 530: GIS I is a prerequisite

Content Area Courses (maximum of 15 crs.)

Students may use techniques courses to count in this section.

- ESS 413 - Mineral and Rock Resources Credits: 3
- ESS 442 - Environmental Geology Credits: 3
- ESS 490 - Selected Topics in Earth Science Credits: 1-3
- ESS 594 - Selected Topics in Earth Science Credits: 1-3
- GEO 404 - Groundwater and Hydrogeology Credits: 3
- GEO 415 - Geography of Africa Credits: 3
- GEO 446 - Water Resources Management Credits: 3
- GEO 490 - Selected Topics in Geography Credits: 1-3
- GEO 594 - Selected Topics in Geography Credits: 1-3
- GEO 503 - Fundamentals of Geoenvironmental Research Credits: 3
- GEO 522 - Geoenvironmental Hydrology Credits: 3
- GEO 528 - Sustainable Systems and the Spatial Economy Credits: 3
- GEO 531 - Geomorphology Credits: 3
- GEO 532 - Disease and the Environment Credits: 3
- GEO 533 - Science of Land Use Change Credits: 3
- GEO 536 - Problems of the Atmospheric Environment Credits: 3
- GEO 542 - Land-Use Regulations Credits: 3

Note:

GEO 490/GEO 594 (including Marine Science Consortium)

GEO 533: GIS I is a prerequisite

Maximum of 15 credits.

Three credits may be taken with advisement from geography/earth science, biology, history, political science, chemistry or international studies.

Curriculum and Instruction, Secondary History
Concentration, M.Ed.
Curriculum and Instruction (M.Ed.)

The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:

- Early Childhood
- Elementary Education
- Middle School
- Middle School with Certification
- Secondary Biology
- Secondary Geography/Earth Science
- Secondary History
- Secondary Mathematics
- Secondary Modern Languages

Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

Program Core (18 crs.)

Curriculum and Assessment (3 crs.)

- ECH 577 - Early Childhood Curriculum and Assessment Credits: 3
- TCH 511 - Framework for Teaching and Learning Credits: 3
- TCH 524 - Middle School Curriculum and Assessment Credits: 3
- ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3

Effective Teaching and Leadership (6 crs.)

Effective Teaching (3 crs.)

- TCH 501 - Instructional Strategies Credits: 3
- TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3

Leadership (3 crs.)

- ECH 563 - Leadership in Early Childhood Education Credits: 3
- ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3

The Learner (6 crs.)
Development (3 crs.)

- TCH 575 - Advanced Child Development Credits: 3
- ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3

Individual Differences (3 crs.)

- ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3
- EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3

Focus on Research (3 crs.)

- TCH 600 - Elements of Research Credits: 3
- BIO 605 - Graduate Research I Credits: 1-3
- GEO 546 - Geoenvironmental Research I Credits: 3
- HIS 600 - Historical Research Methods Credits: 3
- HIS 601 - Research in Local and Regional History Credits: 3

Note:

(TCH 609 does not meet this core requirement)

Cluster Requirement (18 crs.)

Student will choose the program cluster most closely related to their personal/educational needs.

Secondary History Cluster

18 credits in history from 400- and 500-level courses.

United States and North American History (3 crs.)

- HIS 402 - Revolutionary America Credits: 3
- HIS 413 - Pennsylvania History Credits: 3
- HIS 428 - Issues in the Gilded Age and Progressive Era Credits: 3
- HIS 430 - U.S. Cultural History Credits: 3
- HIS 513 - Seminar in U.S. Women's History Credits: 3
- HIS 515 - Seminar in 20th Century U.S. Social History Credits: 3
- HIS 516 - Seminar in African American History Credits: 3
- HIS 519 - Seminar in International Relations Credits: 3
- HIS 525 - Seminar in U.S. Regional History Credits: 3
- HIS 526 - Seminar in the Civil War Era Credits: 3

Global Connections (3 crs.)
• HIS 407 - Women in Comparative Perspective Credits: 3
• HIS 454 - China and the Outside World Credits: 3
• HIS 534 - Seminar in Modern German History Credits: 3
• HIS 535 - Seminar in Medieval Studies Credits: 3
• HIS 558 - Seminar in East Asia and the Modern World Credits: 3
• HIS 562 - Seminar in African History Credits: 3

History Electives (12 crs.)

Any of the above courses or:

• HIS 490 - Selected Topics in History Credits: 1-3
• HIS 594 - Selected Topics in History Credits: 1-3
• HIS 598 - Independent Study Credits: 3
• HIS 599 - Readings in History Credits: 3-6

Curriculum and Instruction, Secondary Mathematics Concentration, M.Ed.

Curriculum and Instruction (M.Ed.)

The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:

• Early Childhood
• Elementary Education
• Middle School
• Middle School with Certification
• Secondary Biology
• Secondary Geography/Earth Science
• Secondary History
• Secondary Mathematics
• Secondary Modern Languages

Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

Program Core (18 crs.)

Curriculum and Assessment (3 crs.)
• ECH 577 - Early Childhood Curriculum and Assessment Credits: 3
• TCH 511 - Framework for Teaching and Learning Credits: 3
• TCH 524 - Middle School Curriculum and Assessment Credits: 3
• ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations
  Credits: 3

Effective Teaching and Leadership (6 crs.)

Effective Teaching (3 crs.)

• TCH 501 - Instructional Strategies Credits: 3
• TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3

Leadership (3 crs.)

• ECH 563 - Leadership in Early Childhood Education Credits: 3
• ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3

The Learner (6 crs.)

Development (3 crs.)

• TCH 575 - Advanced Child Development Credits: 3
• ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3

Individual Differences (3 crs.)

• ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3
• EEC 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/
  Stud with Except Credits: 3
• EEC 423 - Effective Instructional Strategies for Students with Exceptionalities Credits: 3

Focus on Research (3 crs.)

• TCH 600 - Elements of Research Credits: 3
• BIO 605 - Graduate Research I Credits: 1-3
• GEO 546 - Geoenvironmental Research I Credits: 3
• HIS 600 - Historical Research Methods Credits: 3
• HIS 601 - Research in Local and Regional History Credits: 3

Note:

(TCH 609 does not meet this core requirement)

Cluster Requirement (18 crs.)
Student will choose the program cluster most closely related to their personal/educational needs.

Secondary Mathematics Cluster

18 credits in the content area of mathematics.

Choose up to 6 credits from any 400-level MAT courses.

- MAT 400 - History of Mathematics Credits: 3
- MAT 410 - Numerical Analysis Credits: 3
- MAT 421 - Number Theory and Cryptography Credits: 3
- MAT 422 - Partial Differential Equations Credits: 3
- MAT 425 - Advanced Algebraic Structures Credits: 3
- MAT 430 - Complex Analysis Credits: 3
- MAT 441 - Real Analysis I Credits: 3
- MAT 450 - Combinatorics Credits: 3
- MAT 456 - Deterministic Methods of Operations Research Credits: 3
- MAT 476 - Probability Credits: 3
- MAT 486 - Mathematical Statistics Credits: 3
- MAT 490 - Selected Topics in Mathematics Credits: 3

Must take at least 12 credits from any 500-level MAT courses.

- MAT 543 - Concepts of Calculus Credits: 3
- MAT 572 - Probability for Middle and High School Teachers Credits: 3
- MAT 594 - Selected Topics in Mathematics Credits: 3

Note:

A maximum of 12 credits of 400 level courses may be applied to requirements for the curriculum and instruction master's degree. This limit includes both core and cluster courses.

Curriculum and Instruction, Secondary Modern Languages Concentration, M.Ed.

Curriculum and Instruction (M.Ed.)

The curriculum and instruction master's degree program is intended for individuals who possess a teaching certificate or those seeking to obtain certification. Both the early childhood education concentration and the middle level concentration have options that do not require students to hold certification and thus lead to a Pennsylvania teaching certificate. The degree is designed to enhance teaching and learning through exploration of theoretical principles and practical applications to educational settings. Based on the concentration you select and option within the concentration, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Concentrations that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following concentrations of 18 credits:
• Early Childhood
• Elementary Education
• Middle School
• Middle School with Certification
• Secondary Biology
• Secondary Geography/Earth Science
• Secondary History
• Secondary Mathematics
• Secondary Modern Languages

Students in the early childhood, elementary, and middle school concentrations are all required to take TCH 609 Research Informed Practices. This course serves as the capstone experience, synthesizing theory and practice as participants engage in studying and subsequently conducting the action research process.

Program Core (18 crs.)

Curriculum and Assessment (3 crs.)

• ECH 577 - Early Childhood Curriculum and Assessment Credits: 3
• TCH 511 - Framework for Teaching and Learning Credits: 3
• TCH 524 - Middle School Curriculum and Assessment Credits: 3
• ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3

Effective Teaching and Leadership (6 crs.)

Effective Teaching (3 crs.)

• TCH 501 - Instructional Strategies Credits: 3
• TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3

Leadership (3 crs.)

• ECH 563 - Leadership in Early Childhood Education Credits: 3
• ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3

The Learner (6 crs.)

Development (3 crs.)

• TCH 575 - Advanced Child Development Credits: 3
• ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3

Individual Differences (3 crs.)

• ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3
• EEE 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except Credits: 3
Focus on Research (3 crs.)

- TCH 600 - Elements of Research Credits: 3
- BIO 605 - Graduate Research I Credits: 1-3
- GEO 546 - Geoenvironmental Research I Credits: 3
- HIS 600 - Historical Research Methods Credits: 3
- HIS 601 - Research in Local and Regional History Credits: 3

Note:

(TCH 609 does not meet this core requirement)

Cluster Requirement (18 crs.)

Student will choose the program cluster most closely related to their personal/educational needs.

Secondary Modern Languages Cluster

18 credits in language and methodology from 400- to 500-level courses (at least 12 credits at the 500-level). This cluster offers an option in French or in Spanish.

Department Requirements

Student must demonstrate evidence of oral and written proficiency in the target language by taking the ACTFL OPI (oral proficiency interview) and the ACTFL written test. The minimum score on both tests must be at the advanced-low level. Any course in Spanish/French at the undergraduate level with a C or a D would have to be repeated. Student must complete the degree in accordance with the College of Education requirement of seven years. Completion of the master's will entail an oral exam and a Spanish/French Education research project of which the outcome will be reviewed by all Spanish/French faculty.

Spanish

- SPN 510 - Hispanic Theater Credits: 3
- SPN 515 - Hispanic Poetry Credits: 3
- SPN 520 - Hispanic Fiction Credits: 3
- SPN 525 - Hispanic Culture Credits: 3
- SPN 530 - Spanish Linguistics Credits: 3
- SPN 535 - History of Spanish Language Credits: 3

French

- FRN 510 - French Theater Credits: 3
- FRN 515 - French Poetry Credits: 3
- FRN 520 - French Fiction Credits: 3
• FRN 525 - French Speaking Countries Credits: 3
• FRN 530 - French Linguistics Credits: 3
• FRN 535 - History of French Language Credits: 3

Language Education Methods

• EDU 522 - Advanced Methods for the Teaching of World Languages Credits: 3

Literacy, M.Ed.

A graduate program leading to the Master of Education degree with specialization in classroom literacy instruction is offered for elementary and secondary school teachers.

Admission

Admission into the program is offered throughout the year. To become a candidate in the program, an application must be completed through the admissions office. The Literacy program admission packet includes the following: candidate application, three professional reference letters, and transcripts from all undergraduate and graduate coursework (a 3.0 QPA is required on previous coursework for admission). If the candidate is not presently employed in a school district, the following additional information is required at the time of the interview:

1. The Pennsylvania State Police Request for Criminal Records Check (Act 34)
2. The Federal Criminal History Record (Act 114)
3. The Child Abuse History Clearance (Act 151)

When an application is deemed complete by the admission office, the application packet will be forwarded to the Literacy program facilitator who assigns the candidate an advisor.

Degree Requirements (30 crs.)

• RDG 528 - Foundations of Literacy Development Credits: 3
• RDG 537 - Brain Based Strategies for Literacy Learners Experiencing Difficulties Credits: 3
• RDG 529 - Reading and Reasoning Beyond the Primary Grades Credits: 3
• RDG 527 - Inquiry Approaches to Literacy Credits: 3
• RDG 532 - Diagnosis and Assessment in Reading Credits: 3
• RDG 524 - Diversity's Impact on Literacy Instruction in a Standards Aligned System Credits: 3
• RDG 533 - Advanced Diagnosis and Assessment in Reading Credits: 3
• RDG 534 - Laboratory Practicum in Reading Credits: 3
• RDG 520 - Tutoring Secondary Students Credits: 3
• RDG 535 - Seminar in Literacy, Language, and Reading Credits: 3

Reading Specialist Praxis Exam

Optional ETS Praxis Exam Module 5301

Program Completion
When candidates have been granted program completion status, they are eligible to apply for graduation through Registrar's office.

For more information on the Reading Program at ship.edu/academics/programs/graduate/reading/.

Certificate

English as a Second Language Certificate

This graduate-level program prepares teachers to work with students who are learning English as a second language. This 16 credit hour program meets the requirements established by the Pennsylvania Department of Education to be certified as a program specialist for teaching English as a second language.

Certificate Requirements

Required Courses (16 crs.)

- TESL 450 - Foundations of English Language Learner Credits: 3
- TESL 510 - Second Language Acquisition: Theory, Models, and Principles Credits: 3
- TESL 520 - Literacy and Linguistically Diverse Cultures and Communities Credits: 3
- TESL 530 - Instructional Methods and Assessment of English Language Learners Credits: 4
- TESL 540 - Practicum: Teaching English Language Learners Credits: 3

Note:

The final course will include a 40 hour supervised practicum experience where the student will be providing instruction to English language learners. Upon completion of the five courses, students who have teacher certification may apply to PDE for the program specialist certificate.

Opportunities to extend the certification into a master's degree are being created. Contact Dr. Christopher Keyes cskeyes@ship.edu for more information and for questions.

Online Instruction, Learning, and Technology Certificate

The Certificate in Online, Instruction, Learning and Technology is designed for professionals who work with the design and delivery of information and instruction in an online environment. The series of five courses is grounded in research and best practices and provides the participant with foundational knowledge of best practices, instructional and assessment strategies and practical applications in online learning environments. This program is applicable for all professional fields that offer online instruction and/or professional development.

Students will complete a sequence of five online classes that immerse them in the process that participants in their courses would experience; model the strategies that they would employ and utilize in the teaching of an online course; and provide opportunities for the development of their own course material through the learning process. The capstone course is where the participant synthesizes their learning in the design, development, and implementation of an actual online course.

Certificate Requirements
Required Courses (15 crs)

- ONLE 550 - Introduction to Teaching in an Online Environment Credits: 3
- ONLE 560 - Designing and Implementing Online Educational Systems #1 Credits: 3
- ONLE 570 - Designing and Implementing Online Educational Systems #2 Credits: 3
- ONLE 580 - Online Educational Resources for Instruction and Learning Credits: 3
- ONLE 590 - Capstone: Online Course Design, Development, and Implementation Credits: 3

Courses of Instruction

Accounting

**ACC 401 - Advanced Financial Accounting Credits: 3**

Third of three courses involving an intensive study of accounting concepts, theories, and practices relative to external financial reporting. Topics include consolidated financial statements, accounting in the international environment, and governmental accounting. Issues relating to full disclosure and the role of the Securities and Exchange Commission and professional accounting organizations in financial reporting are considered.

Prerequisite(s): ACC 311 with minimum grade of C

**ACC 404 - Auditing Credits: 3**

Introduction to standards and procedures employed by professional accountants in performing audits. The objectives of an audit and the types of examinations necessary for rendering opinions on financial reports and for other specified purposes are considered.

Prerequisite(s): ACC 311 with minimum grade of C

**ACC 406 - Advanced Tax Accounting Credits: 3**

More in-depth coverage of impact of federal income tax on business entities including proprietors, corporations, and partnerships. Primary emphasis is taxation of corporations and flow-through tax entities. Includes expanded coverage of tax research and planning as well as ethical responsibilities in tax practice. Prerequisite: ACC 306 (C grade or better).

Prerequisite(s): ACC 306 with minimum grade of C

**ACC 412 - Advanced Cost Analysis and Control Credits: 3**

Considers a range of problems related to accumulation and use of accounting data for decision making by the management of the business enterprise. Analytical costing techniques are developed by integrating cost concepts and information generated by the accounting system with quantitative business methods. Emphasis on relationship of decision theory and the cost accounting function to the management information system. Explicit consideration given to behavioral foundations for planning and control.

Prerequisite(s): ACC 312 with minimum grade of C
ACC 418 - Accounting Information and Control Systems Credits: 3

Designed to provide an understanding of the accounting function as a subsystem within the total management information system. Consideration given to the source of data processed by the accounting system and the form in which it is stored in order to support the planning, control, reporting, and evaluation activities of management. Emphasis on relationship of the information needs of management to the classification of data and the design of the accounting system.

Prerequisite(s): ACC 201 with minimum grade of C

ACC 420 - Fraud Examination Credits: 3

Introducing students to fraud examination, presented from the framework of the Association of Certified Fraud Examiners®. The discussion incorporates the elements of fraud and the types of fraud schemes, including fraudulent financial statements, asset misappropriation, Ponzi schemes, corruption, organized crime, and money laundering. Emphasis is also spent on preventing and detecting fraud, through various rudiments. Emphasis centers on fraud investigation, the legal aspects of fraud. Careers in fraud comprising of certifications, law enforcement, and continuing education are considered.

Prerequisite(s): ACC 310

ACC 490 - Selected Topics in Accounting Credits: 3

Considers contemporary accounting issues affecting society and businesses (private, public, and not-for-profit) in both the national and international spheres.

Prerequisite(s): ACC 311 with minimum grade of C

ACC 511 - Financial Accounting Topics Credits: 3

Advanced problems in consolidated financial statements, accounting for derivatives and hedging, and selected topics dealing with governmental accounting, governmental units, and not-for-profit organizations. Selected references to professional literature and uniform CPA examination problems.

Prerequisite(s): ACC 311

ACC 512 - Controllership Credits: 3

Evaluates the business environment related to the controller level of managing the firm. Selected topics include: Working capital policy and management, Long-term capital financing, Enterprise continuity related to risk management; Planning and budgeting; Business performance; Cost behavior and cost-volume-profit modeling; Project management and implementation; Human resource management for the accounting department; Customer relationship management from the credit and collection perspective; Corporate social responsibility; Ethics.

Prerequisite(s): ACC 201 or ACC 312 or MBA 502

Administration Juvenile Justice

AJJ 501 - Seminar in Juvenile Justice and Delinquency Credits: 3
Studies the social construction of juvenile delinquency and historical development of justice practices; including the diversity of delinquents and status offenders from early to modern times. Students survey contemporary juvenile justice issues, ranging from applied and evidence-based practice, ethical and data-driven decision-making, to victim impact and restorative justice practices, risk and case management tools, and juvenile correctional policy, sentencing, diversion and treatment.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

**AJJ 502 - Advanced Criminological Theory Credits: 3**

Examines the diverse nature and causes of delinquent behavior, typologies, offenders, and victims to include the process of becoming a delinquent, patterns of delinquent behavior, and the social and individual consequences of juvenile crime and delinquency.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

**AJJ 503 - Leadership in Juvenile Justice Credits: 3**

Studies complex organizations with emphasis on the concepts and practices of the administration and management of agencies in the juvenile justice system. Students will survey contemporary management trends and issues, with special attention focused on how evolving technological, social, political, ethical and economic factors influence juvenile justice administration, theory, and practice.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

**AJJ 504 - Advanced Research Methods Credits: 3**

Studies contemporary empirical research methods and their application in the field of juvenile justice, including research design, research ethics, theories of sampling, construction of data files, data collection strategies, and analysis of findings. The goal of this course is to provide students with the foundational knowledge of research methods and technologies; to become more informed consumers of academic research and adept at quantitative reasoning, and better equipped to implement and evaluate evidence-based practices.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

**AJJ 505 - Quantitative Analysis Credits: 3**

Examines the relationship and application of statistical techniques to theory building, concept construction, computer analysis of quantitative data applied to juvenile justice, the logic of data analysis, and fundamentals of statistical procedures commonly used in criminological research. Students also learn to critique empirical research.

Prerequisite(s): AJJ 504
Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

**AJJ 506 - Strategic Planning, Budgeting & Finance Credits: 3**
Examines the interactive process of strategic planning and financial management within juvenile justice agencies. Emphasis is placed upon this process as a system of organizational development, with grant writing and program budgeting as the visible products. Topics include identifying, developing, and securing fiscal resources through the development of a grant; comparisons of levels of planning; distinguishing between operational and managerial plans; the political context of juvenile justice planning/budgeting as it relates to preparation, presentation, approvals, execution, and audit; and enhancements and alternatives to an agency's routine funding base.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

AJJ 507 - Seminar in Policy Analysis Credits: 3

Introduces, examines, and provides students the skills with which to analyze juvenile justice policies. This course emphasizes a conceptual approach to studying the creation, implementation, and evaluation of juvenile justice policies. The focus is on the steps involved in the evaluation of juvenile justice policies; it will also address the existence of polices and their relevance to the success of the juvenile justice system (acknowledging the operations of each juvenile justice component - law enforcement, courts, and corrections).

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

AJJ 520 - Advanced Studies in Policing Credits: 3

Focuses on research, theory, and applications of the causes and consequences of modern police behavior. Specific focus will be placed on the historical role that police have played in society as well as the structure and functioning of police agencies and the consequences of that functioning on the juvenile justice system. Topics to be covered include police history, the social and political contexts of the police, police strategies and tactics with diverse juveniles, police accountability and legitimacy, and conducting research on the police and their place in modern society.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

AJJ 521 - Seminar in Victimology Credits: 3

Studies the history of victimology from early victim-centric justice to the prevailing model of government-centered prosecutions. Explores the causes and consequences of offense-specific victimizations, variations in risk across persons, relationships, lifestyles, and domains, and societal responses to the diversity of youth who are victimized and/or violate others.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

AJJ 522 - Seminar in Social Justice Credits: 3

Focuses on social justice issues (primarily in America) that affect juveniles. Social justice can be defined as the act of "promoting a just society by challenging injustice and valuing diversity," and is generally equated with notions of equality. Through the exploration into social justice concepts, issues, and policy remedies students develop the necessary analytical tools to assess inequality and injustice in juvenile justice.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.
AJJ 523 - Mental Health and the Administration of Justice Credits: 3

Explores mental illness and the intersection of the mental health and juvenile justice systems in the United States, particularly as a result of the deinstitutionalization movement which has resulted in the shifting of individuals with mental illness from hospitals into community-based correctional facilities and programs.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

AJJ 524 - Anatomy of Violence Credits: 3

Examine the nature of violent and sexual victimization. The focus on juvenile violence will cover various perspectives, including those of victims, offenders, and individuals close to victims/offenders. Students will explore concepts and theories that attempt to explain the causes and effects of violent youthful behavior. The goal of this course is to not only teach students about the types and frequency of violent behaviors, but also to encourage them to seek an answer to the question "why do human beings commit violence?"

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

AJJ 525 - Intimate Partner & Family Violence Credits: 3

This course will provide students with an overview of the theoretical paradigms examining the definitions of, causes of, ramifications of, and interventions for intimate partner and family violence. More specifically, we will (1) examine the nature and extent of intimate partner and family violence; (2) take an in-depth look at the perpetrators and victims of IPV; (3) examine theories to gain a better understanding of why these forms of violence take place; (4) examine the juvenile justice response to intimate partner and family violence; and (5) examine some of the larger cultural contexts within which the varieties of abuse occur. This course recognizes that a disproportionate number of the victims are women, but that a strict feminist analysis needs to be modified to recognize abuse in same sex relationships and a growing literature on female offenders. A seminar format is utilized for the course.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

AJJ 540 - Selected Topics in Juvenile Justice Credits: 3

Courses will be offered covering a range of special topics addressing specific issues or research in juvenile justice.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

AJJ 541 - Selected Topics in Juvenile Justice Credits: 3

Courses will be offered covering a range of special topics addressing specific issues or research in juvenile justice.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

AJJ 550 - Independent Study Credits: 3
This course provides the opportunity for the student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member. The goal of the course is to provide students the opportunity to embrace a comprehensive body of information through the examination/analysis of theories, practices, and/or key issues involved in the management of juvenile justice organizations and operations.

Prerequisite(s): AJJ 504
Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

**AJJ 551 - Practicum I Credits: 3**

This first capstone course requires students to demonstrate their mastery of the program's learning objectives through their ability to successfully review and analyze issues in juvenile justice. Utilizing the principles and concepts as presented in the core and elective courses of the AJJ curriculum, students prepare a scholarly paper which thoroughly reviews and analyzes the extant body of research in regard to a contemporary juvenile justice issue and proposes a research methodology to further examine the issue.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

**AJJ 552 - Practicum II Credits: 3**

This continuation capstone course requires students to demonstrate their mastery of the program's learning objectives through their ability to successfully conduct, analyze and interpret, and present juvenile justice research. Utilizing the principles and concepts as presented in the core courses of the AJJ curriculum, students complete an empirical research paper which presents their findings, discusses limitations, and makes recommendations for actions and/or further research.

Prerequisite(s): Restricted to students in the Administration of Juvenile Justice program. Departmental permission is needed for students who are not enrolled in this program.

**Biology**

**BIO 401 - Coral Reef Ecology Credits: 3**

**BIO 403 - Aquaculture Credits: 3**

**BIO 406 - Mammalogy Credits: 3**

Surveys various areas of mammalian biology including mammalian characteristics, evolution, classification, zoogeography, adaptive radiation, reproduction, population dynamics, behavior, physiology, ecology, and economic importance. Laboratory material covers trapping, study of skin preparation, identification of North American mammals, examination of skeletal and external adaptations, plus field and laboratory techniques. Graduate students are required to complete an additional course project. Includes a weekend field trip. Two hours lecture and two hours lab/week.

Prerequisite(s): BIO 162 and BIO 161

**BIO 408 - Principles of Virology Credits: 3**
Covers morphology, replication cycles, and genetics of important bacterial, plant, and animal viruses as well as the use of gene therapy. Special emphasis given to viral pathogens of humans including the pathophysiology, transmission, treatment, and prevention of viral diseases. Newly emerging viral diseases and their impact on society will also be discussed. Graduate students expected to submit a 5-10 page term paper on a virology-related topic approved by the instructor. (Offered fall semester).

Prerequisite(s): BIO 260 and BIO 385 (may be taken concurrently)

**BIO 409 - Immunology Credits: 3**

Introduction to immunology, including immunity, serology, immunochemistry, and immunobiology. Other topics include immunodeficiency diseases, tumor immunology, transplantation immunology, autoimmune diseases, and allergies. Graduate students must complete additional course requirements. Three (3) hours lecture/wk.

Prerequisite(s): BIO 260 and BIO 385 (may be taken concurrently)

**BIO 412 - Ichthyology Credits: 3**

This course surveys the biology of fishes, emphasizing the evolution, systematics, ecology, and conservation of Pennsylvania species. Laboratory and field exercises will include fish sampling, species identification, population estimation, community characterization, and fisheries techniques such as aging fishes and estimating population structure and production. (2h lecture and 2h lab)

Prerequisite(s): BIO 162 and BIO 242

**BIO 413 - Marine Ichthyology Credits: 3**

Study of the internal and external structure of fishes, their systematic and ecological relationships, and their distribution in time and space. Only at WIMSC during summers.

Prerequisite(s): 16 credits of biology or Graduate standing.

**BIO 417 - Herpetology Credits: 3**

Study of amphibians and reptiles including classification, evolution, functional morphology, ecology, and husbandry. Laboratory work includes anatomical study, identification, and field trips. Graduate students must complete additional course requirements. Two hours lecture and two hours lab/week.

Prerequisite(s): BIO 162 and BIO 161

**BIO 418 - Molecular Biology Credits: 3**

Examines structure and expression of prokaryotic and eukaryotic genes. Topics include experimental techniques used to clone, express, and analyze DNA sequences; chromosome and gene structure; mechanisms of DNA replication and repair; mechanisms of transcription and translation; the regulation of transcription; RNA processing and post-transcriptional regulation; gene regulation in development; and molecular mechanisms of mutagenesis and cancer. Includes discussion of current literature and use of on-line resources for analysis of DNA sequences. Graduate students must complete additional course requirements.

Prerequisite(s): BIO 260
**BIO 419 - Ornithology Credits: 3**

Study of birds including their taxonomic relationships, anatomy, physiology, ecology and conservation. A major focus of the course is identification of avian species found in Pennsylvania and the eastern US, which will be accomplished via field trips and museum skin study. Laboratory instruction will include methods of avian capture, census techniques, museum skin preparation and field trips. Two Saturday field trips and one weekend field trip are required. Graduate students are required to complete an additional course project. Two hours lecture and two hours lab/week.

Prerequisite(s): BIO 161 and BIO 162

**BIO 425 - Biota of Florida Credits: 3**

Seminar/field course deals with the biology of warm temperate and subtropical Florida including vegetation, fauna, geology, history, and economy. Offered spring semester of even-numbered years, it requires a single weekly 75 minute class meeting plus an intensive 10-day field trip to parks, natural area, and refuges in Florida over spring break. Field trip costs for the student include food, transportation, entrance and camping fees. Graduate students must complete additional course requirements. Prerequisite: Biology major with junior standing. (Offered spring semester, even years).

Prerequisite(s): Requires junior standing.

**BIO 428 - Entomology Credits: 3**

Taught in a lecture format with supporting laboratories and field trips, students in this course will study the anatomy, morphology, phylogeny, ecology, taxonomy, and development of arthropods, primarily insects. Emphasis will be placed on collecting techniques, identification, and preparation of specimens.

**BIO 430 - Principles of Evolution Credits: 3**

Introduction to evolutionary principles, their applications, and the appropriate literature. Major topics include the history of evolutionary concepts, the species and speciation processes, phylogenetic patterns and their reconstruction, classification, biogeography, extinction, and biological nomenclature. Graduate students must complete additional course requirements. Three hours lecture/week. (Offered spring semester).

Prerequisite(s): BIO 162 and BIO 161 and BIO 260

**BIO 442 - Aquatic Ecology Credits: 3**

Examines the ecology of inland aquatic habitats including streams, springs, lakes, wetlands and estuaries. Lectures explore the physical, chemical, and biological forces shaping aquatic systems, with an emphasis on the ecology and conservation of freshwater organisms and habitats. Field and laboratory work includes sampling techniques, characterization of aquatic habitats, and identification of aquatic organisms. Graduate students enrolled in this class will be required to complete additional course requirements. Two hours lecture and three hours lab/week. (Offered fall semester, even years)

Prerequisite(s): BIO 162 or Graduate standing. BIO 242 and one year of chemistry strongly recommended.

**BIO 444 - Conservation Biology Credits: 3**

Applies the principles of population ecology, population genetics, biogeography, animal behavior, and paleobiology to the maintenance of global diversity and natural systems. Research theory is applied to conservation policy and
management decisions. Graduate students must complete additional course requirements. Two periods lecture and two periods lab/discussion per week. Includes midweek and weekend field trips. (Offered spring semester, even years).

Prerequisite(s): BIO 242

**BIO 448 - Field Botany and Plant Taxonomy Credits: 3**

Deals with principles of classification and systematics of vascular plants, with emphasis on local plant communities. Field trips and laboratories develop skill in the use of technical and popular identification manuals. Library readings develop familiarity with principles and literature of plant systematics and ecology. Memorization of selected, local species required. Field trips include several local excursions plus a weekend trip to natural areas in Pennsylvania and the Delmarva Peninsula. Graduate students must complete additional course requirements. Two hours lecture and two hours lab/week. (Offered Fall semester)

Prerequisite(s): BIO 162 or BIO 100

**BIO 450 - Endocrinology Credits: 3**

Study of the glands of internal secretion and their biochemical and physiological role in development, growth, metabolism, homeostasis, and reproduction of animals. Graduate students must complete additional course requirements. Three hours lecture/week. (Offered fall semester).

Prerequisite(s): BIO 350 or BIO 351

**BIO 461 - Techniques in Biotechnology Credits: 3**

Provides hands-on experience with standard molecular biology and immunological techniques commonly used in industrial and academic laboratories. Methods include immunoblotting methods, ELISA, isolation and analysis of DNA and RNA, protein purification, and gene cloning techniques. Graduate students must complete additional course requirements. One hour lecture and four hours lab/week. (Offered spring semester).

Prerequisite(s): (BIO 385 or BIO 418 or CHM 301 (may be taken concurrently) )

**BIO 464 - Freshwater Invertebrate Zoology Credits: 3**

This course will survey the ecology, evolution, and conservation of the invertebrate phyla, with a focus on freshwater invertebrates. This will be a practical course intended for anyone with an interest in aquatic ecology and environmental assessment. Lab will emphasize the collection and identification of Pennsylvania taxa and their use in bioassessment of freshwater habitats. Graduate students will complete additional course requirements. Two hours lecture and two hours lab/week.

Prerequisite(s): BIO 162 and 242 with a C or better

**BIO 483 - Wildlife and Fisheries Management Credits: 3**

Applies biological and ecological concepts to the practical management of fisheries and wildlife populations. This course addresses the history and principles of conservation and resource management, key legislation, and current public policy issues related to fisheries and wildlife management. Lab includes sampling methods, case studies, use of population and harvest models, and field meetings with wildlife and fisheries professionals. Two hours lecture and two hours lab/week.
Prerequisite(s): BIO 161, 162 and 242 with C or better

**BIO 485 - Biological Microscopy and Imaging Credits: 3**

Covers principles and techniques in macrophotography, light microscopy, especially micro-photography and videography, and scanning electron microscopy (SEM). Includes specimen handling and preparation including basic theory and practice in fixation, dehydration, dark room techniques, and computer imaging. Perform basic maintenance and alignment of the SEM. Research project required. Graduate students required to complete additional course requirements. Two hours lecture and two hours lab/week. (Offered spring semester, odd years).

Prerequisite(s): Requires upper division or graduate standing.

**BIO 491 - Selected Topics in Biology Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses.

**BIO 492 - Selected Topics in Biology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses.

**BIO 494 - Field Research Techniques Credits: 3**

Overview of methods for investigating biological field problems. Students will learn to use a variety of techniques in field conditions. Collection, analyses, and interpretation of data will be emphasized. Methods applied in current professional literature will be discussed. Graduate students will be required to complete an independent project culminating in a written report. (Offered summers only).

Prerequisite(s): Requires upper division or graduate standing.

**BIO 495 - Selected Topics in Biology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses.

**BIO 496 - Selected Topics in Biology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses.

**BIO 497 - Selected Topics in Biology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses.

**BIO 498 - Selected Topics in Biology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses.

**BIO 514 - Aquatic Entomology Credits: 3**
Rigorous course concentrating on the taxonomy and morphology of the insects having representatives spending all or part of their life cycles in aquatic environments. Intensive field and laboratory work centers on collection, classification of representative types and studies of ecological roles of various aquatic habitats.

Prerequisite(s): Entomology, graduate status, or permission of instructor.

**BIO 515 - Scientific Communication in Biology Credits: 1**

A seminar-style course that helps biology graduate students improve their scientific communication skills. Topics include writing and revision of scientific proposals and research papers, literature searches, preparing tables and figures, the publication process, and preparing and presenting oral poster and slide presentations.

**BIO 520 - Plant Ecology Credits: 3**

Explores structure and function of natural plant communities and exposes students to methods of field sampling and data analysis in community ecology. Will include field labs to local forest and wetland plant communities.

Prerequisite(s): Ecology

**BIO 522 - Community Ecology Credits: 3**

Community ecology encompasses the study of interactions among species and seeks to explain the origin, maintenance, and consequences of phenomena such as species diversity and succession. Students in this course will consider both theoretical and applied aspects of community ecology. The course format will combine lecture, discussion, and student presentations.

Prerequisite(s): BIO 242.

**BIO 524 - Evolutionary Development Credits: 3**

This course will explore the connection between developmental biology and evolution since it is through the processes of development, and the genes that control those processes, that changes in form arise. Most of the course will be based on discussion of books and primary literature that highlight the major contributions at the intersection of these two fields. Topics that will be discussed include some history of evolutionary thought, gene regulation and body patterning during development, developmental foundations of evolutionary change, and scientific and social implications of this new understanding of evo-devo.

Prerequisite(s): BIO 260.

**BIO 526 - Medical Microbiology Credits: 3**

This course examines the role of microorganisms in the diseases of man. Particular emphasis is given to diseases caused by bacteria and fungi but other organisms will also be included. Topics that will be covered include but are not limited to: culture/differentiation of disease causing microorganisms, types of diseases, epidemiology and modes of disease transmission, host response to the disease as well as the treatment and prevention of diseases.

**BIO 541 - Ecosystems Credits: 3**

Explores pattern and process in ecosystem, emphasizing elemental cycling and energy flow in and across terrestrial and aquatic ecosystems, and interfaces with biotic communities. Will include methods and approaches in ecosystem ecology and review of primary literature.
Prerequisite(s): Ecology

**BIO 545 - Wildlife Diseases Credits: 3**

This course examines the ecological, physiological, and behavioral roles of diseases that affect wildlife populations. Particular emphasis is given to diseases caused by biological organisms, but diseases caused by abiotic factors are also addressed. Topics include surveillance, diagnosis, prevention, population regulation factors, and potential treatments. The course is heavily dependent on the primary literature and includes discussion on methodologies used in the study of diseases affecting wildlife.

**BIO 547 - Wetland Ecology Credits: 3**

Wetlands and the resident wildlife are studied as a unit to better understand the fragility of this invaluable habitat. Classification, delineations, wetlands protection techniques, current status of wetlands, specifically coastal wetlands will be the focus.

**BIO 555 - Comparative Environmental Physiology Credits: 3**

Considers comparative aspects of life functions in selected representatives of the animal kingdom with respect to their different environments.

Prerequisite(s): Animal Physiology or Human Physiology or permission of instructor.

**BIO 559 - Evolutionary Ecology Credits: 3**

Lectures and discussion periods cover topics of physiological ecology, interspecific interactions, population ecology, community structure, the ecological niche, coevolution, and biogeography.

Prerequisite(s): A previous college ecology course or permission of instructor.

**BIO 577 - Ecomorphology Credits: 3**

Intended for students interested in a holistic approach to biology and experimental research. Reviews the morphological adaptations of animals with emphasis on vertebrates. The functional and behavioral aspects of these adaptations are discussed in the context of the evolutionary and ecological relationships of key taxa. Students are expected to apply their academic background to research, deliver, and discuss the morphological traits enhancing animal's biological fitness. Ramifications of Ecological Morphology (i.e., molecular biology, genetics, physiology, systematics, philosophy) could be also considered. Course is a combination of lectures, student presentations, and discussions of current scientific literature.

Prerequisite(s): BIO 363 or BIO 370 or permission of instructor.

**BIO 592 - Selected Topics in Biology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**BIO 593 - Biometry Credits: 3**
Examines the uses of parametric and non-parametric statistics in biological research. Students gain practical experience in the application of statistical analyses to sets of original data using both hand calculation and packaged computer programs with emphasis on the organization and preparation of data for analysis, the selection of appropriate statistical tests, and the interpretation of the results of analyses of both published and unpublished data. A pocket calculator with square root function is recommended.

Prerequisite(s): At least 14 credit hours of college biology.

**BIO 594 - Selected Topics in Biology Credits: 1-3**

Department opportunity to offer courses in areas of major interest not covered by regular courses.

**BIO 595 - Selected Topics in Biology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**BIO 596 - Selected Topics in Biology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**BIO 598 - Selected Topics in Biology Credits: 3**

Department opportunity to offer courses in areas of major interest not covered by regular courses.

**BIO 599 - Independent Study Credits: 3**

Opportunity to pursue special studies in biology or biology education on topics not available in other courses.

**BIO 605 - Graduate Research I Credits: 1-3**

Opportunity to engage in research under the guidance of a member of the biology faculty. Research can include field, laboratory, or library research, and is expected to culminate in a substantial final paper and/or presentation.

**BIO 606 - Graduate Research II Credits: 1-3**

Opportunity to engage in research under the guidance of a member of the biology faculty. Research can include field, laboratory, or library research, and is expected to culminate in a substantial final paper and/or presentation.

Prerequisite(s): BIO 605

**BIO 609 - Internship Credits: 3**

Opportunity for students to gain practical experience in their chosen career area.

**BIO 610 - Internship II Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**BIO 612 - Thesis I Credits: 3**
Provides master's degree candidates with the opportunity to conduct a major research project. A research proposal and literature review are required. First in a two-course sequence. A temporary grade of Q will be assigned until the thesis is completed.

**BIO 613 - Thesis II Credits: 3**

Second in a two-course sequence of graduate courses designed to provide master's degree candidates an opportunity to conduct a major research project. Students implement the research designed in Thesis I, collect data, write a thesis, and make an oral presentation.

Prerequisite(s): BIO 612

**Business**

**BSN 511 - Essentials of Business Operations and Analysis Credits: 4**

Explores the responsibilities and processes needed for a business to provide a product or service to customers. Case studies and real-world examples are used extensively to investigate the problems encountered in these business operations. Quantitative and non-quantitative methods and models are used in the analysis of topical subject areas such as forecasting, capacity planning, materials management, scheduling, and quality control. This course is part of the graduate business certificate and does not count toward the MBA degree.

**BSN 519 - Essentials of Information Systems Credits: 2**

This course is designed to provide students with an overview of technology in the business environment, including such topics as data analysis, database management, and information privacy/security. This course is part of the graduate business certificate and does not count toward the MBA degree.

**BSN 520 - Essentials of Economics for Business Administration Credits: 2**

This course introduces economic concepts that are fundamental to understanding many of the issues faced by business firms. Specifically, the course focuses on the application of economics principles that managers, directors, and executives really need to know for meaningful careers in business and will actually use in business administration practice. This course is part of the graduate business certificate and does not count toward the MBA degree.

**BSN 521 - Essentials of Accounting Credits: 2**

Essentials of Accounting introduces the basic concepts of financial accounting and the financial management of corporations. The course focuses on the accounting concepts, practices and principles that guide the preparation of balance sheet, income statement, statement of stockholders' equity, and statement of cash flows. This course is part of the graduate business certificate and does not count toward the MBA degree.

**BSN 530 - Essentials of Finance Credits: 2**

Essentials of Finance is to teach basic financial concepts and principles so that students can be better prepared for MBA 529 (Global Managerial Finance) and other MBA courses. Topical coverage includes "the role of financial management, financial markets and institutions, analyses of cash flows and financial statements (including financial ratios), and the Time Value of Money (concept and application with real-world issues)."

**BSN 531 - Essentials of Organizational Behavior Credits: 2**
Organizational behavior examines human behavior in organizations and considers the practical skills managers need to motivate peers and subordinates, make decisions, deal with conflict, and succeed in a team-based environment. This course is part of the graduate business certificate and does not count toward the MBA degree.

**BSN 534 - Essentials of Marketing Credits: 2**

The primary purpose of this course is to provide an overview of the discipline of marketing, both as a philosophy of business and as a series of business practices. The course will explore how to manage organizations' basic and higher-order resources and respond to the external market environments. This course is part of the graduate business certificate and does not count toward the MBA degree.

**Business Ed of Administration**

**BUS 490 - Selected Topics in Business Credits: 2**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**Counseling and College Student Personnel**

**CNS 490 - Selected Topics in Counseling Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 490 - Selected Topics in Counseling Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 503 - Advanced Field Experience Credits: 3**

Continuation of the CNS 580/CNS 589 field experience in schools.

Prerequisite(s): CNS 580/CNS 589, advisor's approval, and pre-registration form. Site selection must be approved by advisor.

**CNS 504 - Introduction to School Counseling Credits: 3**

Studies the history of school counseling and the development of counselors and counseling programs in schools. Provides practical means to make use of counseling and guidance theories and techniques, as seen in school settings. Describes administrative activities that provide the framework for school counseling services. Studies prevention and intervention strategies that contribute to the academic mission of the school as well as students' career, personal, and social development. Describes effective leadership, proactive strategies, and advocacy for students and counseling programs.

**CNS 505 - Organization and Administration of School Counseling Services Credits: 3**

Studies basic philosophy, principles, and current trends in the organization and administration of comprehensive school counseling programs. Emphasis is given to line-staff organization, guidance committees, counselor-teacher
relationships, adult-community guidance services and roles of school personnel and community agencies in understanding and promoting the school-community guidance programs.

Prerequisite(s): Completion of Phase I of program and CNS 585

CNS 508 - Marital, Couple, and Family Counseling Credits: 3

Designed to aid student in gaining experience and competency in the use of therapeutic interventions with married person, couple, and families. Emphasis on the understanding of prominent theoretical modalities and applying the relevant techniques to classroom simulations. Students gain understanding and experience in dealing therapeutically with typical marital, couple, and family problematic concerns.

Prerequisite(s): Completion of Phase I and CNS 588 or permission of instructor.

CNS 509 - Multicultural Counseling Credits: 3

Designed to sensitize students and promote an understanding of their own self as a cultural being and to acquire expertise in the use of therapeutic interventions with diverse populations. Emphasis on the learning of approaches and application of techniques that facilitate intra- and intergroup and multicultural experiences.

CNS 510 - Drug and Alcohol Counseling Credits: 3

Designed to aid students in gaining understanding of the theories of causation and treatment of alcohol and drug addiction abuse. Students also gain experience and competency in the use of therapeutic interventions and techniques through classroom simulations.

Prerequisite(s): Completion of Phase I or permission of instructor.

CNS 512 - Group Counseling and Leadership Skills Credits: 3

Provides a didactic and experiential overview of a variety of group theories and group types. Particular attention given to tools and techniques necessary to function effectively in the role of group leader. Emphasis on both the acquisition of knowledge and the skills of group leadership theories and techniques.

Prerequisite(s): CNS 578 or concurrent registration with permission of instructor.

CNS 514 - Relapse Prevention and Opiate Treatment Methods Credits: 3

Students are provided with the concept and process of relapse prevention and recovery from addiction. Specific focus is on opiate treatment and the use of medication and a variety of other therapeutic modalities and approaches. A developmental perspective is presented along with a variety of support group philosophies and perspectives; from cognitive to spirituality. Clinical approaches will aid counselors in their work in relapse prevention and clients addicted to opiates.

Prerequisite(s): Master's degree in counseling or related degree.

CNS 515 - Career Development Credits: 3

Stresses development of counselor competencies in the areas of collecting, evaluating, classifying, filing, and using accurate occupational, educational and personal-social informational materials. Also considered are theories of vocational choice, the psychology and sociology of work, vocational interests and aptitudes, the relationship of school
and college subjects to jobs and the use of information in helping students decide on matters of curricular choice. Counseling interviews are employed to give students practical experiences in the use of informational materials with counselees.

**CNS 518 - Treatment and Challenges with Families Impacted by Addiction Credits: 3**

Designed for practitioners working with addiction and how to address multiple family issues. This will contribute to the practitioners knowledge of working with families impacted by addiction and the use of therapeutic interventions. Focus will emphasize family constructs and the use of family counseling to intervene on both the identified client and the family system. Students will gain understanding and experience on how addiction effects communication and power structures within the family and the potential resolution and intervention tools needed to aid the family in crisis.

Prerequisite(s): Master's degree in counseling or related degree.

**CNS 519 - Implications for Human Development for Counseling Credits: 3**

Specifically designed for counselors. Content is rooted in developmental theory with an emphasis on identity development. Professional counselors pay particular attention to our clients’ development across the lifespan; implications of their development on all aspects of life weigh importantly on the way we conceptualize clients’ challenges, adjustments, disorders, and growth. The information and experiences gained will serve as a structural foundation for understanding theories of development and their significance in the work professional counselors perform.

**CNS 520 - Counseling and Spirituality Credits: 3**

This class is an introduction to the essential aspects of spirituality and the integration into the counseling process. Definitions, assessment, and experiential aspects of spirituality are addressed in this dynamic and applicable course. This course is a hybrid approach to instruction of sixteen hours of face-to-face (8 hours the first class and last class) and weekly D2L/Brightspace instruction for 4 weeks between the first and last class. This hybrid approach allows students separate time for reflection questions, discussion within small groups and time to create projects that can aid in applying the material to clinical settings. Throughout the course the American Counseling Association (ACA) code of ethics and the Association for Spiritual, Ethical, and Religious Values in Counseling (ASERVIC) competencies are discussed and reviewed. An exploration of developmental models and clinical interventions related to the interface of spirituality and counseling will be made so as to aid in the development of practical skills in working with spiritual issues in counseling.

**CNS 521 - Emotionally Intelligent Leadership Credits: 3**

This course is designed to introduce students to key components integral to successful leadership. Through exploration of the three tenets of Emotional Intelligence (EI) (consciousness of self, consciousness of others, and consciousness of context) as well as the capacities embedded within these tenets, students will examine their own emotionally intelligent leadership, strengths, and weaknesses and to begin to make adjustments in their behaviors and attitudes as they experience and examine individuals and organizations that may be, at times, significantly different from their own life experience.

**CNS 522 - Assessment Techniques Credits: 3**

Detailed study of collecting meaningful information about individuals and their environment through both testing and non-testing procedures. Emphasis is on understanding the information in order to help individuals cope with concerns and make decisions.
Prerequisite(s): CNS 578

**CNS 524 - The DSM and Psychopathology for a CNS Perspective Credits: 3**

Studies the classification system of psychopathology. Special emphasis placed on building counseling models based on the integration of the classification and the client's individual situation.

Prerequisite(s): CNS 559

**CNS 526 - Brief Therapy for Martial, Family & Couples Counseling Credits: 3**

This course provides an overview of the knowledge needed to use brief therapy as a lens for systemic interventions. The primary focus is on the integration of the techniques and theoretical underpinnings necessary to effectively and efficiently create change in systems using a brief model. Particular attention is given to knowledge and awareness of the role of brief therapist.

**CNS 527 - Models & Techniques in Couples, Marital and Family Therapy Credits: 3**

This course covers the major models used in couples, marital, and family therapy. In conjunction with review of these theories will be a focus on effective use of the specific techniques that accompany each model. Particular attention will be given to the role of the family therapist in each model. Ethical and cultural implications will be reviewed.

**CNS 528 - Assessment from A Family Systems Perspective Credits: 3**

This course is not intended to explore psychometric theory but rather to introduce students to contemporary models and strategies for integrating appropriate assessment measures into work with children, couples and families. Diagnostic, evaluative and treatment assessment paradigms will be explored as they pertain to family systems based counseling. Current controversies about assessment in family systems counseling will be discussed.

**CNS 529 - Systemic Counseling with Individuals, Couples and Families Credits: 3**

This course is designed to aid students in gaining experience and competency in the use of therapeutic interventions with marital dyads, couples, and family systems. Emphasis is on the student?s understanding of prominent theoretical modalities and applying the relevant techniques to classroom simulations and case studies. Students will acquire both understanding and experience in dealing therapeutically with typical marital, couple and family problematic concerns.

**CNS 532 - Advanced Drug and Alcohol Counseling: Clinical Approaches with Co-Occurring Disorders Credits: 3**

Students are provided with the concept of alcohol and drug dependency as it relates to cooccurring disorders. The course explores the diagnostic criteria found in the Diagnostic and Statistical Manual of Mental Disorders 5 and the complicating issues of personality disorders in the treatment process. This course helps practitioners learn more effectively how to diagnose and treat psychiatric disorders and substance use disorders concomitantly. Students will review basic assessment methods and be given opportunities to engage in discussion, presentations and online instruction.

Prerequisite(s): Master's degree in counseling or related degree.

**CNS 536 - Counseling Challenging Adolescents Credits: 3**
Students will learn several unique ways of joining, finding empathy, developing and sustaining healthy boundaries, and creating ways of containing all that the most challenging adolescent clients bring to the therapeutic counseling relationship. A wide variety of professional counseling and therapy settings will be considered.

Prerequisite(s): Master's degree in counseling or its equivalent.

**CNS 538 - Selected Topics in Counseling**  
Credits: 3  
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 539 - Advanced Field II**  
Credits: 3  
Continuation of CNS 580, Clinical Field Experience I, placement. Students must register for this course in order to satisfy the six (6) credit hour field experience requirement. Students must complete 300 clock hours for each field experience in a professional setting appropriate to their career interests, skills, and program of study. Site selection must be approved by adviser. Course offered on a pass/fail basis.

Prerequisite(s): Completion of CNS 580, approval of adviser, and pre-registration form.

**CNS 551 - Clinical Supervision Group I**  
Credits: 2  
Family systems supervision groups (of no more than six students each) will be scheduled at locations and times that suit the members of each group during the three different semesters of coursework. Students will take turns presenting client cases they are working with in their current therapeutic setting, including audio or videotaped segment of their sessions. Group processing will focus on helping the therapist with areas of concern or difficulty in clarifying the dynamics of the client family system, accurately assessing the problem, developing or refining an appropriate treatment plan, effectively using a variety of therapeutic interventions, evaluating client progress and incorporating new information and understanding in the treatment process, and using the self of the therapist effectively.

**CNS 554 - Clinical Supervision Group II**  
Credits: 2  
Family systems supervision groups (of no more than six students each) will be scheduled at locations and times that suit the members of each group during the three different semesters of coursework. Students will take turns presenting client cases they are working with in their current therapeutic setting, including audio or videotaped segment of their sessions. Group processing will focus on helping the therapist with areas of concern or difficulty in clarifying the dynamics of the client family system, accurately assessing the problem, developing or refining an appropriate treatment plan, effectively using a variety of therapeutic interventions, evaluating client progress and incorporating new information and understanding in the treatment process, and using the self of the therapist effectively.

**CNS 559 - Introduction to the Helping Services**  
Credits: 3  
Surveys a wide range of helping services and introduces the basic philosophical concepts underlying each, the principles by which such services operate, and the therapeutic practices which are characteristic of each service. Emphasis is on defining the helping relationship within each area and clarifying the ethical considerations that apply.

**CNS 560 - Principles of College Student Personnel**  
Credits: 3  
Surveys basic principles and practices of student personnel work in higher education. Consideration is given to the purpose of higher education and student affairs, exploring the missions, cultures, and campus climates of varying types of institutions. Within that context, students will learn principles of professionalism, multiculturalism, human development theory, management of student affairs functional areas, necessary competencies, and trends.
CNS 562 - Student Personnel Work in Higher Education Credits: 3

Designed to provide the role concept for students in student personnel work at the college/university level. Designed to deal with specific issues and trends in the field; develop a design or operational model for program development, implementation, and evaluation; establish an operational role concept for specific student personnel positions.

Prerequisite(s): Completion of Phase I and CNS 560 and CNS 565

CNS 564 - Grief and Loss Issues in Counseling Credits: 3

Designed to help students identify, clarify the differences between grief, mourning, and bereavement and understand grief as a response to any loss, including death. Deals with the development of skills as a competent and caring counselor and helps to achieve a deeper self-understanding of the student's own feelings, attitudes, and values regarding loss and death.

Prerequisite(s): Completion of Phase I and CNS 578 or permission of instructor.

CNS 565 - The College Student and the College Environment Credits: 3

Examines the impact of the college environment on both traditional and nontraditional students and provides in-depth understanding of the characteristics, attitudes, and developmental needs of those students. It also suggests methodology for identifying needs and assessing environmental characteristics.

Prerequisite(s): CNS 560

CNS 567 - Counseling Children Credits: 3

Intense study of basic theoretical foundations and approaches in counseling children, including play therapy. Childhood psychological disorders are surveyed using the current edition of the Diagnostic Statistical Manual of Mental Disorders.

Prerequisite(s): CNS 585

CNS 568 - Professional Orientation to Mental Health Counseling Credits: 3

Designed to provide a comprehensive overview of the rapidly evolving field of mental health counseling. Studies basic philosophy, principles and current trends in the provision of mental health counseling services. Students gain understanding of topics such as: treatment of psychopathology, diagnosis, direct counseling services, prevention and psychoeducational approaches, crisis counseling, and ethical and legal issues.

CNS 569 - Selected Topics in Counseling Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

CNS 570 - Working with Dreams, Sandtrays, and Music in Counseling Credits: 3

Designed to acquaint students with the Hill cognitive-experiential model of dream work and the use of music and sandtray in counseling. This course includes a strong experiential component that provides students with an opportunity to practice various approaches for working with dreams and using music and sandtray in counseling.

Prerequisite(s): CNS 578
CNS 573 - Theories of Counseling Credits: 3

Intensive study of basic concepts and theoretical foundations of counseling. Emphasis is on the student's ability to conceptualize client concerns, select appropriate counseling interventions, and apply the relevant theories to classroom simulations.

Prerequisite(s): CNS 559 or concurrent registration with permission of instructor.

CNS 574 - Selected Topics in Counseling Credits: 3

Department opportunity to offer courses in areas of major interest not covered by regular courses.

CNS 576 - Selected Topics in Counseling Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

CNS 577 - Selected Topics in Counseling Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

CNS 578 - Pre-practicum in Counseling Credits: 3

Designed to provide an understanding of, and applied practice in using, the fundamental skills of the helping process. Student-centered methods encourage collaboration, active listening, and peer-to-peer learning exchanges. Emphasizes the development of effective relationship building skills as well as the practice of approaches that facilitate client growth and change. Increased counselor self-understanding and self-analysis are a critical component of the course as well as students beginning to develop a personal style of counseling. Counselor and client characteristics, relationship variables, and external factors (e.g., societal and environmental) that influence the helping process will be addressed.

Prerequisite(s): CNS 559

CNS 580 - Clinical Field Experience I Credits: 3

The culminating experience for all programs, the field experience sequence consists of six (6) semester hours and is the internship requirement of the SU counseling programs. Students must complete 300 clock hours for each field experience in a professional setting appropriate to their career interests, skills, and program of study. Site selection must be approved by adviser. Course is offered on a pass/fail basis. Completion of Phases I and II, adviser's approval, attendance at orientation meeting the prior semester, pre-registration form, and candidacy required prior to enrollment. CNS 589 is required to satisfy the six credits for field placement.

Prerequisite(s): CNS 585

CNS 581 - Counselor Supervision Credits: 3

Provides experience in supervision of counselor trainees, including review of interview recordings; constructive critique of trainees, individually and in group settings; and reading and criticizing of written reports. Significant involvement with counselor trainees, if required, in order to experience a true supervisory and helping relationship. Prerequisites: Permission of the adviser and prior employment as a counselor.
Prerequisite(s): Restricted to students enrolled in the Supervisory Certificate Program through Educational Administration and Foundations Department.

**CNS 585 - Practicum in Counseling Credits: 3**

Field-based assignment in an agency, school, or institutional setting providing supervised professional experiences. Students must accumulate a minimum of 150 clock hours at a site appropriate to their program of study during one academic semester. Students must have a site approved by their adviser prior to course registration. Additionally, attendance at orientation meeting the prior semester, and pre-registration form is required prior to enrollment in the course.

Prerequisite(s): CNS 578

**CNS 586 - Advanced Practicum in Counseling Credits: 3-6**

Extension of CNS 585, permits student to gain greater specialized competencies in the same general setting.

Prerequisite(s): CNS 585 and permission of adviser, attendance at orientation meeting the prior semester, and pre-registration form.

**CNS 587 - Assessment Strategies & Program Evaluation in Student Affairs Credits: 3**

This course provides an introduction to program development, evaluation and assessment in higher education and student affairs. Students will learn how to create, implement, evaluate and assess small and large-scale programs. Students will learn how to create and utilize needs assessment, satisfaction surveys, benchmarking, student learning outcomes and outcomes assessment, higher education data sets and program evaluation.

**CNS 588 - Counseling Strategies and Techniques Credits: 3**

Designed to aid student in gaining experience and competency in the use of therapeutic interventions from a variety of theoretical modalities. Emphasis placed on understanding, experiencing, and applying each technique; the appropriateness of its application, its effect and side effects, and the theoretical concepts underlying the change process facilitated by the intervention.

Prerequisite(s): CNS 585

**CNS 589 - Clinical Field Experience II Credits: 3**

Continuation of CNS 580, Clinical Field Experience I, placement. Students must register for this course in order to satisfy the six (6) credit hour field experience requirement. Students must complete 300 clock hours for each field experience in a professional setting appropriate to their career interests, skills, and program of study. Site selection must be approved by adviser. Course offered on a pass/fail basis.

Prerequisite(s): CNS 580 and permission of adviser, and pre-registration form.

**CNS 590 - Advanced Clinical Field Experiences Credits: 3**

Continuation of the CNS 580/CNS 589 field experience. Course offered on a pass/fail basis.
Prerequisite(s): CNS 589 and permission of adviser, and pre-registration form. Site selection must be approved by adviser.

**CNS 596 - Selected Topics in Counseling Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 597 - Selected Topics in Counseling Credits: 1**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 598 - Selected Topics in Counseling Credits: 1**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 599 - Independent Study Credits: 3**

Provides opportunities for students to pursue independent study designed to develop critical thinking and individual initiative through planned scholarly endeavor. The student, under the advisement of an assigned faculty member, engages in a study of a significant program not clearly a part of existing courses.

Prerequisite(s): Requires permission of adviser.

**CNS 600 - Research and Statistics Credits: 3**

Introduction to problems of structure and function of research in the counseling programs where attention is directed to the importance of individual differences, measurement of several variables, and the task of developmental understanding. Designed to develop competencies and explores empirical findings in both the production and consumption of current research. It considers experimental design, practical use of both descriptive and inferential statistics with application to measures of central tendency, variability, dispersion, correlation and tests of differences.

**CNS 602 - Advanced School Counseling Field Experiences Credits: 3**

Continuation of the CNS 580/CNS 589 field experience in schools.

Prerequisite(s): CNS 580 and CNS 589 and permission of advisor, and pre-registration form. Site selection must be approved by advisor.

**CNS 603 - Advanced Practice Seminar Credits: 3**

Provides experience and training in advanced professional practices including intervention/program design and outcome evaluation, individual and community advocacy, and an introduction to counselor supervision. Students, under advisement of an assigned faculty member, engage in independent projects. Emphasis on practical application in community agency/institutional settings.

Prerequisite(s): CNS 585 and CNS 580

**CNS 605 - Introduction to Complex/Developmental Trauma: Research, Theory & Practice Credits: 3**
This course serves as an introduction to research, theory and practice pertaining to complex/developmental trauma (Complex/DT) resulting from childhood adverse experiences (ACEs). Topics to be covered include: contributing factors, neurobiology of attachment, impact on physical and behavioral health across the lifespan, symptom recognition and differential assessment, individual and systemic interventions, and professional resiliency. Special attention will be given to intergenerational, historical and race-based trauma as primary or contributing factors.

Prerequisite(s): Master's degree or higher in counseling or related field.

**CNS 606 - Complex/Developmental Trauma: Best Practices for Children, Adolescents and Caregivers Credits: 3**

This course will build from the introductory course (CNS 605 - Introduction to Complex/Developmental Trauma: Research, Theory & Practice) and will focus specifically on effective services for child and adolescent survivors. Content will cover a variety of interventions organized within a universal framework for developmental trauma recovery (attachment, self-regulation, competency). Interventions will emphasize attunement and attachment, sensorimotor development, executive functioning, and resource-building strategies. Special attention will be given to addressing intergenerational, historical and race-based trauma. Participants will be expected to explore personal attachment history as pertains to providing effective clinical/direct service, and continue work with professional resilience building.

Prerequisite(s): CNS 605

**CNS 607 - Developmental/Complex Trauma: Best Practices for Adult Survivors Credits: 3**

This course will build from the introductory course (CNS 605 - Introduction to Complex/Developmental Trauma: Research, Theory & Practice) and will focus specifically on effective services for adult survivors. Content will cover a variety of interventions organized within a universal framework for developmental trauma recovery (attachment, self-regulation, competency). Interventions will emphasize addressing the adult behavioral and mental health outcomes of childhood trauma. Special attention will be given to addressing relational dynamics and development of a cohesive and positive sense of self. Participants will be expected to explore transference and counter-transference dynamics as pertains to providing effective clinical/direct service, and continue work with professional resilience building.

Prerequisite(s): CNS 605

**CNS 609 - Internship Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**CNS 610 - Internship II Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**CNS 612 - Thesis I Credits: 3**

**CNS 613 - Thesis II Credits: 3**

**CNS 700 - CES Counseling Leadership and Advocacy Credits: 3**
This course addresses the role of the counselor educator and supervisor in the areas of professional leadership and advocacy. This is one of five doctoral core areas identified as foundational knowledge for counselor education doctoral graduates in the standards of the Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2016). Students will apply course content to current issues, trends, and practices and will initiate a professional development portfolio.

**CNS 705 - CES Theories, Models and Practice of Clinical Supervision Credits: 3**

Clinical supervision is an essential component for creating ethical and competent counselors. This course is designed to provide doctoral students with the theoretical and fundamental knowledge and skills of clinical supervision. This includes the exploration of theories, models, supervisory roles, evaluation methods, research, legal and ethical issues, and socio-cultural issues in supervision. An experiential component of providing individual supervision to Master?s students will provide an opportunity for the supervised practice of clinical supervision in counseling.

**CNS 710 - CES Instructional Theories and Pedagogy Credits: 3**

This course examines teaching, learning, curriculum, and how individuals develop and learn, as well as how organizational, social, and cultural contexts shape learning. Students are asked to draw from their own personal and professional experiences in education, work environments, and learning in general, and to use these experiences as a framework for exploring and testing current theories, models, the empirical literature, and present practices. Teaching-learning theories, models of development, and best practices will be explored, and roles and responsibilities will be clarified regarding teaching, supervising, facilitating, and assessing overall professional development within counselors and other professionals.

**CNS 715 - CES Advanced Group Leadership Credits: 3**

This course builds upon master?s level curriculum in group leadership theory, skills and evaluation. Students will study the pedagogy of teaching group work as well as delivering clinical supervision through a small group modality for pre-licensure and licensed professional counselors. Students will strengthen existing knowledge of how to design and implement groups for psychoeducational purposes (e.g., focus groups, workshops). They will further their understanding of theories and methods of conducting/leading counseling groups in a variety of settings (e.g., schools, outpatient, inpatient), as well as learn to supervise others? leadership of group work (e.g., task/work, psychoeducation, counseling, psychotherapy). Students will investigate current best-practice literature. Lastly, doctoral students will move knowledge to practice by learning to provide accurate and meaningful feedback to pre-licensed counselors and counselors-in-training at the master?s level in group settings (i.e., practicum, internships).

**CNS 720 - CES Advanced Multicultural Counseling Credits: 3**

This course is designed for doctoral students to study multicultural issues in counselor preparation programs, counseling supervision and counseling assessment. Students will further develop their multicultural competence along three dimensions including awareness, knowledge and skills in counseling, educating, researching, supervising, and advocating for and with diverse populations in community agencies/institutional settings. Through self-awareness, scholarly investigation, and course requirements such as review of the diverse needs of clients in counseling settings, exploring policies and procedures that impact access of service, assessing advocacy models, evaluating course curriculum, and reviewing current research and best practices in serving the needs of diverse populations, students will understand multicultural issues in counselor practice, counselor education, and counselor supervision; demonstrate the ability to assess areas for multicultural growth in students, supervises, and clients; and implement effective strategies for client advocacy in access of services.

**CNS 721 - CES Advanced Counseling Theories and Practice Credits: 3**
This course will critically examine select, contemporary, theoretical orientations to counseling and as well as meta-theoretical models for matching counseling orientations to individual client needs. Course activities are intended: (a) to facilitate informed understanding of the named theoretical constructs through critical analysis of seminal and contemporary literature, (b) to promote insight into current applications of the named constructs, and (c) to promote students' continued development and ability to articulate an identifiable integrated, and defensible theoretical approach to clinical practice and research. Course delivery will include readings, lecture, large and small group discussions, and clinical presentations. Students will be required to complete a series of brief position papers, a final research paper and an oral “defense” exercise.

CNS 725 - CES Developing, Leading and Evaluating Programs in Mental Health
Credits: 3

This course provides doctoral student with exposure to leadership theories, skills and approaches as they apply to mental health leadership. The course will explore areas of leadership approaches within the mental health system, administrative supervision, budget and programmatic planning and development, outcome evaluation and needs assessment through extensive literature review. They will assess ethical balance of administrative, clinical and budgetary needs will be discussed and explored. Students will explore how current leaders utilize leadership and organizational change to impact the community, region and state.

CNS 760 - CES Advanced Assessment and Evaluation
Credits: 3

This course provides doctoral students opportunity to advance their already existing education in assessment and evaluation of clients as well as supervise master's level counselors who administer instruments to their clients. This course will provide the experience for test construction methods, supervision of those providing administration of assessment tools, and the legal and ethical bounds of test administration and supervision.

CNS 780 - CES Advanced Quantitative Research Methods and Statistics I
Credits: 3

This course provides doctoral students in CES with a review and an expansion of their current knowledge of research methodology as well as statistical concepts and operations used in quantitative research. The course covers descriptive and inferential statistics including both parametric and non-parametric statistical theories and techniques. Students will demonstrate proficiency using SPSS to create and modify data files, run analyses, and provide accurate interpretations of outputs. Foundational content in quantitative research methodology will address variables, constructs, causality, threats to internal and external validity, and reliability. The course serves as the groundwork for the sequence of quantitative-themed methodology and statistics courses.

Prerequisite(s): CNS 600 or comparable Masters-level Research Methodology course(s) and quantitative statistics course(s).

CNS 781 - CES Research Epistemology and Methods
Credits: 3

This course provides Counselor Education and Supervision doctoral students with a contextual orientation to research epistemology and methods (quantitative, qualitative, and mixed methods), an expansion of their current knowledge of research methodology, as well as concepts and operations used in quantitative, qualitative, and mixed research methods. Foundational content in quantitative research methodology will address variables, constructs, causality, threats to internal and external validity, and reliability. Foundational content in qualitative research methodology will address epistemological frames, conceptual frameworks, research paradigms, and exploration of high ethical standards in research inquiry. Lastly, students will review and expand their knowledge of research questions, hypotheses, and the chapters of traditional doctoral dissertations. The course serves as the groundwork for the sequence of quantitative- and qualitatively-themed methodology and statistics courses.
CNS 785 - CES Advanced Quantitative Research Methods and Statistics II Credits: 3

This course further expands doctoral students’ knowledge of quantitative research methodologies and statistics. New learning will include univariate, bivariate, covariate, and some multivariate analyses. The course covers advanced applications of ANOVA, ANCOVA, MANOVA, MANCOVA, and Factor Analysis including fixed effects, repeated measures, factorials, and nested designs. Students will continue to use SPSS to create and modify data files, run statistical analyses, and provide accurate interpretations of outputs. Paralleling the statistics content, students will explore experimental between and within-groups designs; quasi-experimental and time-series designs; and non-experimental designs that include the production and use of surveys.

Prerequisite(s): CNS 780

CNS 790 - CES Advanced Quantitative Research Methods and Statistics III Credits: 3

This course advances doctoral students’ knowledge of multivariate analyses and statistics, including multiple regression, logistic regression, path analysis, discriminant analysis, and canonical correlation. Students will use SPSS to create, edit, and transform datasets, run appropriate statistical analyses, provide accurate interpretations of outputs, and produce written summaries of their findings consistent with content, verbiage, and formatting of scholarly literature.

Prerequisite(s): CNS 780 and CNS 785

CNS 795 - CES Qualitative Theories and Methodologies Credits: 3

This course provides doctoral students opportunity to examine and synthesize various qualitative methodological approaches in research inquiry. This course will explore issues of qualitative research, specifically addressing the students’ epistemological frame, conceptual frameworks, research paradigms, advanced qualitative methodologies, various qualitative data analyses, issues of goodness, and ensuring high ethical standards in research inquiry.

Prerequisite(s): Completion of Masters-level Qualitative Research Methodology course(s).

CNS 800 - CES Doctoral Practicum in Counselor Education Credits: 3

This course is a supervised practice and application of counseling skills with clients. This advanced practicum experience is designed to provide doctoral students with the opportunity to develop and assess their clinical counseling skills under supervised practice. Students will be given the opportunity to integrate theory with skills to advance their clinical expertise. Learning will also take place through observing and critiquing recorded supervision sessions of fellow classmates. Practicum is a seminar course with weekly group supervision and an hour of individual or triadic supervision from the faculty instructor and an hour of supervision from the site supervisor.

CNS 801 - CES Doctoral Internship I Credits: 3

Doctoral Internship I (Field I) is the second field placement in a sequence of clinical field experiences (Practicum, Internship I and Internship II) designed to meet CACREP objectives AND individual student learning/experiential objectives. All internship experiences are opportunities for doctoral students to practice under supervision in areas to include but are not limited to the role of doctoral level professional counselors in advanced clinical practice (e.g., individual counseling, group counseling, couples and family counseling, specialized technique and approaches, and specific clientele), clinical supervision, program leadership and evaluation, counselor education (e.g., teaching), research and related scholarly activities, and represents the culmination of students’ learning and growth in previous
coursework. The Internship sequence is structured to afford students opportunities to assume greater responsibility at their placements. Internships I and II, both of which require successful completion of 300 clock hours (each), in one or more professional setting appropriate to each student’s career interests. All placements are decided upon by each student and his or her doctoral advisor. All sites and site supervisors must be approved by the student’s advisor and the department faculty.

CNS 802 - CES Doctoral Internship II Credits: 3

Doctoral Internship II (Field II) is the third and final field placement in a sequence of clinical field experiences (Practicum, Internship I and Internship II) designed to meet CACREP objectives AND individual student learning/experiential objectives. All internship experiences are opportunities for doctoral students to practice under supervision in areas to include but are not limited to the role of doctoral level professional counselors in advanced clinical practice (e.g., individual counseling, group counseling, couples and family counseling, specialized technique and approaches, and specific clientele), clinical supervision, program leadership and evaluation, counselor education (e.g., teaching), research and related scholarly activities, and represents the culmination of students’ learning and growth in previous coursework. The Internship sequence is structured to afford students opportunities to assume greater responsibility at their placements. Internships I and II, both of which require successful completion of 300 clock hours (each), in one or more professional setting appropriate to each student’s career interests. All placements are decided upon by each student and his or her doctoral advisor. All sites and site supervisors must be approved by the student’s advisor and the department faculty.

CNS 820 - CES Research Seminar I Credits: 1

This doctoral level seminar is one of 3 one-credit courses, offered in the second semester (Seminar I), the fifth semester (Seminar II) and the ninth semester (Seminar III) of the Ed.D. in CES cohort. These seminars will prepare students to present their dissertation proposals and to keep the cohort members on track for progress and timely defense of their dissertation research. Seminar I is a discursive exploration by the cohort under direction of a faculty member which will answer the question: How does scholarly research shape the profession of counseling?

Prerequisite(s): Requires admission into CES doctoral program to enroll

CNS 821 - CES Research Seminar II Credits: 1

This doctoral level seminar is one of 3 one-credit courses, offered in the fifth semester (Seminar II), the second semester (Seminar I) and the ninth semester (Seminar III) of the Ed.D. in CES cohort. These seminars will prepare students to present their dissertation proposals and to keep the cohort members on track for progress and timely defense of their dissertation research. Seminar II, the second research seminar, is a discursive exploration by the cohort under direction of a faculty member which will answer the question: How does scholarly literature shape individuals’ dissertation research.

Prerequisite(s): Requires admission into CES doctoral program to enroll

CNS 822 - CES Research Seminar III Credits: 1

This doctoral level seminar is one of 3 one-credit courses; this course is offered in the ninth semester (Seminar III), the second semester (Seminar I) and the fifth semester (Seminar II) of the Ed.D. in CES cohort. These seminars will prepare students to present their dissertation proposals and to keep the cohort members on track for progress and timely defense of their dissertation research. Seminar III, the third research seminar, is a discursive exploration by the cohort under direction of a faculty member which will answer the question: How is dissertation research revised into the "6th Chapter" - a journal ready manuscript?
CNS 897 - CES Dissertation I Credits: 3

Working with an assigned dissertation advisor, each doctoral candidate formally begins the dissertation process. This includes a) finalizing a dissertation proposal describing the theoretical framework and conceptual framework, b) defending the written proposal in an oral examination before a Dissertation Committee, and c) beginning dissertation activities as described in the proposal. Expected outcomes include successful completion of Introduction, Literature Review, and Methodology (Chapters 1-3) of dissertation.

CNS 898 - CES Dissertation II Credits: 3

Working with an assigned dissertation advisor, upon successful completion of the dissertation proposal defense, each doctoral candidate continues the dissertation process. Expected outcomes include ongoing progress of research study (Data Analysis, Conclusion) leading to dissertation defense.

CNS 899 - CES Dissertation III Credits: 1-3

Working with an assigned dissertation advisor, each doctoral candidate continues the dissertation process (as necessary).

Communication, Journalism & Media

COM 405 - Brand Journalism Credits: 3

More businesses and organizations are becoming media creators, producing original blogs, videos, digital and print magazines, and other content. Brand journalism (also called content marketing) has quickly become a ubiquitous presence on the media landscape. Brands and content strategists frequently hire journalists to create this content, as they have strong news judgment, conduct solid research and reporting, and write what readers want and need. Public relations professionals may work on strategy, research, social media and content creation. In this course, students will learn how to apply journalistic techniques and practices to create original multimedia content and develop strategies for companies, nonprofits and brands. Students can expect to analyze and compare brands and their content, create customer personas and editorial calendars, write original blog and social media posts, design storyboards and more.

COM 410 - Women and the Media Credits: 3

Introduces overview of the many and varied contributions of women in mass media. Through slide lectures, documentary videos, and student research presentations, students explore the lives and work of women media professionals, explore some of the notable historical obstacles to women in this once male-dominated field: sexist attitudes, stereotypes, lack of women in management, and conflicts between job and family. Also examines the ethnic diversity of women in this important professional field. Will explore how women's style and vision differs from their male counterparts.

Prerequisite(s): (COM 111 and COM 112 ) or permission of instructor.

COM 425 - Feature Writing Credits: 3

Deals with specialized writing for newspapers and magazines and offers instruction and practice in developing ideas for articles, using research methods, and writing for mass audiences. Keyboarding skills required.

Prerequisite(s): (COM 111 and COM 112 ) or permission of instructor.
COM 460 - Case Studies in Public Relations Credits: 3

Reviews current public relations principles and practices as related to business, governments, institutions, and associations. Examines the application of PR principles and practices in the management of contemporary public issues and problems. Different evaluation criteria applied to graduate/undergraduate students.

Prerequisite(s): (COM 111 and COM 112) or permission of instructor.

COM 465 - Documentary Storytelling Credits: 3

This course introduces students to storytelling in documentary film. Students will learn basic principles of documentary film storytelling with an emphasis on the aesthetic, intellectual and ethical considerations involved in this cinematic form. Traditional writing, form, style and structure in documentary film will be stressed; however, students may explore new creative forms of documentary storytelling for their final project.

COM 470 - Advanced Digital Photography Credits: 3

Introduces principles of advanced digital photography and teaches competencies in areas such as photographic composition, exposure, and lighting. Students explore practical applications of advanced photographic techniques in RAW and high dynamic range (HDR) photography. Students also learn advanced techniques in photographic lighting for natural and studio applications. Developmental assignments cover techniques in various types of photography, such as portrait; fashion and bridal; still life and product/promotion; nature and wildlife; sports and action; and architectural photography. The course explores advanced digital manipulation techniques through application of Adobe Photoshop. Students are expected to develop an understanding of the relationship of digital photography to their professional goals. Graduate students enrolled in the course must conduct original research on a topic related to visual communication. Different evaluation criteria are applied to graduate/undergraduate students.

Prerequisite(s): COM 360 or permission of instructor.

COM 476 - Magazine Media & Design Credits: 3

Provides opportunity to examine, discuss, and create periodical publications (magazines) in a variety of specialized formats. Develops skills in understanding and creating periodical publications by focusing on writing and design. Examines a variety of magazines to provide an understanding of content, typography, design, layout, and production. Students learn to create promotional materials necessary to develop audience for periodical publication. Students write and edit several stories for their own publication, which is final course project. Students produce a 32-page magazine as this final project. Graduate students conduct market research analysis and a strategic promotional plan in addition to standard coursework.

Prerequisite(s): (COM 111 and COM 112) or permission of instructor.

COM 478 - Digital Journalism Credits: 3

This course is a senior-level experiential class for students in the Journalism concentration, and includes developmental projects as well as a final professional project. It focuses on the changing nature of technology and its use in news organizations to gather, analyze, synthesize and disseminate information. Focuses on developing, researching, and writing specialized stories for newspaper, magazine, television and radio websites and social media. Students learn to approach stories as packages, developing story ideas that can be presented in written, audio, and video formats. Focuses on writing and editing, written narrative, blogging, podcasting, live tweeting, and capturing and editing digital audio and digital video segments, developing accompanying links, and designing a story package to be presented in print, on a website and on social media. Requires senior standing, graduate students with permission of instructor.
Prerequisite(s): COM 285, COM 293, and COM 375

**COM 481 - Interactive Media Design Credits: 3**

This course primarily deals with digital and interactive design techniques for multiple-platforms with emphasis on web design. It also includes lessons on how to format a web-based publication for mobile and digital pads, how to create basic interactive online advertisements and slideshows; and how to design interactive promotional publications.

**COM 482 - Internet Communication Credits: 3**

Introductory course with fundamental knowledge concerning the construction, use, and importance of worldwide web media for the communications industries. Students construct an actual website concentrating on the usability of web pages and websites while applying skills gained in class to work with real-world clients.

Prerequisite(s): (COM 111 and COM 112 ) or permission of instructor.

**COM 483 - Issues in Media Management Credits: 3**

Many job roles today are facing unique leadership challenges in an increasingly digitized and globalized context. This is especially true of the mass media. From journalism and public relations to advertising and other communication roles - newer technologies, shrinking workforces, and the convergence of multiple media platforms have meant employees have to not just learn new tools, but also get better at social networking, dealing with diversity issues at the workplace, and understanding why employees resist change. At the same time, media professionals at all levels are experiencing more decision-making latitude. As start-ups and smaller organizations become the norm, leadership positions are thrust upon employees at a much earlier stage in their careers. Communication strategies will play a key role in negotiating many of these challenges. This course prepares students for possible decision-making challenges, communicating effectively to address emerging challenges, and team training in a media organizational context.

**COM 484 - Media Programming Credits: 3**

Provides students with insights into the programming of local TV and radio stations; local cable TV systems; national TV, radio, and cable TV networks; national DBS, DTH, and wireless cable services; and international Internet program providers. Emphasis on issues involving program creation and development, program scheduling, program distribution, and audience evaluation of programs.

Prerequisite(s): (COM 111 and COM 112 ) or permission of instructor.

**COM 490 - Selected Topics in Communication/Journalism Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

Prerequisite(s): Requires junior standing.

**COM 491 - Selected Topics in Communication/Journalism Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

Prerequisite(s): Requires junior standing.
COM 492 - Selected Topics in Communication/Journalism Credits: 1-3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

Prerequisite(s): Requires junior standing.

COM 493 - Selected Topics in Communication/Journalism Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

Prerequisite(s): Requires junior standing.

COM 494 - Selected Topics in Communication/Journalism Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

Prerequisite(s): Requires junior standing.

COM 505 - Foundations of Strategic Communication Credits: 3

This course is designed to prepare current and future strategic communication professionals for the workforce in an increasingly digital and diverse world. The course will cover the theory and practice of strategic communication, including public relations definitions and models, persuasion, strategic planning, reputation management, and emerging technologies. The course also will include an exploration of major communication theories to help students understand the influence of strategic communication on individuals, organizations, and society.

COM 506 - Public Relations Strategies Credits: 3

This course will cover the techniques and approaches to strategic planning, strategic writing, and graphic/media design for organizational public relations. In strategic planning, students will learn how to develop objectives, formulate strategies, select tactics and implement plans for public relations activities that can better serve the organization’s goals. The strategic writing component of this course will emphasize goal-oriented writing for a convergent world of print, broadcast, and online/social media. Crisis communication will also be studied in this course. This course will also address a creative skill—the use of graphic/media design—for public relations in a digital media environment.

COM 511 - Modes of Film Communication Credits: 3

Reviews the theory, history, and criticisms of films; analyzes the content and roles of various modes of film such as documentary, exposition, etc.; provides writing opportunities for the film medium.

COM 516 - Photographic Communication Credits: 3

Surveys the history of photography; studies the theory of photography including light, exposure, optics, photographic chemistry, color and composition, and provides background in using photography as a communication tool.

COM 520 - Strategic Communication Research Credits: 3

This course introduces students to several common research methods and their application to the strategic communication field. Students will learn how to conduct surveys, focus group interviews, and content analysis to
examine communication messages and audiences. Students will learn strategies for analyzing and interpreting data to find solutions to practical communication problems.

**COM 523 - Professional Writing & Editing Credits: 3**

This course focuses on types of writing a professional may encounter in the communications workplace, whether they're working for a for-profit company, a nonprofit organization, an internal or external public-relations team, or as a freelance content creator. Students will analyze examples of these forms, create their own original content, and also edit their own work and that of their classmates. Students will create a portfolio of work that showcases a variety of content and is curated to the student's particular area of focus.

**COM 525 - Social Media Analytics & Strategy Credits: 3**

As organizations increasingly use social media platforms to build relationships with their publics, they must develop strategies to measure and evaluate their social media performance. In this course, you will learn how to leverage social media data for strategic communication purposes and use tools for collecting, interpreting, and presenting analytical data from social media platforms. You will use data insights to formulate social media strategies and provide actionable recommendations.

**COM 526 - Emerging Mass Media Technologies Credits: 3**

Reviews and analyzes the role of developing and future telecommunications media technologies and their implication for today's media and society.

**COM 527 - Multimedia Storytelling Credits: 3**

Students will learn to produce engaging multimedia stories using various digital media applications, gain experience and practice using these apps in the online classroom and in the field. This workshop-style course will prepare students to use a suite of tools employed in contemporary media storytelling.

**COM 528 - Digital Media Workshop Credits: 3**

This course will examine the connections between digital technology, media content creation, and the social and individual influences on this content and its distribution. This course will require students to: (1) design and build an online identity using digital media tools and (2) narrate this process throughout the course via a weblog. Students will be expected to openly frame this process and interact with one another throughout the course, as well as engage and interact with the online world beyond campus.

**COM 529 - Crisis Communication Credits: 3**

Crises can significantly impact an organization's reputation, and having a working crisis plan can enable your team to respond swiftly and meaningfully. In this course you will learn and apply theories and models for crisis communication planning, examine crisis case studies and evaluate the effectiveness of the strategies employed, and create a crisis communication plan.

**COM 530 - Social Media Law & Ethics Credits: 3**

The rapid development of social media has had broad social and legal implications. This class will explore legal and ethical issues related to social media's role in supporting an informed citizenry, civil society and the public sphere.
Students will demonstrate a basic understanding of methods of legal research and will strengthen their advocacy and writing skills.

**COM 536 - World Broadcasting Systems Credits: 3**

Comparative study of international broadcasting program policies, economic systems, control, and organization. The use of broadcasting in international affairs as an instrument of propaganda, culture, and information dissemination. Monitoring of overseas broadcasts, and discussions with representatives of domestic and foreign broadcast agencies.

**COM 548 - Global Strategic Communication Credits: 3**

The world is shrinking. Globalization, the growth of the Internet, new advances in communication technology and the explosion of social media have increasingly made journalism and public relations international endeavors. This course is designed to help students prepare for careers in international strategic communication by teaching a range of information gathering, communicating and reporting skills - offering the opportunity to practice the crafts of journalism and public relations internationally or for an international audience.

**COM 565 - Strategic Media Management Credits: 3**

Many job roles today are facing unique leadership challenges in an increasingly digitized and globalized context. This is especially true of the mass media. From journalism and public relations to advertising and other communication roles - newer technologies, shrinking workforces, and the convergence of multiple media platforms have meant managers have to learn new tools, improve social networking, address diversity issues in the workplace, understand why employees resist change and handle crises situations early in their careers. This course prepares students to identify and analyze select issues in media management from an applied, communication-centric, solution-oriented perspective.

**COM 570 - Fund Raising and Association Public Relations Credits: 3**

Introduction to the fundamentals of raising funds for education, religious, health, and social welfare organizations. Study includes a review of the conventional techniques used in reaching traditional funding sources. Association organization, membership development, and volunteer support round out the course.

**COM 594 - Selected Topics Communication/Journalism Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**COM 599 - Independent Study in Communication/Journalism Credits: 3**

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

**COM 603 - Professional Project Credits: 3**

Students design a project of professional and intellectual interest that contributes both to their knowledge and to the field of communication/journalism. (This is an individualized instruction course open only to students who are working with an adviser on the professional project option.)

**COM 609 - Internship I Credits: 3**
Provides opportunity to gain practical experience in chosen career area.

**COM 610 - Internship II Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**Criminal Justice**

**CRJ 411 - Terrorism Credits: 3**

To gain a basic appreciation for understanding the response of the criminal justice system to the terrorism problem. Includes types of terrorism, formation, leadership, location, motives and purposes, criminality, historical and contemporary issues and research, law enforcement, judicial and correctional efforts aimed at curtailing, controlling and understanding terrorism. Approved elective for Ethnic Studies Minors with Departmental permission.

Prerequisite(s): CRJ 309 or CRJ 310

**CRJ 440 - Community Corrections Credits: 3**

Examines the historical development and growth of community interventions, practices, and policies with respect to individuals who violate society's legal norms. Students analyze correctional philosophy, court sentencing and sanctioning alternatives, treatment methods, and the competing goals and potential future trends of corrections. Adherence to evidence based programming and the principles of effective intervention will be consistent themes throughout.

Prerequisite(s): (CRJ 100 and CRJ 211 and CRJ 221 and CRJ 241 and CRJ 309)

**CRJ 461 - Social Construction of Homicide Credits: 3**

Explores the nature of homicide in contemporary society and includes social theories of homicide, domestic murder, serial murder, infanticide, hate crimes, and youth gangs. Examination of the impact of drugs and alcohol and an assessment of capital punishment as a deterrent is included.

Prerequisite(s): CRJ 309 or CRJ 310

**CRJ 463 - Comparative Criminal Justice Credits: 3**

Provides a basic appreciation for understanding the historical, philosophical, ideological, and practical issues relevant to worldwide criminal justice systems.

Prerequisite(s): CRJ 309 or CRJ 310

**CRJ 464 - Popular Culture, Crime and Justice Credits: 3**

Examines the interrelationships between popular culture, crime, and justice. Explores history of this linkage, the research, and the current issues. Examines popular culture's depictions of victims, offenders, and professionals in the criminal justice system. Popular culture depictions are found in print media (newspapers, magazines, and tabloids), popular literature (police and law procedures), true crime fiction, films, television, rap music, and comics. Impact of popular culture by various media is addressed through the presentation of historical and contemporary research images of crime on individuals, groups, and public policy. Approved elective for Ethnic Studies minors with departmental permission.
CRJ 466 - Women and Criminal Justice Credits: 3

Presents contemporary issues and trends concerning women and their interactions with the criminal justice system. Major themes will be women as professionals; women as offenders; and women as victims. Each theme will be treated within the context of police, courts, and corrections. Approved elective for Women and Gender Studies minors with departmental permission.

Prerequisite(s): CRJ 309 or CRJ 310

CRJ 490 - Selected Topics in Criminal Justice Credits: 3

Opportunity to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

Prerequisite(s): CRJ 100 and CRJ 211 and CRJ 221 and CRJ 241 and CRJ 309 and CRJ 310

CRJ 501 - Legal Trends and Issues Credits: 3

Explores in detail current trends and issues in law as they relate to the operation and management of the criminal justice system.

CRJ 520 - Leadership in Criminal Justice Credits: 3

Studies complex organizations with emphasis on the concepts and practices of the administration and management of agencies in the criminal justice system. Students will survey contemporary management trends and issues, with special attention focused on how evolving technological, social, political, ethical, and economic factors influence criminal justice administration, theory, and practice.

CRJ 560 - Advanced Criminological Theory Credits: 3

Examines the etiology of criminal behavior including the process of becoming a criminal, patterns of criminal behavior and crime, and the social and individual consequences of crime and delinquency.

CRJ 571 - Contemporary Issues in Corrections Credits: 3

Following a critical examination of the history of corrections in the United States and various theories underlining corrections and correctional policy, this course focuses on current issues facing corrections including: racial/economic inequality and mass incarceration; prison violence, treatment, and rehabilitation; women in prison; punitive sentencing; juveniles, the elderly, and the mentally ill in prison; and prisoner reentry.

CRJ 572 - Advanced Studies in Policing Credits: 3

Focuses on research, theory, and applications of the causes and consequences of modern police behavior. Specific focus will be placed on the historical role that police have played in society as well as the structure and functioning of police agencies and the consequences of that functioning on the criminal justice system. Topics to be covered include
police history, the social and political contexts of the police, police strategies and tactics with diverse populations, police accountability and legitimacy, and conducting research on the police and their place in modern society.

**CRJ 573 - Seminar in Victimology Credits: 3**

Studies the history of victimology from early victim-centric justice to the prevailing model of government-centered prosecutions. Explores the causes and consequences of offense-specific victimizations, variations in risk across persons, relationships, lifestyles, and domains, and societal responses to the diversity of persons who are victimized and/or violate others.

**CRJ 574 - Seminar in Social Justice Credits: 3**

Focuses on social justice issues (primarily in the United States) that affect the population. Social justice can be defined as the act of "promoting a just society by challenging injustice and valuing diversity," and is generally equated with notions of equality. Through the exploration into social justice concepts, issues, and policy remedies, students develop the necessary analytical tools to assess inequality and injustice in criminal justice.

**CRJ 575 - Mental Illness and the Administration of Justice Credits: 3**

Explores mental illness and the intersection of the mental health and criminal justice systems in the United States, particularly as a result of the deinstitutionalization movement which has resulted in the shifting of individuals with mental illness from hospitals into community-based correctional facilities and programs.

**CRJ 576 - Anatomy of Violence Credits: 3**

Course examines the nature of violent victimization. The focus on violence will cover various perspectives, including those of victims, offenders, and individuals close to victims/offenders. Students will explore concepts and theories that attempt to explain the causes and effects of violent behavior. The goal of this course is to not only teach students about the types and frequency of violent behaviors, but also to encourage them to seek an answer to the question “why do human beings commit violence?”

**CRJ 577 - Intimate Partner and Family Violence Credits: 3**

This course provides an overview of the theoretical paradigms examining the definitions of, causes of, ramifications of, and interventions for intimate partner and family violence. More specifically, we will (1) examine the nature and extent of intimate partner and family violence; (2) take an in-depth look at the perpetrators and victims of IPV; (3) examine theories to gain a better understanding of why these forms of violence take place; (4) examine the criminal justice response to intimate partner and family violence; and (5) examine some of the larger cultural contexts within which the varieties of abuse occur. This course recognizes that a disproportionate number of the victims are women, but that a strict feminist analysis needs to be modified to recognize abuse in same-sex relationships and a growing literature on female offenders.

**CRJ 580 - Seminar in Juvenile Justice & Delinquency Credits: 3**

Studies the social construction of juvenile delinquency and historical development of justice practices, including the diversity of delinquents and status offenders from early to modern times. Students survey contemporary juvenile justice issues, ranging from applied and evidence-based practice, ethical and data-driven decision-making, to victim impact and restorative justice practices, risk and case management tools, and juvenile correctional policy, sentencing, diversion and treatment.
CRJ 590 - Seminar in Policy Analysis Credits: 3

Introduces, examines, and provides students the skills with which to analyze criminal justice policies. This course emphasizes a conceptual approach to studying the creation, implementation, and evaluation of justice policies. The focus is on the steps involved in the evaluation of criminal justice policies; it will also address the existence of policies and their relevance to the success of the justice system (acknowledging the operations of each justice component - law enforcement, courts, and corrections).

CRJ 591 - Selected Topics in Criminal Justice Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

CRJ 592 - Selected Topics in Criminal Justice Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

CRJ 595 - Practicum I Credits: 3

This course requires students to demonstrate their ability to successfully review/analyze issues in criminal justice utilizing the principles and concepts as presented in the core and elective courses of the MCRJ curriculum. The format is a supervised professional paper which represents a capstone experience for the Criminal Justice graduate degree program. This paper must identify and discuss a current issue in the field of criminal justice, thoroughly review and analyze the extant body of research in regard to the issue, cultivate possible solutions and explain implications, and synthesize a thorough summary of the topic.

Prerequisite(s): CRJ 610

CRJ 599 - Independent Study in Criminal Justice Credits: 3

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

Prerequisite(s): CRJ 600 and Departmental Approval

CRJ 600 - Advanced Research Methods Credits: 3

Studies contemporary empirical research methods and their application in the field of criminal justice, including research design, research ethics, and theories of sampling, construction of data files, data collection strategies, and analysis of findings. The goal of this course is to provide students with the foundational knowledge of research methods and technologies, to become more informed consumers of academic research, adept at quantitative reasoning, and better equipped to implement and evaluate evidence-based practices.

CRJ 610 - Quantitative Analysis Credits: 3

Examines the relationship and application of statistical techniques to theory building, concept construction, computer analysis of quantitative data applied to criminal justice, the logic of data analysis, and fundamentals of statistical procedures commonly used in criminological research. Students also learn to critique and conduct empirical research.

Prerequisite(s): CRJ 600
CRJ 617 - Internship I Credits: 3

Provides opportunity to gain practical experience in chosen career area.

Prerequisite(s): CRJ 600 and Departmental Approval

CRJ 618 - Internship II Credits: 3

Provides an opportunity to apply classroom (theoretical) learning in an agency setting; encourages the development of a professional identity and an appropriate set of professional skills and values; helps students identify or clarify their career interests; provides agencies with an opportunity to observe and evaluate potential staff; and provides students with the opportunity to conduct participant research in a justice agency. Student will encounter a variety of real world situations in which previously learned skills must be applied under the supervision of a practitioner. A full range of criminal justice agencies will be available for student selection.

Computer Science

CSC 402 - Big Data Analytics Credits: 4

We are living in a data-intensive world. Efficiently extracting, interpreting, and learning from very large datasets requires efficient and scalable algorithms as well as new data management technologies. Machine learning techniques and high performance computing make the efficient analysis of large volumes of data. In this course we explore big dataset analysis techniques and apply it to the distributed. This course is highly interactive. Students are expected to make use of technologies to design highly scalable systems that can process and analyze Big Data for a variety of scientific, social, and environmental challenges.

Prerequisite(s): CSC 310 with a minimum grade of C and MAT 217

CSC 431 - Computer Networks Credits: 4

Studies protocol suites, emphasizing the TCP/IP 4-layer model. Topics included are network addresses, subnetting, client/server network programming via the sockets API, network utilities, architecture of packets, routing, fragmentation, connection and termination, connection-less applications, data flow, and an examination of necessary protocols at the link layer, particularly Ethernet. Other topics may include FDDI, wireless, ATM, congestion control, and network security.

Prerequisite(s): CMPE 220 with a minimum grade of C and (SWE 200 with a minimum grade of C or CMPE 320 with a minimum grade of C or CSC 310 with a minimum grade of C or CSC 350 with a minimum grade of C)

CSC 434 - Web Programming Credits: 4

Teaches how to set up a website typical of one used in an online business. Includes preparing web pages in HTML, writing client-side scripts in Vbscript or JavaScript for active web pages, writing server-side scripts in Vbscript for active server pages, learning to set up and access a database for processing online ordering and searches, and some web server administration. Students will establish a website for an imaginary business of their choosing.

Prerequisite(s): CSC 371

CSC 451 - Computer Graphics Algorithms Credits: 4
Explores the algorithmic foundations that underlie a typical computer graphics API. Topics include normals; 2-D and 3-D transformation matrices; projection matrices; clipping, raster scan algorithms; fill algorithms; hidden line and surface algorithms; light, color, and shading algorithms; curve fitting; surface representation. Students will implement various aspects of a computer graphics API.

Prerequisite(s): (CSC 350 and MAT 318)

**CSC 462 - Artificial Intelligence Credits: 4**

Overview of artificial intelligence. Emphasis on basic tools of AI, search and knowledge representation, and their application to a variety of AI problems. Search methods include depth-first, breadth-first, and AI algorithms; knowledge representation schemes include propositional and predicate logics, semantic nets and frames, and scripts. Planning using a STRIPS-like planner will also be addressed. Areas that may be addressed include natural language processing, computer vision, robotics, expert systems, and machine learning.

Prerequisite(s): SWE 200

**CSC 463 - Introduction to Robotics Credits: 4**

Introduces the science of robotics from the perspective of artificial intelligence. Emphasizes various robot control architectures and their implementations using mobile robots. Topics include history of robotics; hierarchical, reactive, and hybrid architectures; Braitenberg vehicles; integration and calibration of sensors; construction techniques and considerations; and implementation of various types of behaviors.

Prerequisite(s): CSC 111 and CMPE 220

**CSC 490 - Selected Topics in Computer Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CSC 491 - Selected Topics in Computer Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CSC 492 - Selected Topics in Computer Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CSC 494 - Selected Topics in Computer Science Credits: 4**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CSC 495 - Selected Topics in Computer Science Credits: 4**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CSC 501 - Algorithm Design and Analysis Credits: 3**
Examines various techniques for designing algorithms, analyzes and compares algorithms in terms of storage and computational complexity, and examines proof techniques for doing the analysis. Analysis of run-time growth of algorithms includes the growth classes \( O \), \( \Omega \), \( \Theta \), \( \omega \), and \( o \). Worst-case, best-case and average-case analysis. Solving recurrences. Analysis of sorting algorithms. Design techniques to control growth including data structures, divide-and-conquer, dynamic programming, memorization, and greedy algorithms. Translation of real-world problems to graph problems and algorithms for graph problems including graph searches, topological sort, shortest path and minimum spanning tree. The classes \( P \), \( NP \), and proving a problem is \( NP \)-complete.

Prerequisite(s): MAT 318, CSC 111.

**CSC 502 - Automata Theory Credits: 3**

Finite automata and regular languages, pushdown automata and context-free languages, Type of Turing machines. Proving the relative power of models, Chomsky hierarchy. Connection between languages and problems. Church-Turing Thesis, Inherent complexity of problems: undecidability, computational complexity, the classes \( P \), \( NP \), and \( NP \)-Complete intractable problems.

**CSC 503 - Computer Science and Engineering Fundamentals Credits: 4**

In computer science and engineering, it is essential to have a critical mind to solve problems and build appropriate applications using computer programming. This course is designed for graduate students who need to build a solid background in core computer science skills including: computer programming C and Java, data structures, and computer organization. It will guide students to build their foundation for success in computer science and engineering.

**CSC 504 - Computer Programming for Information Systems Credits: 4**

This course will cover the following fundamental programming concepts: basic computation such as strings, lists, tuples, sets, dictionaries, files, functions, classes and objects. Topics also include object-oriented programming techniques; using advanced data types including multi-dimensional arrays, recursion, sorting and searching algorithms to handle big data. Students will get hand-on labs to understand the differences between different programming languages such as Python, Java, Visual Basic, and C.

**CSC 520 - Computer Architecture Credits: 3**

Introduction to computer architecture, operating systems, and communications. Topics include number and coding systems, overview of microprocessors, supporting chips, memory and memory interfacing, I/O design, timers, interrupts and interrupt processing, DMAs, video adapters, data communication, keyboard and printer interfacing, disk storage, TSRs, and bus architectures.

**CSC 521 - Operating Systems Credits: 3**

Studies functionality of an operating system and design of efficient operating system components. Topics include definition of a kernel and higher-level functions of operating systems, process management, scheduling algorithms, interprocess communication using semaphores and monitors, deadlock situation and starvation, resource management, virtual memory and distributed operating systems.

**CSC 523 - High Performance Computing Credits: 3**

Engages students in the high performance computing. In-depth coverage of techniques for the design and analysis of parallel algorithms and for programming these algorithms on parallel platforms. Covers the principles of parallel algorithm design and different parallel programming models. A broad and balanced coverage of various core topics.
such as graph algorithms, data-mining algorithms, and a number of algorithms used in numerical and scientific computing applications. Hands-on programming experience using MPI on parallel computers. Real-world applications in this area will be discussed.

**CSC 534 - Computer Security Credits: 3**

Network is one of the fastest growing technologies today. In recent years, the need for education in computer security and related topics has grown dramatically and is essential. Explains how networks work and covers several topics in data communications and Internet protocols in order to discuss in-depth topics in security. Students will have a hands-on experience with these concepts. Legal and ethical issues related with security will be discussed.

**CSC 550 - Scientific Visualization Credits: 3**

Explores methods for representing and displaying large amounts of scientific data. Primary areas of study include: the human visual system; psychology of perception; algorithms for visualization; software tools; case studies in scientific disciplines.

Prerequisite(s): MAT 318, CSC 110, and CSC 111.

**CSC 559 - Agile Software Methods Credits: 3**

This course will begin with a survey of agile software development methods including Scrum, Extreme Programming, and Lean. Subsequent topics will include comparisons of their impacts on business processes, development problems they address, and skills they require. In addition, strategies for adopting such processes in a traditional organization will be explored.

**CSC 561 - Agile Development Techniques I Credits: 3**

Techniques used by individual agile developers including test-driven development, design patterns, and refactoring. Includes significant development projects in which the techniques are practiced. Taught as an immersion course in summer. Pre-requisite: programming experience.

**CSC 562 - Agile Development Techniques II Credits: 3**

Techniques used by agile teams including iteration planning, configuration management, continuous integration, stand up meetings, and reflection. Includes a significant team project in which the techniques are practiced. Taught as an immersion course in summer.

Prerequisite(s): CSC 561

**CSC 563 - Software Metrics and Process Management Credits: 3**

Strategies for improvement of the software development process that are rooted in analysis of metrics. Techniques for gathering and analyzing common metrics used to support process improvement including a variety of six-sigma techniques for distinguishing signal from noise. Includes strategies for presenting statistical results.

**CSC 570 - Database Management Systems Credits: 3**

Examines the theory and practical issues underlying the design, development, and use of a DBMS. Topics include characteristics well-designed databases; high-level representation of an application using ER modeling; functional
dependency using ER modeling, functional dependency theory, normalization and application toward a well-designed database; abstract query languages; query languages; concurrency; integrity; security. Advanced topics may be included. Students apply theory to practice in a number of projects involving design, creation, and use of a database.

**CSC 571 - Data Mining Credits: 3**

This course explores the application of specific algorithms to databases to extract potentially useful information and to analyze data warehouses for patterns and relationships. Topics include concepts of data warehousing, classification learning, clustering, and fuzzy information retrieval.

**CSC 592 - Advanced Topics in Computer Science Credits: 3**

Students will research an emerging topic in computer science. In addition to reading appropriate journal articles, students may develop empirical studies to evaluate the current theoretical results.

**CSC 594 - Selected Topics in Computer Science Credits: 3**

Opportunity for the department to offer courses in areas of major interests not covered by regular course offerings.

**CSC 595 - Selected Topics in Computer Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CSC 596 - Selected Topics in Computer Science Credits: 3**

Opportunity for the department to offer courses in areas of major interests not covered by regular course offerings.

**CSC 597 - Selected Topics in Computer Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CSC 598 - Selected Topics in Computer Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CSC 599 - Independent Study Credits: 3**

Students will research an emerging topic in computer science. In addition to reading appropriate journal articles, students may develop empirical studies to evaluate the current theoretical results.

**CSC 635 - Biometrics Credits: 3**

This course concentrates on the unique advantages that biometrics brings to computer security, but also addresses challenging issues such as security strength, recognition rates, and privacy, as well as alternatives of passwords and smart cards. Students will gain knowledge in the building blocks of this field: image and signal processing, pattern recognition, security and privacy, and secure systems design. By the end of the course students will be able to evaluate and design security systems that include biometrics.

**CSC 645 - Cybersecurity Risk Management and Assessment Credits: 3**
In business today, risk plays a critical role. Almost every business decision requires executives and managers to balance risk and reward. This course introduces students to the strategic discipline of assessing, prioritizing, monitoring, and controlling the impact of uncertainty on organizational objectives.

CSC 655 - Wireless Networks and Security Credits: 3

This course is designed to provide the student with an understanding of the principles and concepts of wireless data network and security. Students will study wireless standards (such as IEEE 802.11 a/b/g/n, ZigBee, 2G/3G/4G/LTE). The course will survey the state of the art in wireless networks and security. Students will also learn security and privacy issues associated with wireless networks. Various attacks against wireless networks and their defense strategies will be analyzed.

Early Childhood

ECH 410 - Physical, Motor, and Sensory Development in Early Childhood Credits: 3

Examines physical, motor, and sensory development of typically and atypically developing young children, birth through age eight years. Child health and wellness concerns included. Developmental information applied to best practices in early childhood education and early intervention settings. Field experiences are required.

Prerequisite(s): Requires senior standing.

ECH 415 - Professional Practicum in PK-4 Credits: 3

This field-based course is for senior-level student participation in early childhood environments. Emphasis is placed on building partnerships with families and various community entities and implementing facets of an integrated curriculum. Instructor led seminars are scheduled throughout the course. Students will complete a total of at least 125 hours in a placement with students aged three to nine years.

Prerequisite(s): ECH 210 and ECH 320 and ECH 370 and either ECH 220 and ECH 260

ECH 440 - Building Family and Community Partnerships Credits: 3

Emphasis is on understanding contemporary families with young children. Family diversity and fostering reciprocal relationships are stressed. Field experiences are required and will be completed in ECH 415. Field experiences include both observation of and participation in family/school/community interactions.

ECH 470 - Language Development, Literacy, and Play in Early Childhood Education Credits: 3

Preparation to understand the existing relationships among language development, early literacy development, and play behaviors in young children from birth through eight years. Application made to early childhood education and early intervention settings. Field experiences in an assigned practicum setting required. Prerequisites: senior status or graduate status.

ECH 489 - Early Childhood Student Teaching Credits: 1-12
This supervised, full-semester field-based experience is the culmination of the early childhood teacher preparation program. Early childhood teacher candidates are placed in pre-kindergarten, kindergarten, or first through fourth grade classrooms. Candidates will observe teachers, apply developmental theory and best educational practice, demonstrate dispositions for teaching, engage in ethical and effective professional practice to support the learning of all children. Prerequisites: completion of all course requirements for the early childhood certification major.

Corequisite(s): ECH480

**ECH 490 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ECH 491 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ECH 492 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ECH 493 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ECH 494 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ECH 495 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ECH 496 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ECH 497 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ECH 498 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ECH 499 - Selected Topics in Early Childhood Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
ECH 510 - Diversity and Inclusion in Early Childhood Education Credits: 3

Understanding and respecting the diversity and individuality of every child and family is central to effective educational practice. Students will use an interdisciplinary lens to examine issues of access, equity, and social justice in early childhood education. Specific focus will be on applying knowledge of individual and familial differences in culture, ability, race/ethnicity, gender, and social class to improve inclusive practice in the early childhood classroom.

ECH 520 - Social and Emotional Development in Early Childhood Credits: 3

Examines current research and theory about social and emotional development in young children, birth through eight years. Emphasis is on classroom practices, including instruction and discipline, which facilitate healthy social and emotional development in young children. Field experiences are required.

ECH 530 - Cognitive and Language Development in Early Childhood Education Credits: 3

Examines current research and theory about cognitive and language development in young children, birth through eight years. Emphasis is on classroom practices, including instruction and discipline, which facilitate cognitive and language development in young children. Field experiences are required.

ECH 540 - Families and Early Childhood Education Credits: 3

Examines theory and research from the area of family studies. Emphasis is on characteristics of families with young children and how early childhood practitioners can best apply this information in their work settings. Field assignments are required.

ECH 563 - Leadership in Early Childhood Education Credits: 3

Designed to prepare personnel to function in the role of administrator of early childhood programs. Examines types of early childhood programs and their underlying rationales, ways of establishing early childhood programs, methods of funding and financing programs, and considers the coordinating role of the administrator in working with other personnel.

Prerequisite(s): Requires permission of instructor.

ECH 564 - The Business of Child Care Credits: 3

This course is designed specifically for directors of child care centers seeking a director?s credential from the Pennsylvania Keys to Professional Development with the Office of Child Development and Early Learning. Students will critically reflect on current business practices. Topics will include strategic planning, fiscal management, risk management, policy development, communication and conflict resolution, and grant writing.


This course stresses assessment of national health and safety standards for early childhood programs, as well as the development and evaluation of educational programs designed to improve the health and safety outcomes of young children and their families. Students will learn best practices in measuring program outcomes as a critical part of overall program evaluation. While the focus of this course is on health and safety, skills learned in developing a
program outcome model will be directly applicable to overall program development and evaluation as funders are increasingly requesting outcome measurement as part of grant applications.

**ECH 577 - Early Childhood Curriculum and Assessment Credits: 3**

Investigates contemporary curricular issues, model programs, and appropriate forms of assessment of young children. Curriculum, teaching strategies, and program organization and evaluation decisions are analyzed from the viewpoints of current theory and research.

**ECH 594 - Selected Topics in Early Childhood Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**Education Foundation**

**EDU 410 - Environmental Education Practicum Credits: 3**

Opportunity to apply knowledge gained in previous courses and other experiences to a practical situation. Includes activities specifically designed to develop and evaluate skills needed to create a course of study for teaching environmental education in the elementary and secondary schools. An integral part is working with both elementary and secondary students in the application of both skills and knowledge. Prerequisite: Approval of coordinator of environmental education.

**EDU 412 - Teaching Social Studies in Secondary Schools I Credits: 3**

Designed to acquaint the prospective teacher of social studies with the philosophy of the field, curriculum preparation and materials, and recent methods and techniques. Course outline, preparation of teaching units, testing and visual aids are stressed.

Corequisite(s): EDU 413

**EDU 413 - Teaching of Social Studies II Credits: 3**

Explores the rationale for media use in education, provides an opportunity to develop audiovisual materials and become familiar with commercial materials to supplement teaching techniques and hands-on experiences with a variety of media equipment. Incorporates techniques of evaluation and testing through presentations and projects, which enhance student decision making to include these elements in classroom instructions.

Corequisite(s): EDU 412

**EDU 420 - Microcomputers in the Classroom Credits: 3**

Provides basic knowledge of evolution and operation of a microcomputer system. A variety of educational applications are reviewed and analyzed for instructional contributions. Using recommended evaluation procedures, software reviewed and discussed as to classroom utilization.

**EDU 422 - Methods of Teaching English in Secondary Schools Credits: 3**
Second half of methods block for secondary certification for English majors. Builds on EDU 290 and completes preparation for student teaching. Will learn how to apply many of the concepts of EDU 290 and will begin more specifically elements into practice.

Prerequisite(s): EDU 290

**EDU 426 - Methods of Teaching Foreign Languages Credits: 3**

Focuses on techniques and materials for teaching foreign languages in the K-12 school setting. Theoretical rationales for a variety of methodologies and specific techniques examined along with the implications of findings from research in second language acquisition. Through a variety of strategies and experiences students develop those skills needed to begin a successful teaching career.

Prerequisite(s): Requires permission of instructor to enroll.

**EDU 434 - Teaching of Mathematics in the Secondary Schools I Credits: 3**

Covers theories of learning mathematics, national and state standards, and educational issues related to teaching and learning mathematics. Mathematical content and curricula for secondary school students will be explored and analyzed. Lesson and long-range planning and the classroom environment are included.

**EDU 435 - Teaching of Mathematics in the Secondary Schools II Credits: 3**

Covers instructional and assessment strategies for secondary school mathematics classrooms. Differentiated instruction techniques, the use of student-centered approaches, and reading and writing connections are included. Students will participate in pre-student teaching clinical experiences.

Prerequisite(s): EDU 434

**EDU 440 - Teaching of Science in Secondary Schools Credits: 3**

Students develop an instructional philosophy through discussions and reading as well as experience in simulated teaching activities. Use of demonstrations, experiments, visual aids, projects, cooperative learning, and other inquiry and discovery activities are stressed. Additional topics include individual differences among students, handicapped, or reading disabled.

Corequisite(s): EDU 441

**EDU 441 - Curriculum and Evaluation in the Secondary Science Classroom Credits: 3**

Understanding of inter-relatedness between the life science, physical science, chemistry, and earth and space science curricula through reading, demonstrations, and visits to schools. Emphasis on relationships among learning objectives, teaching/learning activities, and the attainment of those objectives. Evaluation component includes construction of classroom rubrics, quizzes and tests, and the analysis and improvement of those assessment tools.

Corequisite(s): EDU 440

**EDU 490 - Selected Topics in Education Foundation Credits: 3**
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**EDU 491 - Selected Topics in Education Foundation Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**EDU 492 - Selected Topics in Education Foundation Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**EDU 493 - Selected Topics in Education Foundation Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**EDU 494 - Selected Topics in Education Foundation Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**EDU 495 - Student Teaching and Professional Practicum Credits: 6-15**

Professional site-based experience provides a full semester of guided teaching in the K-12 schools during which the student, under the direction of a qualified cooperating teacher and university supervisor, takes increasing responsibility for planning and directing the learning experience of a specific group(s) of students. Student Teaching is a variable credit course based on your program requirements. Program requirements should be verified for the proper number of student teaching credits required for graduation. CREDIT HOURS: 9 hours graduate student teaching, 12 hours middle level student teaching all options except language arts single concentration, 12 hours early childhood student teaching (pre k-grade 4), and 12 hrs secondary education concentration students.

**EDU 496 - Selected Topics in Education Foundation Credits: 1**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**EDU 497 - Selected Topics in Education Foundation Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**EDU 498 - Selected Topics in Education Foundation Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**EDU 499 - Selected Topics in Education Foundation Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**EDU 522 - Advanced Methods for the Teaching of World Languages Credits: 3**

This course is intended for K-12 in-service teachers who want to revitalize/upgrade their current classroom practices with research-based approaches in language teaching. The course will combine theory and practice by encouraging
participants to use research-based approaches to improve student FL learning. Although the course will not endorse a particular teaching method, the theoretical framework of the program will be based on the ACTFL Standards for the 21st Century. The course will also follow the ACTFL Standards for the Preparation of Foreign Language Teachers.

**EDU 599 - Independent Study in Education Foundation**

Credits: 3

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

## Special Education

**EEC 423 - Effective Instructional Strategies for Students with Exceptionalities**

Credits: 3

Designed to prepare both general and special education teachers to effectively teach students with disabilities in general education settings. Emphasis given to utilizing evidence based instructional practices for students with varying disabilities, creating a positive learning environment, collaborating and communicating with other school personnel and parents, and implementing positive behavioral interventions.

Prerequisite(s): EEC 273 or HON 411

**EEC 446 - Transition to Adult Life for Students with Disabilities**

Credits: 3

Information about the pre-vocational and vocational training of adolescents and young adults who have intellectual disabilities, learning disabilities, or behavior disorders. Provides an understanding of curriculum developments, methods, materials and teaching techniques utilized in the development of skills and attitudes essential to success in the world of work.

Prerequisite(s): EEC 526 or EEC 273

**EEC 447 - Special Education Processes in a Standards Aligned System**

Credits: 3

EEC 447 is an advanced study in planning and delivering instructional content to students with disabilities in a standards aligned system. The course will focus on: 1) the major principles of IDEA emphasizing evaluation, identification, and writing legally correct Evaluation Report's (ER) and Individualized Education Programs (IEP), 2) the principles of Least Restrictive Environment, Due Process, and Parent Involvement, 3) Behavior management of students with disabilities.

Prerequisite(s): (EEC 273 or EEC 411 or HON 411 )

**EEC 483 - Assessing Children with Exceptionalities for Curricular Decision-Making**

Credits: 3

Designed to provide teacher candidates with a comprehensive overview of the skills, processes, and research-based interventions for linking assessment and instructional decision-making in inclusive settings for students with disabilities. The academic core areas of literacy, writing, math, and behavior will focus on preparing candidates to participate in pre-referral data collection, contribution to the identification of students with disabilities, IEP writing, progress monitoring, and curriculum based assessment.

Prerequisite(s): (EEC 273 or EEC 411 or HON 411 )
EEC 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except Credits: 3

Provides a background in the field of special education and the nature of exceptionality in children and youth. Emphasis on societal attitudes and practices in relation to persons with exceptionalities, current practices in identifying and classifying children and youth with exceptionalities, characteristics of all exceptional population groups, programmatic needs of individuals with exceptionalities, and issues and trends in the various fields that impact on diagnosis, classification, and programming or service delivery. The knowledge base comes out of social, cognitive, and developmental psychology, medical aspects of exceptionality, educational law and policy, and special education.

EEC 535 - Special Education Processes in a Standards Aligned System Credits: 3

EEC 535 is an advanced study in the legal requirements for the planning and delivering instructional content to students with disabilities. The course will focus on the six major principles of IDEA,. Specifically, the course will address evaluation, identification, and writing legally correct Evaluation Report's (ER) and Individualized Education Programs (IEPs), the principles of Least Restrictive Environment, Due Process, Parent Involvement.

Prerequisite(s): EEC 273 or permission of the instructor.

EEC 543 - Selected Studies in Special Education Credits: 1-3

Opportunity for qualified students to pursue selected studies in areas of special interest such as preparation and development of new curriculum materials, investigations leading to a greater knowledge of procedures for teaching, and the survey and analysis of current practices in the organization and the curriculum of the special education program. Prerequisites: Six graduate credits in special education and approval of department chair.

EEC 545 - Applied Behavior Analysis/Positive Behavior Supports Credits: 3

This course is an advanced study in using proactive approaches in classroom and behavior management for students with disabilities while emphasizing Applied Behavior Analysis (ABA), Functional Behavior Assessment (FBA), and Behavior Intervention Plans (BIPs). The main focus of the course is on 1) teaching proactive approaches, 2) teaching and implementing Applied Behavior Analysis, 3) Conducting a Functional Behavior Assessment, and 3) Writing and Implementing an effective Behavior Intervention Plan using the principles of Applied Behavior Analysis.

Prerequisite(s): EEC 273 or permission of the instructor.

EEC 548 - Direct Instruction Credits: 3

Covers carefully sequenced, highly prescriptive teacher directed procedures for teaching decoding, comprehension, content, and study skills. Rather than merely "list" ways to teach skills, direct instruction method discusses when a skill should be taught, what examples to teach, how to correct errors, and the relationship among different reading skills.

Prerequisite(s): EEC411 or permission of instructor.

EEC 550 - Instruction for Students with High Incidence Disabilities Credits: 3

Provides a study of historical, empirical, and research findings, forces, and factors making up the fundamental structure of the field of learning disabilities. Topics include: causes of learning disorders, characteristics of individuals with learning deficits, models of learning dysfunctions, and perceptual-conceptual learning processes and cerebral components. Additionally, the discussion will include the use of dietary, medical and physiological intervention techniques, administrative programming and parental concerns and responsibilities. New topics and new areas will be
included as they are noted in the research literature. Methods of presentation will be basically lecture and discussion. Field experiences required.

Prerequisite(s): EEC273 or EEC411 or permission of instructor.

**EEC 551 - Subject Area Content Access for Students with Learning Disabilities in a Standards Aligned System Credits: 3**

Advanced course in the field of learning disabilities across the life span; from early childhood to adulthood. Designed to familiarize students with how to teach students with learning disabilities in reading, writing, spelling, math, social studies, science, and social skills by developing research based interventions supported by assessment data. Designed to help students become critical thinkers, creative and expert planners, and effective practitioners, and to work in a standards aligned system. Field experiences required.

Prerequisite(s): EEC 273 or permission of the instructor.

**EEC 561 - Instruction for Students with Low Incidence Disabilities Credits: 3**

EEC 561 is an advanced study of educational strategies and materials used with people who have low incidence disabilities. This course explores instructional strategies and programming for individuals who have significant impairment in intellectual functioning and adaptive behaviors. Adapting instructional strategies and materials to meet the unique needs of people with low incidence disabilities is also stressed. Education for independent functioning in self-care, social, and daily living skills is emphasized.

Prerequisite(s): EEC 273 or permission of the instructor.

**EEC 565 - Instruction for Students with Autism Spectrum Disorders Credits: 3**

An advanced study of educational strategies and materials used with people who have autism spectrum disorders (ASDs). Introductory material will include learner characteristics and screening techniques. This course explores instructional strategies and programming for individuals who have significant deficits in social communication and interactions; restricted, repetitive patterns of behavior, interests, and activities; and whose symptoms presented in early childhood. Current theories about etiology will be explored and analyzed. Intervention approaches will be described and analyzed. Field experiences are required.

**EEC 571 - Instruction for Students with Social, Emotional, and Behavior Disorders Credits: 3**

EEC 571 is a methods course that focuses on the development of appropriate curriculum and strategies based on individual needs, practical application and methods, and assessment. Students will have a field experience working with students with behavior disorders, their teachers, or their families at the elementary, middle, secondary level or in alternative settings. Specific emphasis is placed on what educators can do to promote learning for students with behavior disorders. These include initial planning and organization, assessment, selection and modification of curriculum, communication with others, and positive behavior management programs. EEC 571 emphasizes teaching social skills and appropriate curriculum as an integrated strategy using current and best practices. Field experiences required.

Prerequisite(s): EEC 273 or permission of the instructor.

**EEC 590 - Practicum I in Special Education Credits: 3**
Designed to extend student's professional preparation beyond resources of the college to include resources of the community and region. Practicum is intended to permit graduate student to engage in supervised professional activities in selected cooperating community agencies, local education agencies, or intermediate units.

Prerequisite(s): EEC 551 and EEC 561 and EEC 571

**EEC 594 - Selected Topics in Special Education Credits: 1-3**

Opportunity for the department to offer courses in areas of major interests not covered by regular course offerings.

**EEC 599 - Independent Study Credits: 3**

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

**EEC 600 - Research in Special Education Credits: 3**

Research in Special Education examines methods used in conducting research with students with disabilities. Emphasis is placed on understanding and interpreting data to improve instructional interventions. Methods examined may include quantitative, qualitative, and single-subject methodology.

Prerequisite(s): Restricted to Special Education Majors or permission of the instructor.

**EEC 609 - Internship Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**EEC 610 - Internship II Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**Educational Leadership and Policy**

**ELP 490 - Selected Topics in Educational Leadership and Policy Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ELP 491 - Selected Topics in Educational Leadership and Policy Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ELP 492 - Selected Topics in Educational Leadership and Policy Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ELP 493 - Selected Topics in Educational Leadership and Policy Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
ELP 494 - Selected Topics in Educational Leadership and Policy Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

ELP 500 - General School Administration Credits: 3

Introductory study of the organization and administration of American public education for persons interested in pursuing a professional career in educational administration. A basic understanding of educational leadership is developed through an integration of theory, knowledge, and actual practice. Course is designed for teachers, school board members, and other interested lay citizens who wish to know more about educational administration.

ELP 510 - Special Education Law Credits: 3

Provides a comprehensive and current overview of the major federal laws and judicial interpretations of those laws that apply to the education of children with disabilities. Course includes discussions of inclusion, effective accommodations, IEPs, discipline, equal protection, and procedural due process. It also examines the six principles of the Individuals with Disabilities Act and Chapters 14, 15, and 16 of the Pennsylvania School Code. Course helps students understand what the law requires so that they will become effective educational leaders capable of making appropriate decisions that comply with these laws.

ELP 514 - Practicum I Leadership Field Experiences at the Building Level Credits: 3

Provides an initial exploration and exposure to leadership roles at the building setting within the school environment and should be taken as part of candidate's Tier 3 cluster of courses near the end of the program of study. Candidates are expected to log 180 hours of 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. In addition, candidate will participate in leadership seminars which focus on leadership foundations and best practices as articulated by current leaders in the field. Candidates begin to explore the role of the principal/supervisor as an agent of change and/or reform.

ELP 515 - The Role of Research and Data Informed Decision-Making for School Leaders Credits: 3

Designed to provide school administrators with the knowledge and skills necessary to be intelligent consumers and practitioners of research. Research designs, methods, and results are important tools for leadership and decision-making: administrators should be able to evaluate research studies and implement the findings. Requirements of federal legislation necessitates leadership that is, in part, derived from data-based decision making. Additionally, there may be situations in which an administrator is responsible for constructing a research proposal to qualify for a grant or to lead change in an educational program.

ELP 516 - Curriculum Assessment and Instructional PK-12 for Diverse Student Populations Credits: 3

Focuses on curriculum development, implementation, and assessment (through instructional practice in U.S. public schools). Designed for both future school leaders and central office administrators, students will study curriculum from the foundation of three bases: (1) social forces, (2) theories of human development, and (3) the nature of learning and learning styles. Bases will assist students in defining curriculum by helping them understand key issues from both an historical perspective and current thinking. Useful for individuals aspiring to be (or already serving as) principals, supervisors, counseling personnel, subject area specialists, and superintendents. Emphasis placed on approaches to
developing, evaluating, and articulating curricular changes drawn from a wide variety of subject areas. As a result students will be knowledgeable of the fundamentals of curriculum; the connection between curriculum, instruction, and assessment; current curricular issues; innovative approaches to curricula; planning curricular strategies; and analyzing current curricula.

**ELP 517 - Leadership in Technology and Effective Program Delivery Credits: 3**

Designed to provide future school 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 systemic 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.

**ELP 518 - The Role of Supervision in Promoting Student Achievement Credits: 3**

Designed for educational leaders, whether they are practicing administrators, subject-area supervisors, department chairpersons, cooperating teachers, or mentors. Principal thrust is to facilitate the formulation and implementation of a teacher evaluation and supervision system--based on data-driven and researched-based strategies and practical skills, and supported by law--that promotes enhanced student learning and quality teaching. Treats supervision and evaluation as two separate but complementary functions that should be integrated into a coherent system that provides differentiated opportunities for teacher growth and evidence-based quality assurance. Assists in developing the research-base, practical skills, and necessary dispositions to meet the needs of all teachers, regardless of their current career stage or level of performance. Many class meetings are work sessions that focus on learning and refining the skills necessary to evaluate the instructional act and to support the professional growth of teachers and will include individual and group activities in a supportive environment where participants actively engage in and reflect upon their conceptual understanding and skill development relative to evaluation and supervision.

**ELP 519 - Advanced Leadership and the School Principal PK-12 Credits: 3**

Introduces future educational leaders to school level administration. Focusing on the multi-faceted roles of a school leader, students will study the principal through the lens of the principal as a learner, mentor, instructional leader, supervisor, manager, politician, advocate, and innovator. Combining theory with practice, students will obtain a deeper understanding of the complexity of leadership at the building level.

**ELP 520 - School Finance and Student Learning Credits: 3**

Developed to provide aspiring and practicing elementary and secondary building administrators and supervisors with knowledge necessary to understand and manage department and building-level financial responsibilities by addressing resource management and fiscal issues that affect funding and programming at the building level. Among topics considered are historical perspectives on school finance, current financial issues, trends, and the practical aspects of budget development.

**ELP 521 - Legal and Ethical Issues that Impact on Student Learning Credits: 3**

Focuses on the legal foundations for the establishment and operation of public schools in the United States and Pennsylvania in particular. Assists students in understanding key issues that impact on student learning from both an historical and current perspective. Students should be knowledgeable in all important aspects of school law from basic rights of individuals to the legal requirements for designing and maintaining appropriate school environments for
learning. In addition to a review of landmark cases and current issues, students will also study laws and topics specific to building level leadership in Pennsylvania.

**ELP 522 - Practicum II Advanced Leadership Field Experiences at the Building Level Credits: 3**

Designed as a capstone experience, this practicum provides candidates with the opportunity to assess, develop, and refine knowledge, skills and dispositions acquired as a part of their programs of study. Major focus is on instructional leadership, improving student learning, evidence based decision-making, and the role of the building leader as an agent of reform. Candidates expected to log 180 hours of practical field experiences plus complete a major instructional leadership project and a second action research project. Candidate will participate in three leadership seminars that will focus on their platform of beliefs, professional development plans, and future Act 45 requirements.

**ELP 569 - Seminar: Diversity in Education Credits: 3**

Increases the awareness of administrators, educators, and related school personnel to the problems, challenges, and issues faced by various cultural minority students as they strive to become incorporated in their respective schools within the mainstream of American society. Stresses the various strategies, methods, and techniques educators need to know to write and execute administrative policies and practices and to design and implement curriculum and teaching strategies that reflect the ethnic diversity and cultural minorities found within their respective buildings and school districts. Emphasis placed on the Black and Hispanic populations.

**ELP 594 - Selected Topics in Education Leadership & Policy Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ELP 595 - Selected Topics in Education Leadership & Policy Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ELP 596 - Selected Topics in Education Leadership & Policy Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ELP 599 - Independent Study in Educational Leadership and Policy Credits: 3**

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

**ELP 609 - Internship I Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**ELP 610 - Internship II Credits: 3**

Opportunity for students to gain practical experience in their chosen career area.

**ELP 617 - Survey Development and Measurement Credits: 3**
This advanced course in survey development 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 also examine and determine scale reliability and validity. Course Essential Questions: 1. What is the iterative process of survey development and how can a literature review impact that process? 2. What is the appropriate statistical terminology related to measurement generally and survey data specifically? 3. How can scales be developed to implement surveys in professional settings and/or internship/practicum experiences? 4. How can a researcher ensure structural validity of their own or peers' scales prior to utilization?

**ELP 619 - Leadership for Pupil Services Credits: 3**

Designed for students in administrator certification programs who want to develop skills necessary to provide leadership for pupil services programs in school organizations. Areas of focus include: organization and development of pupil services; team approaches for meeting individual student needs in inclusive learning environments; underlying assumptions of pupil services programs; supervision and staffing; financing; and crisis prevention and response management. Attention will be given to roles of building principals and central office staff in pupil services programs. Community support systems will be addressed with regard to the manner in which they provide assistance to and interact with students, parents, and schools (e.g., juvenile justice, public health, mental health, social services, employers).

**ELP 620 - Thesis Credits: 3**

Elective course offered within the master's program in elementary/middle or middle/secondary administration. Students enrolled in ELP600 Research for School Administrators select a committee, a chair, and complete the proposal (the first three chapters of the thesis), including human subjects review. During ELP620 Thesis, student defends the proposal begun in ELP600, gathers data, completes the writing of the thesis, and defends completed thesis. For students with an interest in research and those who expect to pursue a doctorate.

**ELP 622 - The Superintendent as a School and Community Leader Credits: 3**

Viewing the school as a dynamic cultural entity interacting with external supra-systems, the school's interdependency on the community, and its many publics is assessed. Importance of a sound public relations program for the school, and need to communicate and understand the community is stressed. Student designs a program to enhance effective lines of communication between the school and its publics.

**ELP 626R - Residency: Optimizing Financial Resources to Support District Level Achievement Credits: 4**

This practicum is restricted to Extended Studies students enrolled in the Leadership Residency Program and provides an initial exploration and exposure to leadership roles at the district setting which focus on financial and budgeting issues that can influence student achievement. Candidates will be expected to log 90-120 hours of practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for basic leadership activities as assigned by his/her mentor and conducting a case study on leadership concepts. In addition, the candidate will participate in leadership seminars which will focus on leadership foundations and best practices in the course focus areas as articulated by current leaders in the field and conduct a basic action research activity. The candidate will also begin to explore the role of the superintendent/IU Director as an agent of change and/or reform.

**ELP 627 - Practicum II Strategic Instructional Leadership Credits: 3**

Provides an advanced exploration and exposure to leadership roles at the district setting and should be taken as part of a candidate's Tier 3 cluster of courses at 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. Projects and activities from Practicum I may carry over into Practicum II.

**ELP 627R - Residency: Instructional and Technology Leadership at the Executive Level Credits: 4**

This practicum is restricted to Extended Studies students enrolled in the Leadership Residency Program and provides an initial exploration and exposure to leadership roles at the district setting which focus on Instructional and Technology Leadership Issues. Candidates will be expected to log 90-120 hours of practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for basic leadership activities as assigned by his/her mentor and conducting a case study on leadership concepts. In addition, the candidate will participate in leadership seminars which will focus on leadership foundations and best practices in the course focus areas as articulated by current leaders in the field and conduct a basic action research activity. The candidate will also begin to explore the role of the superintendent/IU Director as an agent of change and/or reform.

**ELP 634 - Legal and Ethical Issues in Online Instruction Credits: 3**

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 thirteen 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.

**ELP 721R - Residency: Strategic Leadership in District Governance Credits: 4**

This practicum is restricted to Extended Studies students enrolled in the Leadership Residency Program and provides an initial exploration and exposure to leadership roles at the district setting that focus on Governance and School Community Relations. Candidates will be expected to log 90-120 hours of practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for basic leadership activities as assigned by his/her mentor and conducting a case study on leadership concepts. In addition, the candidate will participate in leadership seminars which will focus on leadership foundations and best practices in the course focus areas as articulated by current leaders in the field and conduct a basic action research activity. The candidate will also begin to explore the role of the superintendent/IU Director as an agent of change and/or reform.

**ELP 723R - Residency: Negotiations and Personnel Strategic Decision Making Credits: 4**

This practicum is restricted to Extended Studies students enrolled in the Leadership Residency Program and provides an initial exploration and exposure to leadership roles at the district setting that focus on negotiating strategies and human resource issues that influence school district effectiveness. Candidates will be expected to log 90-120 hours of practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for basic leadership activities as assigned by his/her mentor and conducting a case study on leadership concepts. In addition, the candidate will participate in leadership seminars that will focus on leadership foundations and best practices in the course focus areas as articulated by current leaders in the field and conduct a basic action research activity. The candidate will also begin to explore the role of the superintendent/IU Director as an agent of change and/or reform.
ELP 724R - Residency: Ethical and Legal Decision-making at the District Level
Credits: 4

This practicum is restricted to Extended Studies students enrolled in the Leadership Residency Program and provides an initial exploration and exposure to leadership roles at the district setting that focus on Legal and Ethical Issues that face School Leaders. Candidates will be expected to log 90-120 hours of practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for basic leadership activities as assigned by his/her mentor and conducting a case study on leadership concepts. In addition, the candidate will participate in leadership seminars that will focus on leadership foundations and best practices in the course focus areas as articulated by current leaders in the field and conduct a basic action research activity. The candidate will also begin to explore the role of the superintendent/IU Director as an agent of change and/or reform.

ELP 725R - Residency: The Impact of Facilities and Plant Management Decisions on School Effectiveness
Credits: 4

This practicum is restricted to Extended Studies students enrolled in the Leadership Residency Program and provides an initial exploration and exposure to leadership roles at the district setting that focus on developing, managing and designing school district facilities to provide effective learning environments. Candidates will be expected to log 90-120 hours of practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for basic leadership activities as assigned by his/her mentor and conducting a case study on leadership concepts. In addition, the candidate will participate in leadership seminars that will focus on leadership foundations and best practices in the course focus areas as articulated by current leaders in the field and conduct a basic action research activity. The candidate will also begin to explore the role of the superintendent/IU Director as an agent of change and/or reform.

ELP 726R - Residency: Optimizing Financial Resources to Support District Level Achievement
Credits: 4

This practicum is restricted to Extended Studies students enrolled in the Leadership Residency Program and provides an initial exploration and exposure to leadership roles at the district setting that focus on financial and budgeting issues that can influence student achievement. Candidates will be expected to log 90-120 hours of practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for basic leadership activities as assigned by his/her mentor and conducting a case study on leadership concepts. In addition, the candidate will participate in leadership seminars that will focus on leadership foundations and best practices in the course focus areas as articulated by current leaders in the field and conduct a basic action research activity. The candidate will also begin to explore the role of the superintendent/IU Director as an agent of change and/or reform.

ELP 727R - Residency: Instructional and Technology Leadership at the Executive Level
Credits: 4

This practicum is restricted to Extended Studies students enrolled in the Leadership Residency Program and provides an initial exploration and exposure to leadership roles at the district setting that focus on Instructional and Technology Leadership Issues. Candidates will be expected to log 90-120 hours of practical field experiences to include, but not limited to, shadowing school leaders, observing other educators, assuming responsibility for basic leadership activities as assigned by his/her mentor and conducting a case study on leadership concepts. In addition, the candidate will participate in leadership seminars which will focus on leadership foundations and best practices in the course focus areas as articulated by current leaders in the field and conduct a basic action research activity. The candidate will also begin to explore the role of the superintendent/IU Director as an agent of change and/or reform.

ELP 808 - Qualitative Research in Educational Leadership
Credits: 3
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.

**ELP 820N - Introduction to Research in Educational Leadership Credits: 3**

This course will provide an introduction to educational research - qualitative, quantitative, and mixed method designs. The primary purpose of this course is to develop the skills and dispositions 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.

**ELP 822 - Communication Theory for School District Administrators Credits: 3**

This course is concerned with communication processes within an organization. It focuses on the sending, the receiving and the interpreting of messages. Principles of downward, upward and lateral systems are investigated. Case studies, specific to traditionally underserved 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.

**ELP 828 - Emergent Technologies and Instructional Practices Credits: 3**

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.

**ELP 829 - Political/Social Context for Educational Leadership Credits: 3**

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. Candidates engage in diverse structures and communities that are part of previously unexamined marginalized groups and cultures through critical self-reflection. Course designed to target current issues and problematic situations facing the central office administrator in today?s dynamic system of public education.

**ELP 830N - Quantitative Research in Educational Leadership Credits: 3**

This course is designed to prepare school leaders for leadership positions in public education. It intends to assist postgraduate students in defining an appropriate mode of quantitative inquiry related to a chosen topic of study. The
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.

**ELP 831 - Educational Statistics Credits: 3**

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.

**ELP 832 - Introduction to Executive Leadership Credits: 3**

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 facilitation of change. A basic understanding of educational leadership is developed through integration of theory, knowledge, and actual practice. Focusing on the multi-faceted 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 of the complexity of leadership 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.

**ELP 890 - Research in Educational Leadership Part I Credits: 1**

The purpose of this one credit course is to help students identify potential dissertation topics in the field of educational leadership such that when they pass their comprehensive examinations they are prepared for dissertation seminar activities that support the development of their dissertation proposals. The 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. The faculty member assigned to the course will serve as facilitator. Students will explore their ideas, provide background information, 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. Enrollment is by permission of the department.

**ELP 891 - Research in Educational Leadership Part II Credits: 1**

The purpose of this one credit course is to provide a continuation of the work completed in ELP 890 Part 1 to help students identify and refine potential dissertation topics in the field of educational leadership. The course will reinforce the collaboration between a group of students and faculty members established in ELP 890 Part 1 as they continue 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 continue to explore their ideas, provide background information, 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. Enrollment is by permission of the department.

**ELP 897 - Dissertation Seminar Educational Leadership Credits: 3**
ELP 897 Dissertation Seminar Educational Leadership (3 credits) *requires prior approval of the candidate's program advisor. This course is designed to provide Ed.D. candidates with the necessary background and tools to develop their final drafts of the dissertation proposals and assemble their dissertation committees. Key elements of the dissertation proposal will be reviewed and candidates will begin to have more intense conversations with faculty and others regarding the nature and relevance of their research focus. The IRB process will be outlined (It is anticipated that candidates will consult with potential dissertation advisors and the IRB process will be explained when completing this course.)

**ELP 898 - Dissertation I- Educational Leadership Credits: 3**

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.

Prerequisite(s): ELP 897 with minimum grade of B

**ELP 899 - Dissertation II- Educational Leadership Credits: 3**

This course is a continuation of ELP 898 - Dissertation I- Educational Leadership Credits: 3. Working with the assigned dissertation advisor from ELP 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, discussions implications and recommendations for future research. Finally, the candidate presents the findings in a defense of the dissertation before the Dissertation Committee.

Prerequisite(s): ELP 898 with minimum grade of B

**Exercise Science**

**ESC 420 - Clinical Exercise Physiology Credits: 4**

Provides students with understanding of pathophysiology of different chronic conditions, acute response to exercise as well as chronic training effects in these populations. Case specific exercise principles and techniques applied to the prevention, management, and treatment of chronic conditions will be explored.

Prerequisite(s): ESC 321 with a C or better and ESC 343 with a C or better

**ESC 421 - Exercise Physiology II Credits: 4**

Provides an understanding of the physiology of exercise with an emphasis on the physiological responses and adaptations to exercise, the relationship between health and fitness, and the physiology of athletic performance. Three hours lecture and one hour lab per week. Restricted to exercise science majors

Prerequisite(s): ESC 321

**ESC 490 - Selected Topics in Exercise Science Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
Earth Science

ESS 410 - Sedimentary Geology and Paleoenvironments Credits: 3

Sedimentary Geology involves the study of physical, chemical, and biologic processes that result in the formation, transportation and deposition of soils, sediments, fossils, and sedimentary rocks. These earth materials accumulate in a range of terrestrial, marginal-marine and marine depositional environments that experience processes that are often characteristic and unique to those environments. This course will engage students in an exploration of various earth materials (soils, sediments, and sedimentary rocks), sedimentary structures, and fossils, and the chemical, physical, and biologic processes that impact their formation. Students will also explore how soils, sediments, fossils, and sedimentary rocks record spatial and temporal changes in plate tectonics, earth system processes, and environments. An important focus will be on how geoscientists reconstruct ancient environments using earth materials and how they generate scientific models to help test short-term and long-term changes in the atmosphere, hydrosphere, biosphere, and lithosphere through time. The course will entail lectures, local and regional field trips that make occur on the weekend, as well as laboratory assignments that are designed to provide students with substantial hands-on, field experience.

Prerequisite(s): (ESS 110 or ESS 210)

ESS 413 - Mineral and Rock Resources Credits: 3

Deals with metallic ore deposits such as iron, ferroalloys and nonferrous metals, mineral fuels, and other selected minerals of economic significance. Emphasis on geologic occurrence and mode of origin, geographical distribution, and importance to humans.

Prerequisite(s): ESS 110 or ESS 210 or HON 244

ESS 421 - Structural Geology Credits: 3

Recognition, interpretation and illustration of geological structures; kinematic and dynamic analysis of rock deformation; stress, strain and deformation mechanisms. 2 hrs. lecture, 3 hours lab. Field trips required.

Prerequisite(s): (ESS 110 OR ESS 210) AND ESS 212 with C or better

ESS 442 - Environmental Geology Credits: 3

Deals with relationships between man and the geological habitat. Concerned with problems people have in using the earth and the reaction of the earth to that use in both a rural and urban setting. Stress placed on developing problem-solving skills in collecting, recording, and interpreting data through field investigations and simulation techniques.

Prerequisite(s): (ESS 110 or HON 244 or ESS 210)

ESS 451 - Coastal Environmental Oceanography Credits: 3

This field-intensive course examines the interaction of biological, chemical, physical, geological, and ecological ocean processes as applied to coastal environments. A significant emphasis is focused on describing and documenting coastal environments, their biotas, their environmental tolerances and ranges. Emphasis is also placed on environmental management issues of the coastal zone. Topics include water quality analysis, barrier island geology and ecology, estuarine pollution, beach defense and biological implications in areas of coastal upwelling and coastal fronts. Specific cases in coastal pollution, human impacts on coastal landforms, shoreline erosion, wetland loss, sea-level fluctuations, nutrients in estuaries, and climate change will be examined from coastal environments around the U.S. Lecture, field trips, and laboratory exercises are designed to provide students with hands-on experience with field and laboratory
equipment used to solve real-world problems in diverse coastal settings. The course is field-based and taught out of the Marine Science Consortium, Wallops Island, Virginia. The course may also include a travel component to the Florida Keys Marine Lab or similar research facility for additional field experience.

Prerequisite(s): ESS 220 or permission of instructor

**ESS 475 - Problems in the Marine Science Environment Credits: 3**

**ESS 490 - Selected Topics in Earth Science Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ESS 491 - Selected Topics in Earth Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ESS 492 - Selected Topics in Earth Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ESS 493 - Selected Topics in Earth Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ESS 494 - Selected Topics in Earth Science Credits: 1-6**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ESS 594 - Selected Topics in Earth Science Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ESS 595 - Selected Topics in Earth Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**ESS 599 - Independent Study Credits: 3**

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

**Finance**

**FIN 405 - Real Estate Appraisal and Investment Analysis Credits: 3**

Provides understanding of the techniques, risks, and rewards associated with various ways of investing and financing both residential and commercial real estate. Topical coverage includes investing, financing, appraising, consulting, and managing real estate.
Prerequisite(s): FIN 311 or permission of department chair.

**FIN 425 - Global Financial Management Credits: 3**

Studies the international environment, the foreign exchange risk management, the investment decision, the financing decision, and management of ongoing business operations in global settings. Emphasis on the analysis and evaluation of the investment decision, financial decision, and operational and financial risk in foreign countries.

Prerequisite(s): FIN 311 and SCM 200 or permission of department chair.

**FIN 512 - Investment Analysis Credits: 3**

Provide an understanding of the investments environment and process and analytical skills in security valuation and the formulation of investment strategies. The investment decisions concern how much to invest in each security and when to make these investments. The topical coverage include such as introduction and analyses of various investment instruments, risk-return tradeoff, diversification concepts, fundamental analysis, and application of portfolio theory.

**FIN 520 - Financial Risk Management Credits: 3**

This course offers the analysis of a best in practice corporate financial risk management system. Financial risk management is a process of identifying, measuring, and controlling financial risk exposure. The course addresses how to control for market, liquidity and credit risk. Operational risk is discussed. Topics include corporate risk tolerance, value at risk, Monte Carlo simulation, scenario analysis, stress testing, credit derivatives, and risk management failures.

**FIN 525 - Multinational Business Finance Credits: 3**

Examines the challenges of multinational finance for global managers. Multinational Business Finance requires an understanding of cultural, historical, and institutional differences. Although domestic and multinational enterprises (MNEs) must deal with exchange rate risk, MNEs face political risks that are not normally part of domestic finance. Financial theories and concepts must be modified to deal with international influences on sources of capital, cost of capital, capital budgeting, working capital management, taxation, and credit analyses.

**FIN 533 - Applied Financial Analysis Credits: 3**

A finance course designed to teach how to integrate finance concepts and managerial techniques in making financial decision to maximize the firm value. Students learn how finance is related to other functions of a firm, how to evaluate a firm's financial performance, risk-return tradeoff, capital budgeting and decision making process, cost of capital, leverage effects and capital structure, mergers and divestitures, and working capital management.

**French**

**FRN 490 - Selected Topics in French Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**FRN 491 - Selected Topics in French Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
FRN 492 - Selected Topics in French Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

FRN 493 - Selected Topics in French Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

FRN 510 - French Theater Credits: 3

Intends to help in understanding the complexity of the theater in the French speaking throughout the centuries. In a multidisciplinary approach, studies the importance of this literary form, its stature, and the social influences that have impacted it. Students analyze the literary importance of the texts and their political, historical, and sociological impact on the respective cultures that produced them. Films will be included. Taught in French.

FRN 515 - French Poetry Credits: 3

Intends to help in understanding the complexity of poetry in the French speaking throughout the centuries. In a multidisciplinary approach, studies the importance of this literary form, its stature, and the social influences that have impacted it. Students analyze the literary importance of the texts and their political, historical, and sociological impact on the respective cultures that produced them. Films will be included. Taught in French.

FRN 520 - French Fiction Credits: 3

Intends to help in understanding the complexity of fiction in French speaking throughout the centuries. In a multidisciplinary approach, studies the importance of this literary form, its stature, and the social influences that have impacted it. Students analyze the literary importance of the texts and their political, historical, and sociological impact on the respective cultures that produced them. Films will be included. Taught in French.

FRN 525 - French Speaking Countries Credits: 3

Intends to expose students to the complexity of the cultures in French-speaking countries throughout the centuries through a multidisciplinary approach. Studies the importance of different cultural issues from a political, historical and sociological standpoint, exploring the impact on the diverse cultures of the French-speaking world. Analyzes different texts and films to illustrate these issues. Taught in French.

FRN 530 - French Linguistics Credits: 3

Deals with the grammatical structure of the modern French languages and addresses issues relating to phonetics, syntax, morphology, and semantics, all part of what is commonly referred to as grammar. Lectures grounded in practicality and consider the needs of teachers. Prescriptive norms and actual use of the language in its dialectal variations, including those found in Canada, Africa, and the Middle East will be studied. Practicality further emphasized with sociolinguistic considerations that will enhance understanding of the language.

FRN 535 - History of French Language Credits: 3

Seminar course lets students travel both in time and in space, while considering the evolution of the French language. Starting with Latin, changes systematically studied and analyzed, focusing on the nascent dialectal varieties, their importance, the impact of substrate languages and of others that have influenced what is known as French (Greek, Italian, and Arabic among many others). While the language is in part stabilized in Metropolitan France, no thanks to
the Academie whose influence will be debated, French has gone through further changes on the American and African continents. French of Quebec and that of several countries in north and sub-Saharan Africa also explored. Several documentaries complement the seminar.

**Geography**

**ESS 504 - Applied Human-Climate Interactions Credits: 3**

Project-based study of atmospheric phenomena and how they relate to other Earth systems or human endeavors. Specific examples may include climate change and its impacts, alternative energy and energy efficiency, hydrologic monitoring and forecasting, and urban climatology. Secondary focus is to enhance research and writing skills through the development of a semester-long applied research project focused on a subject of the student's choosing.

Prerequisite(s): ESS 111

**GEO 404 - Groundwater and Hydrogeology Credits: 3**

Examines the fundamental concepts of groundwater and hydrogeology in the context of real-world applications on the foundations of theory. Emphasis on the principles of groundwater flow, well installation, field data collection, and the analysis of physical and water chemistry as they relate to professional groundwater investigations. Grades based on exams and application-oriented assignments (problem sets). Required field trip(s) will supplement classroom material (field trip dates and times will be determined during class).

Prerequisite(s): ESS 110 or HON 244 or ESS 210

**GEO 405 - Environmental Conservation and Management in PA Credits: 3**

This course examines the management of environmental and natural resource issues. Legislation, policies, programs, and strategies that are developed at the local, state, and federal levels of government are discussed as they apply to these issues. There will be an emphasis on current environmental and natural resource issues in Pennsylvania. Topics that will be considered during the course will include the environment as a public policy issue, waste management and cleanup programs, energy, air and water pollution, and the use of public lands. Through lectures, discussion, readings, writing assignments, and case study analysis, the student will be introduced to a range of environmental and natural resource issues.

**GEO 406 - Sustainable Food Systems from the Soil Up Credits: 3**

Everyone eats. Everyone is a part of the food system. But the food system does not work for everyone. How does food make its way to your plate? In this time of social and ecological change, is it possible to build food systems that sustainably and equitably feed our communities, now and in the future? The short answer: YES! The long answer is more complicated, and requires skills and knowledge from ecology, geography, economics, and social justice. In this course, we will unpack the food system, examine its parts, and develop the tools necessary to build sustainable food systems that work for everyone. We will accomplish this through class discussion, active problem-solving, engaging with readings and multi-media materials, visiting local farms, and getting our hands dirty at the Campus Organic Farm.

**GEO 415 - Geography of Africa Credits: 3**

This course explores Africa as a world region although greater emphasis is placed on Sub-Saharan Africa, the part of Africa that lies south of the Sahara Desert. Africa is most commonly portrayed as a crisis-ridden continent, plagued by underdevelopment, disease, political disorder, warfare, hunger, economic strife, etc. Some have even referred to it as
'the dark continent'. In so doing, the vitality, richness of cultures, achievements, and the vibrance of African societies and peoples are often overlooked. This course, thought by an African, provides students with a more balanced understanding of Africa including its history, cultures and traditions, diversity, innovations, and developmental challenges. The course examines both the physical and the human geographies of Africa.

**GEO 421 - Environmental Law Credits: 3**

Environmental Law examines the interrelationship between laws, regulations, and policies, which have a direct and indirect impact upon the environment. This course covers the major federal and Pennsylvania environmental laws, regulations, and policies and discusses the importance of compliance in order to avoid liability. The course will include an analysis of laws that establish compliance obligations, laws that enforce and impose liability, and the court?s role in the environmental law process.

**GEO 424 - Soils Credits: 3**

The course examines the physical characteristics of soil, processes of soil formation (physical, chemical, and biological), taxonomic classification, geographic distribution, and environmental applications of soil science. Study is set in the context of geoenvironmental science and environmental land use planning through lecture, laboratory exercises, and field work.

Prerequisite(s): ESS 110 or ESS 210 or HON 244

**GEO 425 - Image Processing Credits: 3**

Computer processing of remotely-sensed imagery is explored and laboratory exercises enhance understanding of image processing. Intermediate and Advanced processing techniques performed on imagery from local and non-local areas. Techniques include spatial modeling, multispectral classification, and learning new techniques in processing satellite-borne imagery and other data. Successful completion of GEO339 Remote Sensing is suggested.

**GEO 427 - Sustainability Credits: 3**

This course examines how human society faces the challenges of global environmental change, resource limitations, and environmental degradation. Areas of focus include global change, ecosystems, population growth, environmental economics and policy, energy, water, agriculture, ethics and history. As a naturally interdisciplinary subject, this course will examine both the physical and social science involved with these issues and the various types of solutions that humans will apply to sustainability problems including: technology, engineering, management, and planning. The course will rely heavily on insight and guest lectures from many disciplines as well as applied projects that focus on different areas of sustainability.

Prerequisite(s): ESS 108 or BIO 145

**GEO 440 - Field Techniques Credits: 3**

Studies geoenvironmental aspects of the local landscape by direct field observation. Various procedures and techniques are utilized to collect data concerning landforms, geology, soil, streams, air quality, population, transportation, housing characteristics and land use. Instruments, maps, air photographs, and statistics are used to aid in the research, analysis, and evaluation of the field problem.

**GEO 441 - Quantitative Methods Credits: 3**
Broad-based education in the geographical sciences requires a proficiency in applying statistical techniques to environmental problems. Provides a comprehensive and empathetic approach to statistical problem solving using practical geographic examples.

**GEO 446 - Water Resources Management Credits: 3**

Roles of water resources management policies and institutions are examined within a central theme of unified river basin management. Stresses interrelationships among watershed planning; relevant legislation; agency authority and coordination; and the geography of watershed management. North American case studies used to illustrate multiple use issues, including aquatic ecology, wetlands, floodplain management, recreation, water supply, hydropower, industry, and commercial shipping.

Prerequisite(s): GEO 226

**GEO 450 - Geography-Geology Field Studies Credits: 1-3**

One week to 10-day regional field study observing and analyzing the physical and cultural landscape. Emphasis placed upon the physical and historical geology and geography of a prescribed route including several states. Prerequisites vary depending on topic. Please contact instructor.

**GEO 452 - Geography-Geology Field Studies Credits: 1**

One week to 10-day regional field study observing and analyzing the physical and cultural landscape. Emphasis placed upon the physical and historical geology and geography of a prescribed route including several states. Prerequisites: ESS 212, GEO 103 or permission of the instructor.

Prerequisite(s): (ESS 212 and (GEO 103 or HON 140 ) )

**GEO 463 - Applied Geophysical Imaging Credits: 3**

This course familiarizes students with the concepts and field implementation of shallow subsurface geophysical techniques applicable to environmental studies. This course will be taught from a practical, environmental perspective rather than an engineering perspective and is field intensive. We will apply multiple geophysical methods in the field to detect and map underground geologic and artificially buried features at selected sites in and around Shippensburg. The course covers the basics of five critical geophysical methods: Electrical Resistivity, Ground-penetrating Radar, Electromagnetic Induction, Gravity, and Seismic methods, with emphases on the basic principles, applications, strengths and the limitations of each method. Field exposure will involve the first three of the five methods, for which the department maintains equipment. Students will map several underground features in the field, including groundwater-bearing zones as well as contaminated sites around landfills, buried man-made features, sinkholes, caves, saltwater/freshwater interfaces, etc.

**GEO 490 - Selected Topics in Geography Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 491 - Selected Topics in Geography Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 493 - Selected Topics in Geography Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 494 - Selected Topics in Geography Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 503 - Fundamentals of Geoenvironmental Research Credits: 3**

Builds student skills common to developing, implementing, and disseminating research projects in the major sub-disciplines of geoenvironmental studies. Generates opportunities to develop critical reading, writing, and presentation skills. Students will develop a literature review and a research proposal, as would be appropriate for either an independent research project or a master's thesis. Also develops fundamental skills for preparing grant proposals, professional reports, and oral and graphic presentations.

**GEO 505 - Medical Geography Credits: 3**

Introduces student to a geographical approach in the analysis of problems regarding environmental health. Dynamic interaction between the total person and the total environment (physical, biological, cultural, economic) lie at the core of geography, a discipline that integrates natural and social sciences. Consideration of such interactions is essential for an understanding of the changes that occur in the distribution of health and disease, when, for instance the environment is altered, or human lifestyles undergo substantial modification.

**GEO 506 - Sustainable Food Systems from the Soil Up Credits: 3**

Everyone eats. Everyone is a part of the food system. But the food system does not work for everyone. How does food make its way to your plate? In this time of social and ecological change, is it possible to build food systems that sustainably and equitably feed our communities, now and in the future? The short answer: YES! The long answer is more complicated, and requires skills and knowledge from ecology, geography, economics, and social justice. In this course, we will unpack the food system, examine its parts, and develop the tools necessary to build sustainable food systems that work for everyone. We will accomplish this through class discussion, active problem-solving, engaging with readings and multi-media materials, visiting local farms, and getting our hands dirty at the Campus Organic Farm.

**GEO 517 - Applied Geographic Information Systems Credits: 3**

Reviews advanced geographic information systems (GIS) applications and the use of geographic information management technology in environmental analysis. Spatial mapping and data applications will be related to renewable resource management, transportation and logistics, infrastructure management, natural resources and land use planning, public health and safety, environmental hazards, mineral exploration, environmental assessment and monitoring, map and database analysis and research and education. Emphasis is on how GIS can assist in answering questions, solving problems, and analyzing spatial data. State -of- the -art GIS software is used to show applications of geographic information technology for geoenvironmental and natural resource management projects.

**GEO 522 - Geoenvironmental Hydrology Credits: 3**

Focuses upon the continental or land phase of the hydrologic cycle and includes the study of supply and the geographical distribution of water in lakes, rivers, streams, embayments, and underground water supplies and the use
and/or misuse of these water resources for urban, suburban, and rural living. Consideration given to recent day knowledge, attitudes and technology concerning these water resources. Local water resources and drainage basins are used as laboratory areas for field problems and reports.

GEO 525 - Economic Geography Credits: 3

This course investigates regional economic processes and associated spatial patterns at a variety of spatial and temporal scales. With a focus on sustainability, the spatial economy is considered both in terms of the factors of production on the one hand and the impact of economic activity on the environment, ecosystems, and human well-being on the other. Analytical tools relevant to analyzing and understanding regional economic growth and development, human behavior, and spatial interactions are covered. Original applied research, which highlights the use of geotechnologies (especially GIS) and or economic modeling techniques to understand regional economic processes and sustainability will be conducted and presented orally and in various textual graphical formats. Students will lead discussions on core themes and topics in modern economic geography.

GEO 528 - Sustainable Systems and the Spatial Economy Credits: 3

Focuses on the quantitative and qualitative examination of a range of perspectives relating to sustainable interrelationships between human, economic, and environmental systems across a variety of spatial and temporal scales. The dynamics of environmental/ecological valuation and sustainability are explored via broadly based economic perspectives using both conceptual and analytical frameworks. The course uses a geographic approach to examine the interlinkages between the ideas of sustainable communities and ecosystems. Significant emphasis is placed on student discussion, research, analysis, and presentations. Previous coursework in introductory macroeconomics, microeconomics and quantitative analysis would be useful but is not required. Basic proficiency in word processing, spreadsheet, and presentation software is expected.

GEO 530 - Mapping Sciences Credits: 3

Advanced methods in computer-assisted mapping and map analysis (geographic information systems or GIS). Emphasis placed upon techniques of establishing, managing spatial (geographic) data bases, cartographic modeling and analysis, and digital map composition using state-of-the-art GIS software. One hour lecture, three hours computer laboratory per week.

GEO 531 - Geomorphology Credits: 3

Geomorphology is the systematic description, analysis, and interpretation of landscapes and the processes that change them. Emphasizes both the qualitative and quantitative aspects of landscape change and has three principal objectives: 1) to provide a solid grounding in the basic concepts of process and Quaternary geomorphology, 2) to apply these concepts to the central Appalachian Highlands region, and 3) to examine these relationships in the field. Consists of in class lecture, discussion, laboratory assignments, outside readings, a written paper and presentation, a local field trip, and a two-day field trip to Maryland and Virginia. Prerequisite: introductory geology course or equivalent.

GEO 532 - Disease and the Environment Credits: 3

Seminar in geoenvironmental health hazards such as solid waste, air, and water pollution. Emphasis on public health problems these hazards pose, the application of geographic methods, and tools of analysis. Means available to cope with geoenvironmental hazards and associated policy debates are examined. Lecture information limited. Students expected to participate actively in every seminar meeting.

GEO 533 - Science of Land Use Change Credits: 3
Land use and land cover change can have dramatic social and ecological consequences. This seminar course will focus on understanding and recognizing drivers of land use and land cover change and on recognizing linkages between land use and land cover change and other ecosystem processes, such as hydrologic processes and habitat fragmentation. The course will also focus on methods for analyzing land use and land cover changes, landscape patterns, and will incorporate geographic information systems and modeling.

GEO 535 - Karst Hydrology and Geomorphology Credits: 3

A graduate-level course that makes use of seminar, lecture, lab analysis, field work, and problem sets to study the geomorphology and hydrology of karst landscapes. Karst is a term used to describe a characteristic landscape that forms on soluble bedrock. The individual landforms might include caves, springs, and sinkholes, all of which form as water flows through the system over time. Emphasis will be placed on the study of landform assemblages, particularly in different climates across the globe, hydrologic methods, geochemical processes, and the theories of cave formation. The course will also examine field water chemistry sampling protocol, make use of numerous field instruments, and examine aspects of groundwater dye tracing. Real-world, practical, issues such as sinkhole flooding, groundwater contamination and monitoring, and sinkhole collapse will also be addressed, with many examples coming from Pennsylvania's Cumberland Valley.

GEO 536 - Problems of the Atmospheric Environment Credits: 3

Examines and analyzes various weather and climate topics, both natural and human-influenced. Topics include brief review of atmospheric basics, air pollution, ozone, ENSO, climate change, climate modeling, and greenhouse warming. Potential solutions to problems explored. Presented in seminar format and includes journal paper discussion and evaluation, writing opinion papers on controversial atmospheric issues, group projects, class presentations, and a term paper. Interrelationships among the various atmospheric problems are emphasized.

GEO 538 - GIS2: Intermediate Geographic Information Systems Credits: 3

Continues development of the student's understanding of GIS and extends understanding into spatial analysis. Fundamental concepts covered previously, including scale, earth models, map projections and coordinate systems, are also developed. New major concepts include Boolean logic, overlays, map algebra, terrain modeling. Technical skill development focuses on data collection and integration, digitizing, and design of spatial data display. Primary emphasis on using real-world examples in GIS modeling and analysis.

Prerequisite(s): GEO 202

GEO 542 - Land-Use Regulations Credits: 3

Provides student with knowledge of the components of community level land use regulations. The following community level system components are examined: comprehensive plan, zoning ordinance, subdivision regulations, taxation, other minor land acquisition techniques.

GEO 543 - Environmental Land Use Planning Credits: 3

Studies the spatial pattern of land-use development in rural and urban areas and interaction between urbanization and environment. Examines the physical and cultural requirements of environmental land-use planning including the study of the land-use classification, planning and zoning procedures, economic activity and the city as an ecosystem. City planning techniques, land-use mapping and field study of local region are utilized.

GEO 546 - Geoenvironmental Research I Credits: 3
Research course to be worked out with member of the geography-earth science department.

**GEO 548 - Geoenvironmental Research II** Credits: 3

Research course to be worked out with member of the geography-earth science department.

**GEO 553 - Cartography** Credits: 3

Introduces basic tools of map making. Explains techniques for displaying data and develops skills in compilation, design, and execution of maps.

**GEO 568 - GIS3: Advanced Geographic Information Systems** Credits: 3

GIS3 is the capstone course for both the GIS Major and GIS Minor programs. GIS3 examines advanced topics in GIS such as spatial data analysis and visualization, workflow automation, and recognizing the interoperable nature of GIS, Remote Sensing, GNSS, and other geotechnologies. Skills development focuses on advanced forms of spatial data analysis (e.g., network analysis, spatial point pattern analysis, terrain modelling, optimum site selection, etc.), workflow automation methods, and both desktop and online mapping. Students are expected to design and implement an independent Capstone GIS Project during the course.

Prerequisite(s): GEO 363 with a minimum grade of C

**GEO 592 - Selected Topics in Geography** Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 593 - Selected Topics in Geography** Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 594 - Selected Topics in Geography** Credits: 1-3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 599 - Independent Study** Credits: 3

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

**GEO 609 - Internship I** Credits: 3

Provides opportunity to practice geoenvironmental theory and concepts as an observer and participant in the process. Placement on a limited basis with consulting firms and state and local governments enhances the student's preparation in the field.

**GEO 610 - Internship II** Credits: 3
Provides opportunity to practice geoenvironmental theory and concepts as an observer and participant in the process. Placement on a limited basis with consulting firms and state and local governments enhances the student's preparation in the field.

**GEO 612 - Thesis I Credits: 3**

**GEO 613 - Thesis II Credits: 3**

**Gerontology**

**GRN 490 - Selected Topics in Gerontology Credits: 3**

Opportunity to offer courses in areas of program minor not covered by the regular courses.

**GRN 491 - Advanced Selected Topics in Gerontology Credits: 1-3**

Opportunity to offer advanced courses in areas of program minor not covered by the regular courses.

**GRN 492 - Selected Topics in Gerontology Credits: 3**

Opportunity to offer courses in areas of program minor not covered by the regular courses.

**GRN 601 - Gerontology Internship I Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**GRN 602 - Gerontology Internship II Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**History**

**HIS 402 - Revolutionary America Credits: 3**

Explores the fundamental changes in American life during the 18th century and their culmination in the American Revolution. Analyzes those themes within the conceptual framework of the modernization of traditional societies and in the context of broader Western and American developments.

Prerequisite(s): HIS 105 or HON 122 or permission of instructor

**HIS 407 - Women in Comparative Perspective Credits: 3**

Topical exploration of female experiences in selected global cultures. How different societies have constructed gender (or defined the social meaning of being a woman) over time explored in a comparative perspective. Intellectual discourses of religion, education, and politics structure cultural comparisons of women's work, their position within the family, attitudes toward sexuality, civil rights, and access to public power. Through readings, discussions, films, and occasional lectures the class examines the historical development of modern gender conventions in various world regions and of controversies about the human rights of women.
Prerequisite(s): HIS 105 or HON 122 or permission of instructor.

**HIS 413 - Pennsylvania History Credits: 3**

Deals with development of Pennsylvania from the eve of European settlement to the present. Attention given to political, economic, and social trends and institutions from the 17th through the 20th centuries. Pennsylvania's role in national and international history also studied.

Prerequisite(s): HIS 105 or HON 122 or permission of instructor

**HIS 423 - Issues in 20th-Century Europe Credits: 3**

Chronological and topical study of political, economic, social, and intellectual trends of our era. Modern wars, the struggle between authoritarianism and democracy, the East-West split, and the European economic community are major themes.

Prerequisite(s): HIS 105 or HON 122 or permission of instructor.

**HIS 428 - Issues in the Gilded Age and Progressive Era Credits: 3**

Covers political, economic, social, and intellectual aspects of the Progressive Movement, tracing its origins in the 19th century and showing how progressivism was a part of the background of the New Deal. Special attention given to the all-important transition of the concept of liberalism from laissez-faire individualism to state regulation. Emphasis placed upon the differing interpretations of the Progressive Movement, which have been developed by various historians.

Prerequisite(s): HIS 105 or HON 122 or permission of instructor.

**HIS 430 - U.S. Cultural History Credits: 3**

Focuses upon significant cultural developments in American History, and upon the importance of culture to major trends and events in the U.S. past. Course addresses cultural theory, definitions of culture, multiculturalism in history, and the roles of culture and communication in the interpretation of history. Individual subjects covered each semester will include some combination of the following: mass media (including radio, television, print), folklore, religion, material culture, and performance culture.

Prerequisite(s): HIS 105 or HON 122 or permission of instructor.

**HIS 433 - Oral History Credits: 3**

Introduces students to methods and uses of oral history. Students learn to analyze and use oral history sources, and will practice oral history protocols including the conduct of recorded interviews, the storage of oral history recordings, and the transcription of oral history interviews. Students will also be introduced to alternative uses for oral history including audio and video documentary, and digital methods of exhibition.

Prerequisite(s): HIS 105 or HON 122 or permission of instructor.

**HIS 444 - History of Women in Latin America Credits: 3**
Surveys history of women in Latin America from pre-conquest to the present. Major topics include prescribed gender roles, how race and class have shaped one's ability to live up to these roles, and women's participation in work, politics, religion, the economy, intellectual movements, and cultural practices.

Prerequisite(s): HIS 105 or HON 122 or permission of instructor

**HIS 454 - China and the Outside World Credits: 3**

Investigates China's relations with the outside world during its pre-modern history. Since China is somewhat geographically isolated from the rest of Eurasia, historians have tended to assume Chinese civilization is mostly the product of indigenous developments. The course challenges this assumption by looking at how China and people outside of its borders have influenced each other.

Prerequisite(s): HIS 105 or HON 122 or permission of instructor.

**HIS 460 - Archives and Public History Credits: 3**

Course examines the relationship between archives and the theory and practice of public history. The course will survey the best practices for the care and preservation of archival materials, as well as the application of archival techniques to the care and preservation of electronic records. Special attention will be paid to the ways that public historians and archivists can use archival materials, online archival resources, and public archival programs to help the public learn about the past and appreciate the value of historical records. Students enrolled in the class will be required to visit archival institutions and to undertake hands-on projects with archival materials.

Prerequisite(s): HIS 105 or HON 122 or permission of instructor

**HIS 482 - Selected Topics in History Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**HIS 483 - Selected Topics in History Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**HIS 484 - Selected Topics in History Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**HIS 490 - Selected Topics in History Credits: 1-3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**HIS 492 - Selected Topics in History Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**HIS 493 - Selected Topics in History Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
HIS 496 - Selected Topics in History in Public History Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

HIS 501 - Introduction to Applied History Credits: 3

Explores the practical application of historical skills and practices in a variety of settings (including business, government, and historical institutions such as museums, historic sites, archives, and historical societies), and the issues historians face when they preserve, interpret, and present the past to the general public. Through hands-on experience, students examine areas such as archive and manuscript curating, historical editing, oral history, material culture studies, museums, historic preservation, historical media production, and history on the World Wide Web. Special emphasis placed on the financial, legal, ethical, political, and interpretive issues faces by historians presenting the past to diverse audiences.

HIS 502 - Introduction to Archives Credits: 3

Explores the history of archives and the historical roots of modern archival practices, and the rise of the archival profession in the United States. Examines the principles and best practices in archival collection development, accessioning, appraisal, arrangement, description, and reference, including consideration of the special issues posed by electronic records and audiovisual materials. Surveys the basic principles and techniques for the preservation and conservation of archival records, including paper documents, photographs, and electronic media. Students will investigate the different missions, audiences, and approaches used by government, church, business, labor and educational archives.

HIS 505 - Advanced Topics in Public History Credits: 3

Provides intensive examination of some of the specialized historical methods used by historians working for museums, historic sites, historical societies, government agencies, and other types of historical organizations. Emphasis may be on one or more of the following: oral history, local history, material culture studies, historical editing, historic preservation, or museum studies. Students gain hands-on experience by designing and executing significant public history projects and by conducting historical fieldwork.

HIS 513 - Seminar in U.S. Women's History Credits: 3

Explores topics and themes pertinent to shaping the past experience of American women, including personal, property, and political rights; ideologies of gender; rural and urban work; education; class, race, and ethnicity; social policy; and sexuality. Readings and discussion in the seminar focus on both empirical and theoretical literature of the field.

HIS 515 - Seminar in 20th Century U.S. Social History Credits: 3

Reviews United States history since 1945 through the topical approach. Problems such as internationalism, civil rights, extremism, and comparable topics are considered as they reflect the impact of the assumption of world leadership and responsibility on traditional American concepts, ideals, and values.

HIS 516 - Seminar in African American History Credits: 3

Deals with the experience of the black man in America from colonial times to the present. Origins and developments of white attitudes toward black Americans and the origin and development of the attitude of blacks emphasized. Students examine topically and in-depth attitude development, slavery, segregation, the Civil Rights movement, and the contribution of black leaders to American life. Prerequisites: HIS201 and HIS202 or permission of instructor.
HIS 519 - Seminar in International Relations Credits: 3

Treats United States diplomatic history from 1914 to the present. Considers interpretations of major diplomatic events such as American entry into World War I, World War II, the Cold War, the Korean War, and the Vietnam War, as well as peacemaking at Versailles, Yalta, and other negotiated settlements. Also develops dominant themes in United States diplomacy, including foreign economic interests, Caribbean intervention, isolationism, collective security, the nuclear arms race and disarmament.

HIS 525 - Seminar in U.S. Regional History Credits: 3

Introduction into the major historiographical issues and research methods of regional and local U.S. history. Focuses attention on questions of regional identity and themes of the relationship between region and nation, and the relationship between region and world. Trains students in analyzing regional and local primary sources. Alternates emphasis between the American West and the American South.

HIS 526 - Seminar in the Civil War Era Credits: 3

Considers new and old interpretations regarding this political watershed's coming and consequences (roughly 1830 to 1880), emphasizing social, cultural, and political perspectives.

HIS 534 - Seminar in Modern German History Credits: 3

Analysis of critical issues in German history since 1871, with emphasis on the period since 1919. Particular emphasis given to collapse of the Weimer Republic and Hitler's dictatorship.

HIS 535 - Seminar in Medieval Studies Credits: 3

Focuses upon the reading and interpretation of various writings of the Early Middle Ages as well as secondary accounts dealing with the age which have come to be recognized as standard works in the field. The selection of works affords a coverage of the economic, political, philosophical, religious, and literary aspects of the period.

HIS 539 - Historic Preservation Practice & Advocacy Credits: 3

This course is designed to provide an intensive introduction to the fields of historic preservation and cultural resource management for individuals who will be assuming leadership roles in the field. The course will provide an overview of the theory and technical skills used by practitioners in the field, combined with case studies and guest speakers focused on examining the method of planning, policymaking, advocacy, organizing, engagement, and education used by historic preservationists and cultural resource managers to preserve resources and build vibrant communities that preserve and appreciate their historic resources.

HIS 541 - Museum Education Credits: 3

This course is intended to provide students with an intensive introduction to the field of Museum Education. The course will include lectures, discussions, site-based work at history museums, guest lectures by museum educators, and field studies to observe and analyze the museum education practices of other historical museums. Course content will focus on practical applications of education theory in the museum setting. Primary consideration will be given to planning, presenting, and evaluating programs for school groups and general audiences, as well as to off-site programs and digital resources.

HIS 542 - Textile History & Museum Methods Credits: 3
This course examines the history of the production, use, and meaning of textiles and clothing, with special emphasis on clothing and accessories from nineteenth and twentieth centuries. Members of the class will examine the different methods and processes of production used to create textiles, and learn to identify how the use of different materials and styles reflected the tastes, values, and needs of different historical eras. Then through lectures, readings, hands-on activities, and visits by guest speakers, members of the class will gain training in the professional museum theory and methods for the care, handling storage, exhibition, and management of textiles housed in museum collections.

HIS 543 - Environmental History Credits: 3

Deals with the interaction between humans and the natural world in a global comparative perspective. Explores historiographical trends in the field of environmental history including the contentious meaning of such terms as "The Environment," "Nature," and "Wilderness," the tension between social and natural histories, and the role/s of colonialism, imperialism, and nationalism in reshaping conceptions of the environment.

HIS 558 - Seminar in East Asia and the Modern World Credits: 3

A comparative look at major themes in the histories of China and Japan from earliest times to the present. Pre-modern topics include prehistory, the development of state Confucianism, the spread of Buddhism, roles of scholars and warriors, the impact of Inner Asia, political decentralization, gender, and peasant society. Includes study of how traditional cultures have been transformed as a result of contact with the West since the 19th century.

HIS 562 - Seminar in African History Credits: 3

Comprehensive survey of the culture and history of Africa with emphasis on the diversity which exists among the peoples of Africa. Includes study of the physical aspects and peoples, the great kingdoms that existed before the coming of the Muslim and the European, slavery and slave trade, art, family life, land, labor, markets, policy, law, and religion. Special attention given to the colonial period and its legacies: nationalism, negritude, independence.

HIS 592 - Selected Topics in History Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

HIS 593 - Selected Topics in History Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

HIS 594 - Selected Topics in History Credits: 1-3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

HIS 595 - Independent Study in History Credits: 3

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

HIS 598 - Independent Study Credits: 3

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.
HIS 599 - Readings in History Credits: 3-6

Opportunity for independent readings in an area of special interest to the student of history, such as the major field of American, European, and non-Western history, including political, economic, social, intellectual and cultural developments.

Prerequisite(s): Requires permission of the department and instructor.

HIS 600 - Historical Research Methods Credits: 3

Seminar in historical research techniques, analysis of source materials, and preparation of a research paper. Students expected to perform research and prepare and present a model seminar paper. Emphasizes the important role electronic resources have assumed in basic historical research methods. Students should schedule this course as early as possible in the program.

HIS 601 - Research in Local and Regional History Credits: 3

Intensive study and hands-on research of micro regions or localities defined by their natural geographic, economic, or cultural characteristics. Course examines the theoretical and methodical issues of local and regional historical research and then has students apply those concerns in the intensive study of two or more localities. Students are required to complete a research paper demonstrating mastery of the techniques of local and regional historical research.

HIS 609 - Internship I Credits: 3

Provides opportunity to gain practical experience in chosen career area.

HIS 610 - Internship II Credits: 3

Opportunity for students to gain practical experience in their chosen career area.

HIS 612 - Thesis I Credits: 3

HIS 613 - Thesis II Credits: 3

Information System Studies

ISS 515 - Information Systems Project Management Credits: 3

Introduces the student to the principles and practices necessary to be an effective information systems team member or project manager. Covers project scope, time, costs, quality, and human resource management techniques as applied to the kinds of project management problems and issues unique to the IS environment. The student will obtain hands-on experience using MS Project as well as other types of project management software. Specific course emphasis will focus on the techniques of project management, leadership, teamwork, and project risk management. Case work will be a major part of this course.

ISS 520 - Programs, Data, and File Structures Credits: 3

Advanced programming, data organization, and accessing design techniques.
ISS 530 - Modeling and Decision Systems Credits: 3

Explores a wide range of analytical techniques that may be employed in business decision-making processes. Topical coverage includes simulation, project management, financial analysis, optimization, break-even analysis, and inventory management. While the theoretical foundations of these concepts are addressed, emphasis is on applications and solution techniques relevant to practical business situations. Utilization of current computer technology is an integral part of the course.

ISS 540 - Data Communications, Networks, and Distributed Data Processing Credits: 3

Covers communications environments, communication system components, networks and control, common carrier services, design of communications networks, network management and distributed environment, local area data networks, future networks.

ISS 550 - Database Design Credits: 3

The data environment, basic technical concepts and system resources for data, database concepts, use and management of databases.

ISS 560 - Introduction to E-Business Credits: 3

Covers the Internet and electronic commerce concepts related business operations and management, technology utilization, and industry-specific applications. It is intended to introduce students to the current business, management, technology, and legal issues in e-business. Topics span a wide range and include web strategies, e-marketing, e-human resources, e-finance, B-to-B systems, e-legal issues, website design, technology needs, and database-driven websites.

ISS 561 - Business Security Credits: 3

This course addresses issues related to cybersecurity and information assurance. Students are expected to develop an understanding of how cybersecurity fits into their personal lives, business enterprises, and society. Both simulated labs and real-world scenarios are used extensively to explore tools and techniques used in cyberattacks and for defending systems against attacks. Topics covered include access control and identity management, cryptography, physical security, perimeter defenses, network defenses, host defenses, application defenses, data defenses, and assessments and audits.

ISS 570 - Information Analysis Credits: 3

Designed to provide student with the necessary skills to accomplish the systems analysis and logical design of information systems. It will include the role of a modern systems analyst as a problem solver in the business organization. Course will progress through the system development life cycle (SDLC) and include project planning, project management, and feasibility assessment. Different methodologies, models, tools and techniques used to analyze and design and build systems will be introduced.

ISS 580 - Web Programming Credits: 3

Includes, but not limited to, the following topics: introduction to the Internet and the World Wide Web, programming, using Microsoft Express and Visual InterDev, JavaScript programming, Dynamic HTML programming, ActiveX controls, electronic commerce and security, web servers, active server pages, CGI and PERL, and XML. A major portion of this course will be to build a website based upon an e-commerce business.
ISS 590 - Information Systems Development I Credits: 3

First in a two semester sequence where students apply the knowledge they have gained in MSIS program. While studying various software development paradigms, the students practice those techniques by performing requirements analysis and design of a state-of-the-art information systems project to solve a given business problem. This course stresses team management, project planning, and risk assessment in addition to technical skills.

ISS 600 - Information Systems Development II Credits: 3

Second in a two semester sequence where students apply the knowledge they have gained in MSIS program. The projects started in ISS 590 are implemented and tested. Technical knowledge and experience with configuration management tools, inspection, and testing strategies is paired with project management and risk analysis techniques.

Literacy Studies

LST 500 - Literacy Studies in 21st Century Credits: 3

This course is designed to explore cognitive, socio-cultural, motivational and physiological research related to literacy studies, as well as research-based instructional theories and models for teaching reading and writing. In addition, this course will review the Common Core State Standards for the purpose of exploring theory in practice within academic disciplines among primary, middle, and secondary learners. In addition, candidates will explore the components of experimental and action research designs; learn to summarize and critique literature; and examine the connection between theory and practice. In addition, candidates will design a classroom-based research project with a literature review and methodology to analyze instruction in literacy.

LST 510 - Multiple Literacies in a Digital World Credits: 3

This course is designed to explore multiple literacies development, instruction and curricula in PK-8 classrooms, as well as consider how students in PK-8 classrooms interact using multiple media as a means of enhancing reading and writing skills and competencies. In addition, the content of the course will focus on disciplinary literacy, digital literacy, visual literacy, and critical literacy, but emphasize the use of digital literacy research finding and theories to evaluate instructional practices that aim to develop multiple literacies. Candidates will critique technology related instructional programs for characteristics of best practice; describe a technological adaptation to an existing curricular framework; and design technology-based literacy lessons using the Optimal Learning Model for PK-8 learners.

LST 520 - Motivating and Engaging Readers and Writers Across the Content Areas Credits: 3

This course explores strategies for motivating and engaging PK-8 learners during reading and writing instruction. In order to enhance candidates' conceptions of purposeful and explicit instruction, the Common Core State Standards, as well as content areas curriculum will form the basis for examining and applying instructional practices, particularly in science, social studies and mathematics. Candidates will examine a variety of instructional and technology related tools used to motivate readers and writers in content areas; review strategic-based instruction among PK-8 grade levels; evaluate instructional practices using data to describe strengths and limitations, as well as consider the use of informal, student interest surveys to evaluate motivation and interest.

LST 540 - Creating and Managing a Literate Environment Credits: 3

This course explores instructional approaches and curricular materials that are used within a comprehensive, integrated and balanced literacy program, in particular the literacy-related, curricular frameworks for self-contained and
departmentalized primary and middle level classrooms. Candidates will consider the impact of classroom environment, specifically the quality and use of resources and methods designed to optimize learning in PK-8 classrooms. In addition, the Common Core State Standards will serve as the curricular competencies that shape literacy instruction, specifically in reading and writing. Candidates will analyze videos of classroom environments within PK-8 grade levels; design a strategy intervention block of instruction for one grade level; and evaluate instructional practices in an existing classroom to describe strengths and limitations, as well as recommend research-based, best practice adaptations within that classroom.

LST 550 - Assessment and Evaluation as a Framework for Literacy Instruction
Credits: 3

This course explores types of assessment and evaluation measures, as well as their purpose and intended use within a comprehensive, integrated and balanced literacy program. Candidates will review various state assessments and the standards or anchors that formulate the content within the measure, as well as the structure of measures. Candidates will also evaluate various published assessments, namely those used within a commercially produced program. In addition, candidates will examine the use of assessment measures as a framework for determining instruction for whole group, small group, and independent students? reading and writing competencies. Candidates will analyze videos of simulated assessment administration, and use the data from the simulation to generate instruction for the simulated students.

Master Business Administration

MBA 502 - Managerial Accounting Credits: 3

Develops an understanding of the quantitative use of accounting data for decision-making within the firm. The focus is on developing an understanding of and appropriate use of cost in managerial decision making. Although the appropriate use of cost in this course refers primarily to short-term decisions, the strategic implications of cost analysis are also addressed.

MBA 506 - Data Mining for Predictive Analytics I Credits: 3

This course covers the basic concepts of data mining and introduces students to the data mining process. The students will learn data reduction, exploration, and visualization. The primary emphasis of the course will be using the data for predictive modeling. Time series forecasting methods are introduced. Students will use large data sets to build models.

MBA 507 - Data Mining for Predictive Analytics II Credits: 3

This course is a second level course in managerial data analysis and data mining. The emphasis is on understanding the application of a wide range of modern techniques to specific decision-making situations, rather than on mastering the theoretical underpinnings of the techniques. Upon successful completion of the course, students should possess valuable practical analytical skills that will equip them with a competitive edge in almost any contemporary workplace. The course covers methods that are aimed at prediction evaluation, classification, association rules, and clustering. It also introduces cutting edge interactive data-visualization tools, as well as data reduction techniques. No prerequisites. Students will use large data sets to build models.

Prerequisite(s): MBA 506

MBA 511 - Marketing Analytics Credits: 3
This course is designed to expose MBA students to the use of analytics in marketing strategy decision-making. Understanding the marketplace has now become an intense data-driven process, as many global companies have increasingly shifted their priorities in measuring strategic effectiveness to combine traditional marketing research efforts (e.g., descriptive survey analysis and focus groups) with advanced data science practices and marketing dashboard analytics.

**MBA 529 - Corporate Financial Management Credits: 3**

Explores financial theories, their application, and financial decision models necessary to handle corporate financial problems to maximize the firm value. This course emphasizes the important role of financial management in the corporate business environment.

**MBA 532 - Marketing Research Credits: 3**

Investigate how all types of business research are conducted as well as determining the quality and validity of research reports and findings. Business research is an important management tool that exerts a major influence on decision-making. It provides insights into and solutions for organizational problems. The pedagogy will be applied and real world. Extensive use of cases and actual business problems will be utilized. Finally, greater emphasis on using the power of the Internet and computer software to conduct business research will be employed.

**MBA 533 - Business Operations and Logistics Planning Credits: 3**

Introduces students to scope and variety of logistics operations as they pertain to transforming resources into goods and services. Topics include demand forecasting, planning for logistics operations, resource management, production and service delivery strategies, and quality assurance.

**MBA 534 - Buyer Behavior Credits: 3**

Primary goal is to enhance student's understanding of customer behavior and ultimate goal is for student to develop effective marketing techniques. Includes consumer psychology as well as its relevance for marketing researchers and managers. Presents a comprehensive, systematic, and conceptual framework for understanding people as consumers and organizational buyers. Makes heavy use of models from psychology and social psychology. Topics such as demographics, lifestyle, information processing, motivation, social influence, brand loyalty, attitude measurement and change, and decision-making are studied. Other topics may include cross-cultural differences in customer behavior, ethics, and the impact of technology on customer behavior.

**MBA 547 - Management Information Systems and Applications Credits: 3**

Designed to provide a managerial overview of the role of information systems in the business environment, the roles, and responsibilities of those involved, and the potential future trends in information technology and their implications on the business world. Information is a powerful resource and information systems (IS) are used in almost every business function within every industry. Knowledge of information and how it flows within processes is an essential element of success in virtually any position. While not everyone in business needs to be an IS professional with detailed technical expertise; everyone needs an in depth understanding of the subject to know how to use and manage IS in his or her profession.

**MBA 548 - IT Management and Innovation Credits: 3**

This course examines frameworks, concepts, practices, and examples that help business managers understand the value of IT and generate business value from investments in IT and its complimentary business resources. Topics include strategic alignment of IT with organizational goals, organizational efficiency and transformation enabled by IT,
organizational learning and innovation enabled by IT, positioning and managing of the IT function, IT and sustainability. Uses lecture, projects, case studies. This course also examines from business perspective systems and technologies that help companies innovate and deliver business value such as business analytics, cloud computing, enterprise resource planning, customer relationship management, and supply chain systems.

**MBA 550 - European Business Environment Credits: 3**

Explores the current environment for business in Europe, with particular emphasis on the European Union. Compares and contrasts business practices in Eastern and Western Europe with those typical in the United States. Includes travel to Europe and visits to businesses, government institutions, and cultural sites in order to gain first hand knowledge of European business practices and prospects. Examines the current economic conditions in Europe and possible scenarios for the future.

**MBA 552 - Entrepreneurship Credits: 3**

Examines all aspects of starting a new business, with emphasis on the critical role of recognizing and assessing opportunities. Topics include attributes of entrepreneurs and entrepreneurial careers, creating and evaluating opportunities, writing business plans, and financing new ventures.

**MBA 554 - International Business Credits: 3**

Presents broad view of issues facing professionals in the international business area. Topics are broad and include international trade, exchange rates, finance, organizational structure, and international legal dimensions. Student learns to weave the social, technical, cultural, risk and human relations factors into a global context.

**MBA 556 - Organizational Leadership Credits: 3**

Examines the leadership and influence issues managers face. Attention is given to leading up, down, and across the organization, recognizing leadership is not limited to managers. Through guest business speakers, cases, readings, projects, and simulations, students gain greater insight and skill in leading. Topics include characteristics of effective leaders, power and influence strategies, crisis management, organizational politics, and leadership assessment.

**MBA 557 - Negotiation Credits: 3**

Course is designed to provide students with skills needed to approach negotiation and bargaining situations with confidence. This includes providing frameworks for the analysis conflict and its origins, knowledge about one's own tendencies in negotiation, and a chance to experiment with negotiating techniques in a variety of contexts. Topics include: integrative and distributive negotiations, individual differences in bargaining styles, coalitions, team negotiations, negotiating through agents, and ethical issues in negotiation. Course content is delivered through readings, cases, and lecture, however, considerable emphasis is placed on inside and outside class negotiation simulations and subsequent classroom discussion.

**MBA 558 - Ethics and Sustainability Credits: 3**

This course is a combined conceptual and application course. The course will explore the various concepts of business ethics, social responsibility, corporate citizenship and sustainability. This course will specifically explore stakeholder theories, environmental and social concerns, criticisms of capitalism as well as specific ethical and social issues that would apply to the various business fields including employee relations, marketing, operations, finance, and accounting. The course will also explore the application of these concepts to various business cases.
MBA 559 - The Practical, Legal, Ethical and Strategic Implications of Employment and Labor Regulation Credits: 3

This course explores the major areas of the legal regulation of the employment relationship necessary for all managers to be successful. Topics include the Doctrine of Employment at Will and its exceptions - common law and statutory, EEO laws and their impact on all facets of business operations, the Americans with Disabilities Act, leave laws including the FMLA, the developing law of alternative dispute resolutions systems, administrative law including workplace safety law, unemployment, and worker's compensation and private and public sector labor law. Course also prepares managers to be able to identify potential legal issues and to understand their responsibilities as defined via court rulings and statutes. This course is intended to give managers the tools to handle the area of employment compliance in a Practical, Legal, Ethical and Strategic manner.

MBA 565 - Contemporary Decision Making Credits: 3

Provides skills and tools necessary for managers to gain insight and better understand business problems to support the decision making process. Quantitative and qualitative tools and methods will be studied. The approach to course material will be an emphasis on application of the tools to making more-informed business decisions.

MBA 570 - Marketing Management Credits: 3

Detailed study of concepts and procedural alternatives in: the delineation of the market target, the development and implementation of the marketing mix, and the control and analysis of the total marketing effort. A survey of the marketing mix (product, place, price, and promotion) with emphasis on the strategic fit of these items to the overall execution of providing customers the greatest value proposition possible. Extensive use of cases and analysis will be employed.

MBA 571 - International Marketing Management Credits: 3

The purpose of the course is to investigate the concerns and factors that surround international marketing strategy on a global scale. This course will focus on assessing opportunities in international markets, marketing strategy development in relation to the international marketing environment, and measuring global market needs.

MBA 575 - Global Supply Chain Management Credits: 3

This class starts by exploring the strategic nature of the global supply chain. The class will illustrate the impact of globalization on the business decisions for demand fulfillment, e.g. procurement, location, and distribution. Investigates how global supply chains utilize global markets for both supply and demand. Shows how enhanced information systems can lead to decreased costs and more efficient outcomes. Explains how global supply chain partners can be evaluated. Deliberates efficient organizational structures for fulfilling global demand. Shows global risk and provides risk management tools to mitigate. In addition to being exposed to the theory, case studies will be used to further reinforce the material's application in practice.

MBA 577 - Supply Chain Management Credits: 3

Introduces an integrated enterprise approach of flow of goods and services from suppliers to customers (supplier relationship, procurement, operations management, inventory control, logistics and transportation, distribution and customer service). Every topic in each area is being discussed in the context of integrated flow of goods and services from suppliers to customers and continuous flow of information from the customers to the suppliers. Covers the issues facing managers of import-export firms, trading companies, international service companies, and multinational corporations.
MBA 581 - Health Care Financial Management Credits: 3

Healthcare Financial Management introduces students to the most important principles and applications of healthcare finance. Coverage includes both accounting and financial management topics. Examines the most used tools and techniques of health care financial management, including financial accounting and financial statements; managing cash, billings, and collections; making major capital investments; determining costs and using cost information in decision-making; pricing and service decisions; budgeting; and analyzing financial performance.

MBA 582 - Health Information Technology Credits: 3

This course provides a comprehensive overview of health care information technology (HIT), including the effects of the external environment and government policies on its evolution; the expanded role of the CIO; the basics of hardware, software, and communication systems; the types of operational, management, and clinical applications; and the value HIT brings to the enterprise. The concepts included reflect a broad vision of HIT management as a combination of technology, information, and manpower leadership.

MBA 583 - Health Care Law Credits: 3

The course deals with the law regulating health care in the United States, including physicians, providers, hospitals, insurers and patients. The course will focus on the special impact of the legal system on access and delivery of health care services.

MBA 584 - Health Care Strategic Management Credits: 3

This course is designed to provide students with an active understanding of the role of strategy in healthcare organizations in the modern healthcare environment. It uses both academic models as well as practical examples and application to help students become familiar with the dynamic environment in which strategies must be formulated and implemented. The course will emphasize the use of management skills coupled with an understanding of the complex healthcare environment to evaluate strategic opportunities and to develop and implement strategic plans. The course will emphasize the importance of ethical decision-making, professionalism, and the use of effective written and oral communication skills.

MBA 590 - Selected Topics in Master Business Administration Credits: 1-3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

MBA 591 - Selected Topics in Master Business Administration Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

MBA 593 - Strategic Management Credits: 3

Examines strategic analysis and decision-making under conditions of dynamic uncertainty, with a focus on cross-functional integration and the management of processes and change. The importance of achieving a fit between the internal and external environment for organizational survival and success is a central issue.

MBA 594 - Selected Topics in Master Business Administration Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
MBA 595 - Selected Topics in Master Business Administration Credits: 3
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

MBA 596 - Business Practicum Credits: 3
This course is designed so that MBA students can apply their course work to actual problems found in the real world. Working closely with faculty and under direct supervision, students will formulate, analyze, solve, and report on actual problems that are job-related. Using skills, tools and concepts acquired in the classroom, students tackle complex and "messy" problems in an effort develop their management and problem solving abilities.

MBA 597 - Selected Topics in Master Business Administration Credits: 3
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

MBA 599 - Independent Study in Master Business Administration Credits: 3
Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

Management

MGT 448 - Strategic Compensation Credits: 3
This course examines the strategic use of compensation practices to attract, motivate, retain, and reward employee performance and drive organizational success. The course focuses on compensation practices used to implement a firm's compensation strategy. Topics include compensation strategies, total rewards, pay equity, pay differentials, legal issues in compensation, job evaluation methods, pay structure and design, pay-for-performance, benefits, and executive compensation.

Prerequisite(s): MGT 340

MGT 450 - Negotiation Credits: 3
Course is designed to provide students with skills needed to approach negotiation and bargaining situations with confidence. This includes providing frameworks for the analysis conflict and its origins, knowledge about one's own tendencies in negotiation, and a chance to experiment with negotiating techniques in a variety of contexts. Topics include: integrative and distributive negotiations, individual differences in bargaining styles, coalitions, team negotiations, negotiating through agents, and ethical issues in negotiation. Course content is delivered through readings, cases, and lecture, however, considerable emphasis is placed on inside and outside class negotiation simulations and subsequent classroom discussion.

Prerequisite(s): (MKT 305 and FIN 311 and MGT 305 ) and senior standing.

Military Science

MIL 431 - The Army Officer Credits: 3
Enables cadets to further advance their leadership and managerial skills. Focuses on developing cadet proficiency in planning, preparing, executing, and assessing complex operations; functioning as a member of an organizational staff; and providing performance feedback to subordinates. MSIV cadets will be given situational opportunities to assess risk, make ethical decisions, and lead fellow cadets at the MS I-III level. Meets for three hours per week, plus a two-hour weekly leadership lab.

Corequisite(s): MIL 115

**MIL 432 - Company Grade Leadership** Credits: 3

Emphasizes the role of the Army during offensive, defensive, stability, and defense support of civilian authority operations in a complex global environment. Significant emphasis is placed on preparing cadets for their first assignment as a company grade officer through completion of situational opportunities to assess risk, make ethical decisions, and lead fellow cadets at the MS I-III level. Meets for three hours per week, plus a two-hour weekly leadership lab.

Corequisite(s): MIL 115

**Music**

**MUS 490 - Selected Topics in Music** Credits: 1-3

Provides the opportunity for the department to offer courses in areas of departmental major interest not covered by the regular courses.

**Online Learning Environment**

**ONLE 550 - Introduction to Teaching in an Online Environment** Credits: 3

Introduction to Teaching in an Online Environment will provide the foundational information for online instruction. Three main topics will be featured within this particular course and focus on an in-depth examination of online learning and environments; the theoretical research and best practices associated with online instruction; and the logistics associated with course instruction and development. Learners will engage in examining how current educational learning theory can be utilized in online and blended environments.

**ONLE 560 - Designing and Implementing Online Educational Systems #1** Credits: 3

Designing and Implementing Online Educational Systems I ? the Macro View focuses on specific elements that contribute to effective online program design and instructional delivery. Modules focus on online education and best practices for teaching, learning, and assessment in online educational programs. Learners will complete descriptive, reflective, and evaluative responses to assigned readings and develop an online unit for use in the appropriate environment.

**ONLE 570 - Designing and Implementing Online Educational Systems #2** Credits: 3

Designing and Implementing Online Educational Systems II will focus on the evaluation, analysis, and design of online environments that engage learners in active and collaborative learning. Learners will examine aspects of socially shared
cognition, multimodal communication, and digital literacy and apply key elements to the development of an online learning experience. Group members will participate in peer evaluation of shared learning opportunities and analyze the effectiveness of the design.

**ONLE 580 - Online Educational Resources for Instruction and Learning Credits: 3**

Online Educational Resources for Instruction and Learning provide an overview of online course curriculum structure, organization, and distribution in blended, hybrid, and full online mode; identification, evaluation, and application of online educational resources, including web2.0 tools. Participants will learn the theories and practices of integrating online educational resources, including web2.0 tools in learning environments and in other learning settings for today's digital learner. The course will use a series of hands-on activities, computer labs, and subject area related digital projects to help participants learn how to identify, evaluate, and select appropriate online materials and to align the materials with academic standards and curriculum in particular lessons or lesson units based on grade levels and subject areas. Designing and creating individualized digital learning environments will be another focus of the course.

**ONLE 590 - Capstone: Online Course Design, Development, and Implementation Credits: 3**

Participants will apply an instructional design model to analyze, design, develop, assess, and evaluate a six week online learning module. Emphasis will be placed on theories related to instructional design, information processing, and motivation. Participants will gain an understanding of their role as an instructional designer and become knowledgeable of learning management platforms and resources available to the professional online educator.

**Philosophy**

**PHL 490 - Selected Topics in Philosophy Credits: 1-3**

Provides the opportunity for the department to offer courses in areas of departmental major interest not covered by the regular courses.

**Political Science**

**PLS 431 - Pennsylvania Local Government Credits: 3**

Concerns the structure and administrative functions of local governments in Pennsylvania. Extensive emphasis placed on analyzing local governmental functions and problems emanating from the jurisdictions' political, social, and economic environments.

Prerequisite(s): 9 hours in political science or permission of instructor.

**PLS 490 - Selected Topics in Political Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PLS 491 - Selected Topics in Political Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PLS 492 - Selected Topics in Political Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PLS 501 - Organizational Theory and Behavior Credits: 3**

Examines organization theory relevant to the administration and leadership in complex organizations. Focus is on topics of bureaucracy and development of administrative thought; human behavior in organizations including individual motivation, group and interpersonal dynamics, and leadership modes; organization structure, process, and dynamics; organizational development and change; and emerging perspectives in the field.

**PLS 502 - Human Resources Management Credits: 3**

Case study course reviewing personnel administration integratively as an administrative, behavioral, and technical area. Role of the line manager in personnel administration is covered, as well as the technical roles of central personnel agency and the operating personnel office.

**PLS 503 - Public Budgeting and Financial Management Credits: 3**

Provides the knowledge base required to understand and interpret public sector budgets and the principles underlying public sector budgeting and decision making. Budget processes, influences, and tensions are explored as well as various budgeting approaches, formats, and historical developments. Emphasis is placed on developing analytical skills to interpret and design budgets and their processes and understanding the expanding role that budgets play in public sector management.

**PLS 504 - Ethics for Public Service Managers Credits: 3**

Examines specific contemporary ethical concerns in the public sector and the ethical conduct required by statutes and codes of conduct. Appropriate case studies discussed, emphasizing the constantly changing standards in the public sector.

**PLS 511 - State Government Credits: 3**

Studies state governments in the American federal system and analyzes state government institutions and processes with special reference to Pennsylvania.

**PLS 512 - Intergovernmental Relations Credits: 3**

Examines the developing area of intergovernment relations among federal, state, and local governments. Special emphasis placed upon the work of the Advisory Commission on Intergovernmental Relations and implementation where feasible by state and local governments.

**PLS 521 - Labor Relations in the Public Sector Credits: 3**

Reviews whole area of relations between public employees and public employers and impact on public personnel administration. Some guidelines used for past contractual arrangements are covered.

**PLS 522 - Advocacy in Public Administration Credits: 3**

Advocacy and lobbying are two of the core activities in the relationship between citizens and the government. This course demonstrates the strong relationship between these activities and governmental outcomes. Students will examine
reasons for doing advocacy and lobbying, advocacy and lobbying techniques and the effect of lobbying and advocacy on policy outcomes.

**PLS 523 - Communication for the Public Manager Credits: 3**

This course will improve the ability of the student to effectively communicate in a public sector setting. It will rely on exercises, analysis and evaluation to improve the student’s ability to communicate better in various formats, including written, oral, and graphic methods.

**PLS 531 - Nonprofit Management and Leadership Credits: 3**

This class provides an introduction to nonprofit management in the United States. The purpose of this course is to provide a foundation for understanding the unique functions and characteristics of nonprofit organizations. The course examines the legal, political, economic, and social environment in which nonprofit organizations operate. This course will introduce students to various aspects on nonprofit management, including the role of boards of directors, human resource management, grants administration, fundraising, and financial management.

**PLS 553 - Public Policy Implementation Credits: 3**

After briefly examining the public policy-making process, the course applies policy implementation theories, models, and frameworks to public policies. This course analyzes and evaluates public problems facing local and state public organizations. The course content focuses on a policy domain; the seminar is research-intensive, requiring students to choose one policy domain for implementation analyses.

**PLS 561 - Administrative Law Credits: 3**

Study of the law concerning the powers and procedures of administrative agencies. These governmental bodies which affect the rights of private and public parties through either adjudication or rule making are compared to and contrasted with the judicial, legislative and executive processes using the case method.

**PLS 591 - Selected Topics in Political Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PLS 592 - Selected Topics in Political Science Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PLS 601 - Research Methods Credits: 3**

Survey of the research process including preparation of a research design, use of theoretical framework, and testing of hypothesis by gathering and analyzing data. Recommend the student complete this course as early in the graduate program as possible.

**PLS 603 - Public Policy Analysis and Program Evaluation Credits: 3**

Examines the policy making and policy implementation processes as they relate to the analysis of public policies. Major focus is upon results-oriented management techniques, and a number of specific quantitative policy analysis techniques. This includes program evaluation and cost benefit analysis.
**PLS 605 - Capstone Seminar: Applied Public Management Credits: 3**

Requires students to demonstrate their ability to successfully resolve workplace situations by utilizing principles and concepts of public management as presented in the core and elective courses of the MPA curriculum. Employing the case study method, and additional reading, the principal focus requires the students as individuals and in teams to work with the development and implementation of public policy. Course takes an application and problem-solving approach designed to develop the practical management skills required in the current public administration workplace.

**PLS 611 - Internship I Credits: 3**

Opportunity to practice public administration theory and concepts as participant and an observer in the process. Placement on a limited basis in a government or nonprofit activity enhances the student's preparation in the field.

**PLS 612 - Internship II Credits: 3**

Opportunity to practice public administration theory and concepts as participant and an observer in the process. Placement on a limited basis in a government or nonprofit activity enhances the student's preparation in the field.

**PLS 623 - Field Research I Credits: 3**

An independent supervised research project.

Prerequisite(s): PLS 601 with minimum grade of B

**PLS 624 - Field Research II Credits: 3**

An independent supervised research project.

Prerequisite(s): PLS 601 with minimum grade of B

**Psychology**

**PSY 500 - Advanced Research Design and Statistics I Credits: 3**

Concerned with scientific method to the investigation of behavior. Research methods and experimental design and statistics are reviewed along with a survey of the more recent significant developments in the field of psychology. Use of computer statistical packages to analyze data is emphasized. Students demonstrate competency in descriptive statistics.

**PSY 502 - Program Evaluation Credits: 3**

Provides an introduction to the issues and methods of modern program evaluation. This course provides an overview of the tools available to evaluate programs and policies. Program evaluation concepts and methods will be emphasized and applications in business, government, health, and education settings will be provided.

**PSY 503 - Survey Research Credits: 3**

Provides an introduction to the issues and methods of modern survey research. Methodological survey research steps to be covered include: question wording, questionnaire design, defining and sampling populations, data collection
modality, data processing and analyses, and ethical issues. Applications in business, government, health, political, and education settings will be covered.

**PSY 512 - Theories of Learning Credits: 3**

Examines the explanations of human learning processes offered by various behavioral and cognitive theorists. Classical and contemporary theories and applications are presented dealing with topics such as conditioning, motivation, memory, and problem solving.

**PSY 516 - Motivation Credits: 3**

Explores and compares different theories in the realm of motivation. Topics may include: Basic human drives, core human motives such as autonomy, competence, and belonging, goal setting, planning, and striving, and the role emotions, individual differences, and the situation plays in motivation. The course will also look to see how principles of motivation can be applied.

**PSY 517 - Applied Psychology of Women and Gender Credits: 3**

This course takes an applied approach to the psychology of women and gender. For five decades, psychologists have studied social phenomena from feminist frameworks. This course is designed to familiarize students with those frameworks, as well as see how these theoretical and epistemological underpinnings lead to different research questions, methodological approaches, data analyses, and implications for practice. Students will move from feminist theory and epistemology to empirical study and practice across current topics in the field which may include sexualization, reproduction and motherhood, work and achievement, sexual and gender categories, immigration, and violence against women.

**PSY 518 - Introduction to Behavior Analysis Credits: 3**

Introduction to applied techniques for assessing and modifying behavior, including descriptive and functional assessment, reinforcement, extinction, punishment, stimulus control, modeling, token economies, systematic desensitization, and counterconditioning.

**PSY 529 - Adult Development and Aging Credits: 3**

Focuses on process of aging during later years of the life span. Developmental approach provides basis for the systematic study of aging. The interaction of the physiological, psychological, emotional, intellectual, and social aspect of aging are emphasized.

**PSY 530 - Applied Child and Adolescent Psychopathology Credits: 3**

This course introduces students to the major mental health disorders typically diagnosed in childhood and adolescence. Students in this course will learn about the current issues and knowledge in the field of child and adolescent pathology. Students will learn about the developmental frameworks in the psychopathological paradigm as well as the current empirical and theoretical approaches to the classification and treatment of childhood disorders.

**PSY 531 - Cognitive Psychology Applied to the Workplace Credits: 3**

The modern workplace provides many instances where an understanding of cognitive psychology (how we reason, process information, and make decisions) is crucially important in complex, intensive, and fast-paced work environments. This course will illustrate how cognitive psychology can apply to our understanding of such
environments. Topics include mental models, medical and financial decision making, problem solving, cognitive overload and burnout, and the impact of artificial intelligence on work.

**PSY 533 - Applied Social Psychology Credits: 3**

Study of the theoretical and applied aspects of social attitudes, behavior, cognition, and affect from a social psychological perspective. Topics may include social cognition, the self, attitudes, prosocial behavior, aggression, prejudice, stereotyping, discrimination, social influence, intimate relationships, and groups.

**PSY 535 - Behavioral Assessment Credits: 3**

A study of the conceptual background and practical application of behavioral assessment techniques. The focus will not be on the diagnosis of a particular form of psychopathology, but rather on the function a particular behavior or set of behaviors is serving. Methods ranging from interviews with parents and direct care staff to the experimental analysis of function will be discussed, with emphasis on the idea that once function has been identified, it will be possible to design a behavioral intervention to treat a behavioral excess based on its function(s), and thus, improve the effectiveness and efficiency of behavioral treatment.

Prerequisite(s): PSY 518

**PSY 536 - Research Design in Behavior Analysis Credits: 3**

A study of single-case research design, the primary research design utilized for applied research in behavior analysis as well as the implementation of interventions to treat behavioral excesses and deficits in the practice of applied behavior analysis.

Prerequisite(s): PSY 518

**PSY 539 - Community Psychology Credits: 3**

Community psychology is concerned with the interrelation and interdependence of individuals and their communities and environments. This involves how individual's thoughts, emotions, and behaviors are shaped by the social, cultural, and physical environments in which they live, as well as how individuals shape their environment. In addition, community psychology takes an active, applied approach to the world, focusing attention and action on social issues and policies, underserved and marginalized groups, social justice and social change, prevention science, health promotion, and the design and evaluation of interventions aimed generally at promoting individual and community competence and empowerment. The goal of this course is to introduce you to the central concepts, theories, strategies, findings, and values of community psychology in order to help develop broader perspectives on individual and community functioning and wellbeing.

**PSY 543 - Behavioral Treatment & Systems Support Credits: 3**

A study of the conceptual background and practical application of behavioral treatment techniques. With behavioral excesses, it is essential to determine the function that the behavior or set of behaviors is serving via behavioral assessment. Then, a functional treatment can be created to decrease excesses, which will be more effective and less restrictive than treatment that ignores function. Treatments to increase existing deficits in behavior will also be considered. Finally, considerations with regard to support of behavioral interventions within different settings (home, school, etc.) will be examined, including ethical considerations.

**PSY 545 - Child & Adolescent Psychology Credits: 3**
Students in this course will gain an advanced understanding of how individuals grow and develop from infancy through adolescence. Students will investigate the major theoretical perspectives and research methods related to child and adolescent development. Topics covered in this course include physical development, cognitive development, socioemotional development, and contextual influences on child and adolescent development.

**PSY 547 - Forensic Psychology Credits: 3**

A survey of the broad field of forensic psychology, including roles that psychological knowledge, theory and practice have played with respect to issues of law and the legal system. Topics include psychological theories of crime, the psychological evaluation of criminal suspects, factors influencing the reliability of eyewitness testimony and psychological models of jury selection, among others. Students also learn the opportunities, demands and responsibilities associated with careers in the field of applied forensic psychology.

**PSY 565 - Human Factors Credits: 3**

Focuses on the application of psychological principles of human behavior, perception, and cognition to real-world environments. Topics include improving workplace and transportation safety, improving human-computer interaction, and discussing general ways humans can work more easily and naturally with complex technologies in today's society.

**PSY 590 - Introduction to Group Dynamics Credits: 3**

Examines classic and current theory and research on the dynamics of small group interaction. We will examine the motivational, behavioral, social, cognitive, and organizational aspects of groups and their dynamics. The course is taught using recent theory and research from the field of group dynamics. Through online discussion, students are expected to engage in critical analysis of the literature, and actively participate in the weekly class conversations. This course will primarily focus on issues affecting groups in an organizational setting like leadership, cohesion, performance, decision-making, and conflict.

**PSY 595 - Selected Topics in Psychology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PSY 596 - Selected Topics in Psychology Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PSY 597 - Independent Study in Psychology Credits: 3**

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

**PSY 598 - Independent Study Credits: 3**

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

**PSY 600 - Capstone Credits: 3**
This capstone course requires students to demonstrate their mastery of the program's learning objectives through their ability to successfully identify a research question in an applied setting, review the issues related to the research question, and develop a comprehensive research proposal. Utilizing the principles and concepts presented in the core and elective courses of the MAP curriculum, students create a research proposal in the form of a paper and deliver an oral presentation via video conference.

Prerequisite(s): PSY 500, PSY 502, PSY 503, each core category completed, and 24 credit hours completed, 3.0 GPA.

Reading

RDG 413 - Teaching Reading to English Language Learners Credits: 3

Designed to address teaching reading and writing to the English language learner in a non-ESL classroom; address the concerns of teachers who encounter students in their classrooms who are learning English; explore theories about first- and second-language acquisition; introduce classroom best practices in literacy as they relate to learners of English; and support teachers in developing an understanding of the basic principles of teaching and assessing English language learners with practical suggestions for assisting students in learning to cope in their new culture. Course is reserved for reading minors and master's of reading students.

RDG 443 - Reading Measures and Interventions in PK-4 Credits: 4

Focuses on assessment methods, including observation, informal, and formal assessment measures to diagnosis and describes stages of reading development among readers, specifically prekindergarten through fourth grades. Uses assessment data to identify and implement literacy instruction for small groups and individual learners. Participation in an education field experience will be required.

Prerequisite(s): (RDG 323 and RDG 363)

RDG 490 - Selected Topics in Reading Credits: 1-3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 491 - Selected Topics in Reading Credits: 1

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 492 - Selected Topics in Reading Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 493 - Selected Topics in Reading Credits: 1

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 511 - Comprehensive Literacy Model for School Improvement Credits: 3

The course is designed as a summer literacy institute for teachers and school teams interested in implementing a comprehensive literacy model, including a framework for literacy, individual and small group interventions, literacy
team meetings, assessment walls and progress monitoring, school plans, and literacy coaching. This course is the first in a sequence of seven courses required for a literacy coach registration.

**RDG 512 - Theory and Practice in Literacy Credits: 3**

This course examines theories of cognitive, linguistic, and cultural learning and their practical implications for teaching students in the elementary and middle grades. A focus is placed on developing inquiry-based classrooms where language becomes a tool for increasing knowledge. Research-based components of reading are examined and applied to the everyday context of teaching and learning. Students begin an action research project in literacy that will be carried over and completed in the spring theory course. The course is a requirement for the literacy coach university registration.

Prerequisite(s): RDG 511

**RDG 513 - Supervision and Organization of Reading Programs Credits: 3**

The course is one of seven courses to prepare reading specialist/literacy coaches for supervising and organizing a school's literacy program. The course focuses on organizational techniques and instructional approaches as applied to the operation of total reading program. An additional focus will be on developing the skills and techniques of a literacy coach in three major areas: coaching teachers, providing professional development to school personnel, and evaluating a school's literacy program. The course is a requirement for the literacy coach university registration.

Prerequisite(s): RDG 511

**RDG 514 - Processes and Strategies in Reading Comprehension Credits: 3**

This course focuses on the processes of reading comprehension, including the influence of perceptions, beliefs, motivation, language, and strategies on the reader's understanding. An emphasis is placed on effective questioning, text selection, discourse chains, and environment as ways to promote comprehension. The course is a requirement for the literacy coach university registration.

Prerequisite(s): RDG 511

**RDG 515 - Research in Language and Literacy Acquisition Credits: 3**

This course explores the contributions and latest research of linguists, sociolinguists, and psycholinguists to language and literacy acquisition; description of methods and techniques employed in literacy research; designing and conducting a research project in literacy. The course is a requirement for the Literacy Coach University Registration.

Prerequisite(s): RDG 511 and RDG 512 and RDG 513 and RDG 514

**RDG 516 - Literacy Coaches as Agents of Change Credits: 3**

This course focuses on the roles and responsibilities of a literacy coach, including specialized techniques and language prompts for scaffolding teachers. An emphasis is placed on observing change over time in knowledge levels and types of self-reflection. Other responsibilities include modeling lessons, conducting team meetings, leading study groups, selecting materials, and collecting and analyzing data for school improvement. The course is a requirement for the Literacy Coach University Registration.

Prerequisite(s): RDG 511 and RDG 512 and RDG 513 and RDG 514
RDG 517 - Curriculum Design and Evaluation of Literacy Programs Credits: 3

This course focuses on designing and assessing literacy curriculum, including evaluating literacy programs and materials and analyzing their evidence-based rationales, aligning curriculum to state and professional standards, creating activities and rubrics to match curriculum, and using school-embedded professional development to achieve literacy goals. The course is a requirement for the Literacy Coach University Registration.

Prerequisite(s): RDG 511 and RDG 512 and RDG 513 and RDG 514

RDG 520 - Tutoring Secondary Students Credits: 3

Designed to give master's degree candidates experience working with upper-grade students who are having difficulty becoming effective readers and writers. Candidates in this course will tutor 3-5 freshman students once per week for the course duration. In addition, student's reading and writing abilities will be assessed at the beginning and end of the course.

RDG 524 - Diversity's Impact on Literacy Instruction in a Standards Aligned System Credits: 3

This course is designed to address the impact that linguistic and cultural diversity has on literacy instruction in a Standards Aligned System (SAS). Foundational theory in both first and second language acquisition and instruction is explored. In addition, this course investigates what influences the learning process, how instruction best aids that process, and how to utilize the SAS to enhance student learning for speakers of languages other than English. This course explores the needs, experiences, values, and beliefs of culturally and linguistically diverse learners. Course is reserved for Master's of Reading students.

RDG 525 - Curriculum Evaluation and Data Analysis Credits: 3

This course focuses on designing and assessing literacy curriculum, including evaluating literacy programs and materials and analyzing their evidence-based rationales, aligning curriculum to state and professional standards, creating activities and rubrics to match curriculum, and using school-embedded professional development to achieve literacy goals.

RDG 526 - Leadership and School Change Credits: 3

This course is focused on coaching principles and strategies related to making improvements and innovations in classroom teaching and literacy instruction. Emphasis is on program evaluation and professional development to bring about educational reform and improvements in teaching and literacy instruction. Course content is informed by various research, policy, and practice resources, which contribute in different but complementary ways to the preparation of literacy coaches and instructional leaders. Research and theory addressed in the course will draw from several fields of inquiry, including adult learning, professional development, teacher quality and student achievement, and school improvement.

RDG 527 - Inquiry Approaches to Literacy Credits: 3

Students will be required to examine foundational knowledge of literacy research, reading theories and principles, and methods for conducting and critically evaluating reading research as applied to the three roles of the literacy specialist. Additionally, students will engage in a professional learning community to broaden and share their literacy understandings regarding research-based literacy practices.
RDG 528 - Foundations of Literacy Development Credits: 3

Provides a comprehensive overview of factors related to literacy development and explores the implications of knowledge about the reading/writing process for effective instruction. Topics considered include such areas as: research knowledge about literacy processes, early literacy experiences, comprehension, vocabulary/concept development, word identification, literature for reading instruction, microcomputers and literacy, instructional materials, classroom organization for effective literacy instruction, and strategies for instruction/assessment in reading.

RDG 529 - Reading and Reasoning Beyond the Primary Grades Credits: 3

Examines comprehensively all aspects of literacy instruction for older children and adults. Special attention given to topics having unique relevance to older readers such as: mastery of expository text structures, development of independence in monitoring and controlling one's own reading, building of vocabulary concepts, and development of positive attitudes toward print.

RDG 532 - Diagnosis and Assessment in Reading Credits: 3

Explores varied means for obtaining information about children's abilities in using print as a basis for aiding further development. Critically examines the strengths and weaknesses of assorted reading/writing assessment strategies. Emphasis will be given to those strategies that are process-oriented and have the most direct application to instruction. Students will practice using informal observation techniques and varied measurement instruments as a basis for preparation of a clinical case report.

Prerequisite(s): RDG 528 and RDG 529 or permission of instructor.

RDG 533 - Advanced Diagnosis and Assessment in Reading Credits: 3

Further examines issues introduced in RDG 532 with emphasis upon refining and expanding expertise in observation of literacy development. Preparation of a clinical case report required. Other topics investigated include: current issues in literacy assessment, new strategies for assessment, organizing classrooms for optimal diagnosis and instruction, recent literature by reading researchers with implications for assessment.

Prerequisite(s): RDG 532

RDG 534 - Laboratory Practicum in Reading Credits: 3

Provides experience in facilitating children's literacy development in a clinical setting with guidance and support from university faculty. Assessment/instructional strategies are practiced and discussed as a means of building insights about literacy processes and individual developmental needs.

Prerequisite(s): RDG 532

RDG 535 - Seminar in Literacy, Language, and Reading Credits: 3

Explores current understandings of literacy processes with opportunities for in-depth study of topics of special interest and relevance. A capstone course, students reflectively examine concepts introduced in earlier courses including possibilities and problems of their application in varied instructional settings. Practice in curriculum leadership roles such as writing for publication and planning/implementation of in-service sessions provided.

Prerequisite(s): RDG 532 and RDG 534 and two other graduate-level courses in reading.
RDG 537 - Brain Based Strategies for Literacy Learners Experiencing Difficulties
Credits: 3

Focuses on differentiating reading and writing instruction within various settings, including supplemental and classroom, for meeting the needs of struggling learners. Includes techniques for using intervention team meetings to select appropriate services, collaborating with teachers across intervention programs, and using assessment to monitor learner's progress.

RDG 554 - Practicum in Reading Credits: 3

Addresses a series of practical issues Teacher Leaders face on a daily basis. Topics include teaching adults, how to work with administrators, parents, and trainers of teacher leaders in coming years. Field site visits are included.

Prerequisite(s): Requires a Master's degree to enroll.

RDG 555 - Practicum in Assessment Credits: 3

Prepares Reading Recovery teachers to learn to observe and record the reading and writing strengths of individual children. Field site visits are included.

Prerequisite(s): Requires a Master's degree to enroll.

RDG 593 - Selected Topics in Reading Credits: 1

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 594 - Selected Topics in Reading Credits: 1-3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 595 - Selected Topics in Reading Credits: 2

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 596 - Selected Topics in Reading Credits: 2

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 597 - Selected Topics in Reading Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 598 - Selected Topics in Reading Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

RDG 599 - Independent Study Credits: 2
Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

**RDG 601 - Language Development Theory Credits: 3**

Focuses on theory and current research related to effective Reading Recovery instruction. Examines and applies theoretical principles of learning and literacy learning to their practice. Evaluates and relates theories of literacy learning, thinking, and teaching to the process of becoming literate.

**RDG 602 - Reading Thoughts and Processes Credits: 3**

Reading Recovery is a system intervention that changes how educators think about learning and instruction. Teacher Leaders are key to creating systemic change. Examines recent developments and research regarding issues Teacher Leaders are most likely to face when implementing Reading Recovery Programs in their respective sites.

**RDG 607 - Reading Recovery Training for Teachers I Credits: 3**

Assists teachers in developing an understanding of the Reading Recovery procedures in order to select from these procedures to meet individual learning needs. Lesson analysis, specific strategies, and charting student progress are important components of course.

Prerequisite(s): Requires permission of instructor to enroll.

**RDG 608 - Reading Recovery Training for Teachers II Credits: 3**

Refines and expands the Reading Recovery teacher's level of awareness and understanding of how to effectively implement the Reading Recovery Program.

Prerequisite(s): Requires permission of instructor to enroll.

**RDG 609 - Internship Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**RDG 610 - Reading Internship II Credits: 3**

Provides opportunity to gain practical experience in chosen career area.

**RDG 612 - Thesis I Credits: 3**

Students identify, explore, and synthesize current information regarding a topic of special significance in literacy education. Work guided by reading faculty and must be approved by faculty committee. All students expecting to undertake advanced graduate studies in reading are urged to elect the thesis option.

**RDG 613 - Thesis II Credits: 3**

Continuation of RDG 612.

**Science Education**
SCED 550 - Safety and Welfare in Science Education Credits: 3

This fifth course in the Master of Arts in Science Teaching (MAST) program surveys the primary safety concerns in science instruction with emphasis on chemical safety, safety equipment and procedures, and legal and ethical considerations for using live and preserved organisms in the classroom and field. Principles and legal requirements for classroom design and how classrooms and laboratories must be modified to accommodate students with learning and physical disabilities will also be included. Students will also complete a minimum of 25 hours of observations in a secondary science classroom.

Prerequisite(s): SCED 510 with minimum grade of C and SCED 520 with minimum grade of C and SCED 530 with minimum grade of C and SCED 540 with minimum grade of C

Supply Chain Management

SCM 410 - Distribution Systems in Supply Chains Credits: 3

This course introduces students to the contributions that distribution systems make to value driven supply chains, the impact of distribution systems imperatives on the strategic management of supply chains, and the integration of these systems with manufacturing and service operations. Strategies for effective and efficient decision-making and management of distribution systems that augment and support the supply chain as well as deliver customer value are explored. Models of distribution systems that minimize or reduce system wide costs are investigated. The course also explores advances in information technology and its role in distribution systems.

Prerequisite(s): SCM 330 or permission of instructor.

SCM 420 - Global Logistics Systems Credits: 3

Studies the impact of operations management decisions in order to fulfill demand e.g. location, production, and transportation on a global scale. Investigates how logistical systems impact operations strategies to open new markets for supply and demand. Delves into the implications of international operations and logistics strategies based on enhanced information systems and their impact on transportation costs and value added activities. This course provides participants with an examination of the preconditions of globalization and its effects on logistics operations management decisions with regard to performance measures, risk management, and organizational structures. In addition to being exposed to the theory, case studies will be used to further reinforce the material's application in practice.

Prerequisite(s): SCM 330 or permission of instructor.

SCM 481 - Decision Models for Supply Chain Management Credits: 3

Introduces a variety of models to aid decision making in supply chain management focusing on the integration of business processes from end user through original suppliers. Additional issues covered are concerned with the value added by the supply chain to customers from products, services, and information. Emphasis on applying tools and skills in the areas of spreadsheets, database languages, and statistics to gain insights into the integrated nature of the supply chain. Analysis will focus on optimization, risk analysis, decision analysis, forecasting, resource allocation, new product introduction and production, and inventory planning and control. Role of information systems in supply chain management also discussed.

Prerequisite(s): SCM 330

SCM 490 - Selected Topics in Supply Chain Management Credits: 1-3
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**SCM 510 - Logistics and Transportation Management Credits: 3**

The course introduces students to the theories, concepts, and practice of logistical operations needed to support the supply chain. It investigates the rise of logistics management from a minor business function to its current role as the backbone of the supply chain. Covers issues related to state of the art methods of delivering goods and services to customers through efficient inventory management, materials flow, transportation, warehousing, and procurement.

**SCM 515 - Procurement Management Credits: 3**

This course is designed to give students a foundation in the theory and practice of purchasing and sourcing. Presented in the course are concepts, procedures, and issues related to negotiations, sourcing, pricing, procurement, cost management and global supply management. Strategies and challenges facing purchasing and sourcing in a global environment to maintain competitive advantages are considered.

**SCM 555 - Supply Chain Quality Management Credits: 3**

This course introduces students to the principles, concepts and strategies needed for managing quality in a manufacturing or a service environment. Historical perspectives and theories of quality management are considered. The design of quality systems is studied from a market, customer, and manager’s prospective. State of the art skills and tools for quality assessment are covered providing insight into the implementation and maintenance of quality systems. The origins and principles of continuous improvement and their impact on quality management are explored.

**SCM 570 - Supply Chain Management Theory and Practice Credits: 3**

Covers theory, principles, and practices in designing, planning, and operating a supply chain. The course considers the historical development, impact, and role of supply chain management in today’s society. It investigates the role of information and transportation networks within the supply chain. Also discusses how firms develop and formulate strategy and design of their supply chains to improve competitive advantage.

**SCM 590 - Warehousing and Distribution Management Credits: 3**

Considers the theory and best practices for designing, operating, and managing material handling systems as they relate to warehousing. This course discusses warehouse location, design, and work force issues with regard to warehousing operations. It also considers warehousing strategies that minimizes supply chain inefficiencies and allows product accumulation, consolidation, and customization. Addresses a variety of principles and systems needed to create and manage world-class warehousing.

**SCM 592 - Simulation Models for Supply Chain Design Credits: 3**

Course deals with optimizing the supply chain design by using computer models for simulating the operations of the supply chain.

**SCM 595 - Demand Management Credits: 3**

Course deals with demand side of Supply chain Management and provides critical skills needed for operations and supply chain professionals needed for interdepartmental decision making in S&OP process.

**SCM 598 - Corporate Applications of Supply Chain Analytics Credits: 3**
This course exposes students to various supply chain planning, optimization, simulation, and execution concepts. Topics such as fundamentals of ERP software, materials management and logistics management, demand planning, supply and demand matching, supply network planning, and inventory planning will be discussed. Throughout the semester, cases and mini projects will be assigned giving students an opportunity to work on real-life business issues using an ERP software.

**Sociology**

**SOC 421 - Impact of International Migration Credits: 3**

This course is a sociological survey of immigration and ethnicity, with a primary focus on originating countries of immigrants and their experiences in the contemporary United States. The causes of immigration will be studied. Various assimilation patterns will be compared and analyzed. We will examine the needs of immigrants including housing, employment, education and medical care, and what kind of impacts they will cause on receiving society. This course is a sociological survey of immigration and ethnicity, with a primary focus on originating countries of immigrants and their experiences in the contemporary United States. The causes of immigration will be studied. Various assimilation patterns will be compared and analyzed. We will examine the needs of immigrants including housing, employment, education and medical care, and what kind of impacts they will cause on receiving society.

Prerequisite(s): SOC 101 OR HON 161

**SOC 435 - Gender, Organizations, and Leadership Credits: 3**

Examines the dynamics of gender and leadership in broader social contexts with particular focus on organizational settings. Focuses on the larger realm of women and men working, together or otherwise, in leader-follower situations framed by organizational constraints and concerns. The course examines a wide range of survey data and literature on gender and leadership. Students will learn how to promote a workplace culture of equality, diversity, and inclusion.

Prerequisite(s): SOC 101 or HON 161

**SOC 440 - Global Leadership for Global Society Credits: 3**

Examines leadership across the social settings and organizational cultures embedded in differing global perspectives on leadership. Many organizations in a variety of social settings and cultural contexts have developed formal leadership expectations in response to emerging global issues. Students will analyze leadership perspectives seen at the organizational, institutional, and social structural level beyond US borders and come to understand how the discipline of leadership in social and organizational settings requires a multi-faceted approach.

Prerequisite(s): SOC 101 or HON 161 or INT 200

**SOC 445 - Sexuality and Sexual Orientation: A Social Approach Credits: 3**

Examines the interrelationship of sexuality and the broader social structure in a variety of settings. Analyzes some of the critical theory on gender and sexuality and applies the lessons learned to issues such as the globalization of sexuality, transgendered and intersexed individuals, sexual exploitation, and sex trafficking. Intentionally not a course on just sexual orientation; also examines the specific issues, opportunities and threats surrounding the social experiences of G/L/B/T/Q and their allies. Students work together to develop better strategies for female/male sexuality and sexual interaction.

Prerequisite(s): SOC 101 or HON 161
SOC 490 - Selected Topics in Sociology Credits: 1-3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

SOC 522 - Culture and Organizations Credits: 3

"Culture" is one of the most complex words in the English language, a term that is used frequently but rarely defined. And yet, what is signifies lies at the very heart of what makes us humans. In this class, we will investigate the origins, meanings, and importance of culture to the human experience. We will investigate the culture of modern societies, with specific attention given to the cultural foundations of the modern formal organization. Finally, we explore recent cultural transformations that impact the nature of organizing.

SOC 530 - Sociology of Higher Education Credits: 3

Examines the different social structures, organizations, and communities that make up higher education in the U.S. today. Emphasis is placed upon the history and recent development of higher education models. Examines how the bureaucratic and institutional structures handle many of the issues, including the role of the "liberal arts," governance, distance education, the financing of higher education, the emergent emphasis on professional/vocational programs, institutional and systemic inequalities, growth of higher education administrative staffs, increasing role of for-profit institutions, the marketing of higher education, and the various "crises" identified by commentators and critics.

SOC 550 - Leadership Theory and Practice Credits: 3

Overview of theories of leadership historical and contemporary. Emphasis will be on application of theories in pragmatic situations to promote system goals. Understanding of variations in effective leadership models across diverse cultures and subcultures is discussed.

SOC 560 - Leadership, Change, and Innovation Credits: 3

Analysis of leaders as agents of social change. Leadership characteristics and strategies that have changed the world will be identified through a diverse set of case studies.

SOC 570 - Applied Organizational and Leadership Analysis Credits: 3

Part of capstone experience that will prepare students to conduct an organizational and leadership analysis during their concurrent internship experience. Students will develop a design for their analysis, present and discuss their designs with other students, meet during their internship to discuss their progress, and present their conclusions.

Prerequisite(s): SOC 550 and SOC 560 and PLS 501 and PLS 601

SOC 594 - Selected Topics in Sociology Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

SOC 599 - Independent Study in Sociology Credits: 3

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.
SOC 609 - Sociology Graduate Internship Credits: 3

Designed to give graduate students relevant leadership experience in the concentration area. All ODL internships are to be approved by the director of the program in semester prior to the start of the internship. Students would ideally register for SOC609 and SOC570 concurrently.

SOC 610 - Internship in Sociology II Credits: 3

Provides opportunity to gain practical experience in chosen career area.

Spanish

SPN 490 - Selected Topics in Spanish Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

SPN 491 - Selected Topics in Spanish Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

SPN 492 - Selected Topics in Spanish Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

SPN 493 - Selected Topics in Spanish Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

SPN 494 - Selected Topics in Spanish Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

SPN 495 - Selected Topics in Spanish Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

SPN 510 - Hispanic Theater Credits: 3

Intends to help in understanding the complexity of Spanish or Latin American Theater throughout the centuries. In a multidisciplinary approach, studies the importance of this literary form, its stature, and the social influences that have impacted it. Students analyze the literary importance of the texts and their political, historical, and sociological impact on the respective cultures that produced them. Films will be included. Taught in Spanish.

SPN 515 - Hispanic Poetry Credits: 3

Intends to help in understanding the complexity of Spanish or Latin American Poetry throughout the centuries. In a multidisciplinary approach, studies the importance of this literary form, its stature, and the social influences that have
impacted it. Students analyze the literary importance of the texts and their political, historical, and sociological impact on the respective cultures that produced them. Films will be included. Taught in Spanish.

**SPN 520 - Hispanic Fiction Credits: 3**

Intends to help in understanding the complexity of Spanish or Latin American Fiction throughout the centuries. In a multidisciplinary approach, studies the importance of this literary form, its stature, and the social influences that have impacted it. Students analyze the literary importance of the texts and their political, historical, and sociological impact on the respective cultures that produced them. Films will be included. Taught in Spanish.

**SPN 525 - Hispanic Culture Credits: 3**

Intends to expose the students to the complexity of Spanish or Latin American cultures throughout the centuries in a multidisciplinary approach. Studies the importance of different cultural issues from a political, historical, and sociological standpoint, exploring the impact on the diverse cultures of the Hispanic world. Analyzes different texts and films to illustrate these issues. Taught in Spanish.

**SPN 530 - Spanish Linguistics Credits: 3**

Deals with the grammatical structure of the modern Spanish language and addresses issues relating to phonetics, syntax, morphology, and semantics, all part of what is commonly referred to as grammar. Lectures grounded in practicality and consider the needs of teachers. Prescriptive norms of the language and the actual use of the language in its dialectal variations, including those found in the United States, will be studied. Practicality further emphasized with applications in the written language that will discuss common errors and pitfalls in this form of expression.

**SPN 535 - History of Spanish Language Credits: 3**

Seminar course lets students travel both in time and in space, while considering the evolution of the Spanish language. Starting with Latin, changes systematically studied and analyzed, focusing on the nascent dialectal varieties, their importance, the impact of substrate languages, and of others that have influenced what is known as Spanish (Greek, Italian, and Arabic among many others). While the language was in part stabilized thanks to the Academia de la lengua, a body influenced by the French Academie, Spanish has gone through many changes on the American continent, but also in Africa and Asia. Spanish of Latin America, United States, and several countries in Africa and Asia will be explored. Several documentaries complement the seminar.

**Science, Technology, Engineering, and Math**

**STEM 510 - Foundations of STEM Education in the United States Credits: 3**

This introductory course in the Science, Technology, Engineering, or Mathematics (STEM) Master of Arts in Teaching (MAT) program includes the historical and philosophical foundations of secondary education in the United States with particular emphasis on STEM education. Contemporary issues such as federal and state educational policies and curriculum standards, standardized testing and accountability, and professional expectations for teachers will also be discussed.

**STEM 520 - Research & Contemporary Issues in STEM Ed Credits: 3**

This second course in the Science, Technology, Engineering, or Mathematics (STEM) Master of Arts in Teaching (MAT) program surveys various research approaches in education including quantitative, qualitative, and mixed methods. Emphasis will be placed on research characterizing contemporary issues such as inquiry-based instruction,
effects of curriculum standards and standardized testing, and STEM-specific instruction. Action research, research for the purpose of improving one's own practice, will also be included and each student will design a project to be completed throughout the remainder of the MAT program. Students will also complete between 20 and 25 hours of observations in a secondary science classroom.

Prerequisite(s): STEM 510

**STEM 530 - Instructional Strategies and Technology in the STEM Education**  
**Credits: 3**

This course in the Master of Arts in Teaching (MAT) program assists the student with understanding the variety of strategies and philosophies behind those strategies for presenting instruction in a STEM classroom. Furthermore, specific instructional models related to STEM education will be utilized. Students will develop their own instructional philosophy in concert with the national efforts in the appropriate field of science, technology, engineering or mathematics through readings, discussions, classroom observations, as well as simulated and real teaching activities. Students will be prepared to design coherent instruction through curriculum design, unit planning and individual daily lessons. Also included within this course will be understanding how the instruction, assessment, and evaluation process occurs and results in a student grade. Students will also complete a minimum of 25 hours of observations in a classroom setting.

**STEM 540 - Assessment in STEM Education**  
**Credits: 3**

This course in the Master of Arts in Teaching (MAT) program includes all facets of the assessment process within the STEM classroom. Standardized achievement, diagnostic and aptitude tests, as well as teacher-constructed tests will be examined. Emphasis will be placed on assessing student's conceptual understanding within the science, technology, engineering and mathematics fields through a variety of formative and summative assessment strategies. Also included within this course will be understanding how the instruction, assessment, evaluation process occurs and results in a student grade. Students will also complete a minimum of 25 hours of observations in a classroom setting.

**STEM 555 - Foundations of Teaching Business and Technology**  
**Credits: 3**

This course is designed to provide prospective business education teachers an overview of basic business courses while familiarizing them with the tools necessary to teach in today's technological classroom. Emphasis is placed on information technology, personal financial planning and entrepreneurship, as well as current trends in teaching business education. Students will utilize educational theory to identify elements of instruction that are positive and productive for learners.

**STEM 560 - Accommodating all Students in STEM Education**  
**Credits: 3**

This sixth course in the Master of Arts in Teaching (MAT) program is a survey course that examines the intellectual, physical, sensory, and social-emotional differences of individuals as they pertain to learning processes. It will also address the needs of English Language Learners (ELL) in the science, technology, engineering or mathematics (STEM) classroom. It delves into how to best accommodate these students within a STEM classroom so that they can have the opportunity to be engaged in all aspects of learning the subject. Students will also complete a minimum of 25 hours of observations in a classroom setting.

**STEM 590 - Student Teaching in STEM Practicum**  
**Credits: 1-12**

This capstone course in the Master of Arts in Teaching (MAT) program consists of two parts. The first part is a twelve-week student teaching experience where students assume incrementally more responsibilities for lesson planning, assessment, classroom management, and other teacher-related duties under the guidance of an experienced mentor.
teacher and a university supervisor. Assignments during this time include a comprehensive unit plan and an assessment portfolio. The second part of the course is a four-week period where students complete and present their professional portfolios and action research projects to a panel of secondary education teachers in their field of study and university professors.

Prerequisite(s): STEM 510 and STEM 520 and STEM 530 and STEM 540 and STEM 560

**Software Engineering**

**SWE 400 - Large Scale Architectures Credits: 4**

This course will cover the issues associated with enterprise size systems including: layered and tiered architectures, view patterns, input controller patterns, concurrency, session states, distribution strategies, domain logic patterns, object-relational patterns, web presentation patterns, and distribution patterns.

Prerequisite(s): SWE 200 and CSC 371

**SWE 415 - Interdisciplinary Development Credits: 4**

The course is focused on building a product for a non-engineering customer. The class will be paired with another course or activity on campus which will act as the customer. The students will work with that customer initially to define a product and then throughout the semester, they will revise that definition and use agile development techniques to deliver the product to the customer.

Prerequisite(s): SWE 300 or CSC 371

**Social Work**

**SWK 420 - Gender Issues for Helping Professionals Credits: 3**

Examines institutionalized gender socialization, current gender issues and controversies, feminist theory for understanding behavior, and guiding principles and practices for helping professionals. Students encouraged to develop heightened self-awareness about their gender-related attitudes and values for functioning as a helping professional. May be taken for under-graduate or graduate credit.

Prerequisite(s): SWK 270 or junior standing.

**SWK 490 - Selected Topics in Social Welfare Credits: 1-3**

Provides the opportunity for a range of topics to explore issues and concerns for the helping professions. Designed for advanced undergraduate and graduate students.

**SWK 491 - Selected Topics in Social Work Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**SWK 492 - Selected Topics in Social Work Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
SWK 501 - Principles and Philosophies of Social Work Credits: 3

Introduces the generalist model for practice, which serves as a base for subsequent social work courses and provides initial understanding of the needs and issues of special populations in relation to social welfare policies and services as well as social work practice. The course provides an introduction to the profession and the M.S.W. program while helping to prepare students for their subsequent field placements.

SWK 505 - Understanding Social Work Practice with Diverse Populations Credits: 3

Focuses on issues of understanding human diversity, risk, societal power and privilege, including issues related to sexism, heterosexism, classism, ageism, religion and spirituality, cultural identity development oppression, risk, resilience, and empowerment.

Prerequisite(s): SWK 501

SWK 510 - Human Behavior in the Social Environment I Credits: 3

Examines the life span approach to human development with a focus on the interaction between the individual’s bio-psycho-social 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.

Prerequisite(s): SWK 501 (may be taken concurrently)

SWK 511 - Human Behavior in the Social Environment II Credits: 3

HBSE II 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.

Prerequisite(s): SWK 510

SWK 515 - Social Welfare Policy Credits: 3

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.

Prerequisite(s): SWK 501

SWK 520 - Micro/Mezzo Social Work Practice Credits: 3

Offers opportunities for applying and studying advanced generalist practice with individuals, families and groups. Students will learn and apply intervention skills to their specific areas of interest, which enable development of individuals, families and groups in environment processes for improving social functioning.

Prerequisite(s): SWK 501
Corequisite(s): SWK 530

SWK 521 - Macro Social Work Practice Credits: 3
Course 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, and the nature of formal organizations as environments through which social services are provided in the community, and the knowledge and skills necessary to affect change within organizations. Students will examine the role of a macro social worker as program developer, program administrator and organization developer. This course will meet 2/3 in the classroom with 1/3 of the schedule involving online work.

Prerequisite(s): SWK 520
Corequisite(s): SWK 531

**SWK 525 - Research Methods Credits: 3**

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.

Prerequisite(s): SWK 501

**SWK 530 - Field Practicum I Credits: 3**

Provides students with practical experience (200 hours) in supervised direct-service activities across all client systems, from the individual’s 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.

Corequisite(s): SWK 520

**SWK 531 - Field Practicum II Credits: 3**

Provides students with practical experience (200 hours) in supervised direct-service activities across all client systems, from the individual’s 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.

Prerequisite(s): SWK 530
Corequisite(s): SWK 521

**SWK 591 - Selected Topics in Social Work Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**SWK 592 - Selected Topics in Social Work Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**SWK 593 - Selected Topics in Social Work Credits: 3**
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**SWK 601 - Integrative Seminar Credits: 3**

Course builds upon the foundation content from students' B.S.W. programs. It serves as a 'bridge' course to integrate B.S.W. learning in preparation for M.S.W. courses. The course provides opportunities for a review of competencies and related behaviors, with a special focus on ethics, policy and research.

Prerequisite(s): Requires advanced standing admission status.

**SWK 602 - Behavioral Health Care Settings Credits: 3**

This elective course is designed to help prepare students for advanced generalist social work practice with client systems and social resource systems relating to mental or behavioral health. Extends and elaborates the advanced generalist approach to social work practice to a special field of practice. Introduces the social worker's role in behavioral health care and the policy issues that impact on practice.

Prerequisite(s): SWK 601 (may be taken concurrently) or SWK 531 or permission of instructor

**SWK 603 - Gender Issues Credits: 3**

In-depth study of the concepts, policies, practices, and research in the field of gender studies. Examines institutionalized gender socialization, current gender issues and controversies, feminist theory for understanding behavior, and guiding principles and practices for helping professionals. Students encouraged to develop heightened self-awareness about their gender related attitudes and values for functioning as a helping professional.

Prerequisite(s): SWK 601 (may be taken concurrently) or SWK 531

**SWK 604 - Health Care Settings Credits: 3**

This elective course is designed to help prepare students for advanced generalist social work practice with client systems and social resource systems relating to mental or behavioral health. Extends and elaborates the advanced generalist approach to social work practice to a special field of practice. Introduces the social worker's role in behavioral health care and the policy issues that impact on practice.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

**SWK 605 - Child Welfare Settings Credits: 3**

This elective course 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.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

**SWK 606 - School Settings Credits: 3**

This elective course 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. Examines the roles and functions of social workers and values and ethics within educational institutions.
Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

SWK 607 - Emergency Mental Health and Trauma Credits: 3

This elective course 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.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

SWK 608 - Social Work Administration and Supervision Credits: 3

This elective 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. The course will also cover different supervisory approaches and techniques, and consider supervisory challenges that arise in various practice settings.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

SWK 609 - Introduction to Art Therapy Credits: 3

This elective course explores the principles and 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.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

SWK 610 - Advanced Micro Practice and Assessment Credits: 3

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.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently)

SWK 611 - Children and Youth at Risk Credits: 3

This elective 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 help 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.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor
SWK 612 - Social Work and the Law Credits: 3

Social workers understand that virtually everything they do professionally in the 21st century has to include evaluations of risk, legality, funding, and unintended consequences. Malpractice appropriately receives much attention in this regard but legislative and regulatory requirements regarding funding, grants and contracts, definitions of disabilities, responsibilities of different levels of government and many other legal aspects of the profession must also be considered. Law, for most people, is a foreign language and social workers need to be somewhat fluent in this language so they can deal with the convergence of law and social work, social services and social policy. Approximately one-third of this class will include online content, one-third will be in person with the instructor, and one-third will be via video conferencing.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently)

SWK 613 - Mediation in Social Work Practice Credits: 3

This elective course provides information on mediation as an alternate form of dispute resolution is continuing to rise and is being widely used in human services, corporate, labor, consumer and family issues 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 for social work clients. Skills in helping parties find common ground, creating a climate for reaching agreement, aspects of confidentiality, and both directive and nondirective mediation techniques will be explored.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

SWK 614 - Social Work Surveys Development and Measurement Credits: 3

This elective 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.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

SWK 615 - Advanced Social Welfare Policy Credits: 3

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.

Prerequisite(s): SWK 531 or SWK 601

SWK 616 - Leadership Dynamics in Social Work Practice Credits: 3

This elective course focuses on 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. among colleagues). Leadership issues and challenges within a multicultural context and variety of settings including nonprofit, public, for-profit, community-based, political, national, and international organizations will be explored. Special emphasis will be placed on the need for evidence-based leadership practice and leadership for social and economic justice.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor
SWK 617 - Social Work Practice in the Field of Addictions Credits: 3

This elective course will focus on the topic of addictions, preparing students to recognize and intervene when clients and their families demonstrate addiction problems in a wide range of social service agencies and host settings, such as child welfare, mental health, aging, schools, healthcare, 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.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

SWK 618 - Human Rights in Social Work Credits: 3

This elective course includes the examination of the major human rights documents and their impact on social work practice as well as the exploration of strategies and techniques used in the rights-based approach in social work.

Prerequisite(s): SWK 601 (may be taken concurrently) or SWK 531 or permission of instructor

SWK 619 - Global Perspectives in Social Work Credits: 3

In this elective course, 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 different areas. 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 also be examined.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently) or permission of instructor

SWK 620 - Advanced Practice with Groups and Families Credits: 3

This course builds on the practice concepts learned during the foundation year, particularly in the SWK 520/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.

Prerequisite(s): SWK 531 or SWK 601
Corequisite(s): SWK 630

SWK 621 - Advanced Macro Social Work Practice Credits: 3

The course 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 the oppressed populations.

Prerequisite(s): SWK 531 or SWK 601
Corequisite(s): SWK 631

SWK 622 - Military Social Work Credits: 3
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. Through interactive practice activities, including the use of case studies, film, role-plays, and guest speakers, students will develop an understanding of narrative therapy as an empowering approach in working with diverse populations.

Prerequisite(s): SWK 601 (may be taken concurrently) or SWK 531 or permission of instructor

**SWK 623 - Narrative Therapy in Social Work Practice**

Credits: 3

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 reauthor 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 role-plays, students will develop an understanding of narrative therapy as an empowering approach in working with diverse populations.

Prerequisite(s): SWK 601 (may be taken concurrently) or SWK 531 or permission of instructor

**SWK 625 - Advanced Research Methods**

Credits: 3

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.

Prerequisite(s): SWK 531 or SWK 601

**SWK 630 - Advanced Field Practicum I**

Credits: 3

Provides students with practical experience (250 hours) in supervised direct-service activities across all client systems, from the individual's 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.

Prerequisite(s): SWK 531 or SWK 601
Corequisite(s): SWK 620

**SWK 631 - Advanced Field Practicum II**

Credits: 3

Provides students with practical experience (250 hours) in supervised direct-service activities across all client systems, from the individual's 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.

Prerequisite(s): SWK 630
Corequisite(s): SWK 621
SWK 640 - Selected Topics in Social Work Credits: 3

Provides the opportunity for a range of topics to explore issues and concerns for the social work profession. Designed for advanced graduate students.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently)

SWK 641 - Selected Topics in Social Work Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

Prerequisite(s): SWK 531 or SWK 601 (may be taken concurrently)

SWK 642 - Selected Topics in Social Work Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

Teacher Education

TCH 423 - Integrating Literature in Middle Grades Credits: 3

Focuses on broadening knowledge base and understanding of children's/young adults' literature available for use with students in content area study. Literature discussed with exploration of incorporating it into middle level content subjects and using it as a tool to enhance literacy and content learning.

TCH 445 - Strategies for Effective Classroom Management Credits: 3

Presents historical perspective of past practices in classroom management strategies, including discipline techniques. Relates current school law to what is legal for teachers in managing classrooms. Surveys current theories and programs regarding classroom and time management strategies. Provides practical suggestions based upon research findings as to how to more effectively and efficiently develop a proactive environment conducive to instruction. Explores multicultural settings and inclusion dynamics as they relate to classroom management strategies.

TCH 490 - Selected Topics in Teacher Education Credits: 1-3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

TCH 491 - Selected Topics in Teacher Education Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

TCH 492 - Selected Topics in Teacher Education Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

TCH 493 - Selected Topics in Teacher Education Credits: 3

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.
TCH 494 - Selected Topics in Teacher Education Credits: 3
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

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Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

TCH 499 - Selected Topics in Teacher Education Credits: 3
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

TCH 501 - Instructional Strategies Credits: 3
This course will examine instructional strategies that are utilized in a modern classroom as well as research-based recommendations for instruction. Best practices and instructional strategies to support the diverse student population are critical components that will be addressed. The course will include a focus on how instructional strategies impact and influence differentiated instruction, delivery of curricular content, scope and sequence, standards implementation, and program evaluation.

TCH 502 - Strategies for Critical Thinking and Problem-Solving Credits: 3
Offers both a research base and real-world classroom applications for infusing critical thinking and problem solving into all levels of curricular areas. Encourages participants to create learning environments fostering intellectual curiosity and inventiveness. Explores strategies that challenge students to pose problems and search for ways to solve them. Incorporates performance-based assessment.

TCH 505 - Designing Blended and Online Learning Environments Credits: 3
This course is designed to prepare students with knowledge and skills to integrate current and emerging technology to support instruction and assessment in blended and online environments. Students design instructional plans, develop assessments, evaluate online resources, and create digital media in alignment with professional, technological, and academic standards and based on current research and big data analytics. Participants apply nationally recognized best practices of online learning environment designs that ensure social, cognitive, and teaching presence.

TCH 511 - Framework for Teaching and Learning Credits: 3
This course explores the theory and practice of integrating pedagogy into curricular practices and assessment. Foundational and current educational theories will be addressed. The course will assist the learner in reflecting upon how these concepts drive instructional practices in today's challenging classroom environment and will explore how standards and accountability will impact multiple instructional approaches and strategies.

**TCH 524 - Middle School Curriculum and Assessment**

Credits: 3

Surveys basic characteristics of middle school organizational patterns, curriculum design, and evaluation models. Evaluates student development, instructional strategies, and assessment issues. Reviews these areas based on current research.

**TCH 542 - Modern Elementary School Mathematics**

Credits: 3

Deals with the structure of mathematics: reasoning, sets, numeration systems, operations and their properties and number sentences (equalities and inequalities). Discovery learning of the mathematics is emphasized.

Prerequisite(s): Undergraduate course in teaching of mathematics or permission of the instructor.

**TCH 546 - Teaching Science in the Elementary School**

Credits: 3

Explores a variety of strategies and techniques for effective N-8 science teaching. An understanding of related science principles is interwoven with practical applications for the classroom. Science curriculum construction and analysis is an emphasis. Science, technological, and societal connections are considered.

Prerequisite(s): Undergraduate course in elementary science methods or permission of the instructor.

**TCH 560 - Making Social Studies Dynamic**

Credits: 3

Eliminates the "bore" and "gore" from social studies by studying the impact of dynamic forces on the technological age of information. Explores the arena for modern media literacy. Examines social forces, controversial issues, current events, cooperative learning, conflict resolution, and pragmatic research findings about the social studies. Investigates how to make the classroom teacher's social studies more relevant and meaningful.

Prerequisite(s): An undergraduate course in teaching of social studies or permission of the instructor.

**TCH 575 - Advanced Child Development**

Credits: 3

Stresses the results of scientific studies that are used to examine cognitive, physical, and social processes in child development from birth to pre-adolescence with an emphasis placed on the early years. Influence of child's environment, home, and school explored.

**TCH 581 - Leadership at the Classroom, Teaching, and School Level**

Credits: 3

The process of instruction should incorporate continual improvement. Educators today rely on improving their own instruction, collaborating with peers, and contributing to the overall school and/or district improvement. This course will focus on utilizing a three-pronged approach of selecting evidence-based practices for classroom instruction, data-informed decision making, and peer collaboration for improvement. The student will have a well-rounded understanding of the leadership roles they may serve within a school environment.

**TCH 594 - Selected Topics in Teacher Education**

Credits: 1-3
Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**TCH 595 - Selected Topics in Teacher Education Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**TCH 596 - Selected Topics in Teacher Education Credits: 3**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**TCH 597 - Student Teaching Practicum and Integrated Action Research Credits: 1-12**

This capstone course consists of two parts. The first part is a twelve-week student teaching experience where students assume incrementally more responsibilities for lesson planning, assessment, classroom management, and other teacher-related duties under the guidance of an experienced mentor teacher and a university supervisor. Assignments during this time include a comprehensive unit plan and an assessment portfolio. The second part of the course is a four-week period where students complete and present their professional portfolios and action research projects to a panel of teachers and university professors.

**TCH 599 - Independent Study Credits: 3**

Opportunity for student to pursue in-depth study on a topic or issue of personal interest under the direction and guidance of a department faculty member.

**TCH 600 - Elements of Research Credits: 3**

Includes a study of the nature and types of research, the selection of appropriate research topics, research techniques including simple statistics, the use of the library resources in research and the systematic collection, evaluation and presentation of research data. Students are guided in developing an action research project in the area of elementary education. Students who have departmental approval and are enrolled in TCH 612 and/or TCH 613 , Thesis, may use the course to assist them in preparing a research proposal. TCH600 must be completed within the first 15 crs. leading to a master's degree.

**TCH 609 - Research Informed Practices Credits: 3**

This course serves as the capstone experience for graduate students enrolled in the C&I program (including early childhood, elementary, middle, and secondary education). It will assist students in synthesizing theory and practice as students engage in studying the action research process. The focus will be that action research is a form of self-reflective systematic inquiry which has its goals the improvement of their own personal teaching practice, a better understanding of that practice, and how their instruction can be improved. Inquiry may focus on students, instructional practices and assessment, the teacher's underlying philosophy or belief system, or curricular issues. The major assignment for the course will be the completion of an action research project undertaken in an educational setting in which the student is engaged in professional practice.

Prerequisite(s): TCH 600

**TCH 610 - Internship II Credits: 3**

Provides opportunity to gain practical experience in chosen career area.
TCH 612 - Thesis I Credits: 3

TCH 613 - Thesis II Credits: 3

TCH 620 - Curricular Decision Planning: Standards, Assessment & Accountability Credits: 3

Curricular Decision Planning: Standards, Assessment & Accountability examines the different attributes, best practices, approaches and resources for curricular design, improvement, decision making, as well as utilization of data for classroom and school wide instruction and accountability. Pennsylvania?s Standards Aligned System (SAS), Common Core Standards, Alternative Academic Standards and other state and national guiding documents will be used as the basis for investigating how curricular planning, assessment, accountability and student learning performance are interconnected. In addition to foundational research in curriculum, students will also utilize the SAS portal to focus on integrating the components of Standards, Assessments, Curriculum Framework, Instruction, Materials and Resources, and Safe and Supportive Schools. This course meets the requirements for conversion to Level II Certification.

Teaching English as Second Language

TESL 450 - Foundations of English Language Learner Credits: 3

This course is designed to provide a beginning foundation to the instruction of English Language Learners in a diverse classroom setting. The course will address the role of culture in education and will provide practical suggestions for assisting culturally and linguistically diverse students in learning to thrive in a classroom environment.

TESL 510 - Second Language Acquisition: Theory, Models, and Principles Credits: 3

This course is designed to provide a theoretical foundation to the instruction of English Language Learners in a diverse classroom setting. The course will address the role of theory, empirical research, and program design to meet the needs of ESL students.

Prerequisite(s): TESL 450 with minimum grade of B

TESL 520 - Literacy and Linguistically Diverse Cultures and Communities Credits: 3

This course focuses on developing understanding of culture and its impact on literacy with linguistically diverse populations. Multicultural literature, community literacies, and strategies to promote growth in literacy are discussed.

Prerequisite(s): TESL 450 with minimum grade of B and TESL 510 with minimum grade of B

TESL 530 - Instructional Methods and Assessment of English Language Learners Credits: 4

This course is designed to develop instructional methods and assessment methods for teachers of linguistically diverse students.

Prerequisite(s): TESL 450 with minimum grade of B and TESL 510 with minimum grade of B and TESL 520 with minimum grade of B
TESL 540 - Practicum: Teaching English Language Learners Credits: 3

This course is designed to provide a practicum experience working with a linguistically diverse population. You will be formally observed and provided with feedback on your instruction.

Prerequisite(s): TESL 450 with minimum grade of B and TESL 510 with minimum grade of B and TESL 520 with minimum grade of B and TESL 530 with minimum grade of B

Faculty and Administration

University Administration

CHARLES E. PATTERSON, President

NICOLE R. HILL, Interim Provost and Vice President for Academic Affairs

For the most current information on other members of the Shippensburg University administration, please follow this link:

http://www.ship.edu/admin/

Faculty Members

ABDULMAJEED M. ABDURRAHMAN, Professor of Physics (2002)
B.S., University of Tennessee; M.A., University of Mississippi; Ph.D., University of Oxford-United Kingdom

ABDULKADIR ADEN, Associate Professor of the Library (2018)
B.S., Lincoln University; M.A., Indiana University of Pennsylvania; M.S.L.S., Clarion University of Pennsylvania

MOAYYAD AL NASRA, Professor of Civil and Mechanical Engineering (2019)
B.S. and M.S., Yarmouk University-Jordan; Ph.D., Old Dominion University

MICHAEL T. APPLE GARTH, Associate Professor of Geography/Earth Science (2001)
B.S., Northern Arizona University-Flagstaff; M.A., University of Northern Iowa-Cedar Falls; Ph.D., Arizona State University-Tempe

ALICE J. ARMSTRONG, Associate Professor of Computer Science (2008)
B.S., M.S., and D.Sc., George Washington University

ALLEN J. ARMSTRONG, Professor of Physics (1994)
B.S., Montana State University; M.S. and Ph.D., University of Colorado

DENNIS J. ARNOLD, Instructor of Mathematics (2019)
B.S. and M.Ed., Shippensburg University

MARCIE L. BAER-LEHMAN, Professor of Biology (2000)
B.S., Loyola College; Ph.D., University of Maryland

LONCE H. BAILEY, Professor of Political Science (2009)
B.A., University of California, Irvine; M.A., University of Virginia; Ph.D., University of Massachusetts
DAVID F. BATEMAN, Professor of Educational Leadership & Policy and Special Education (1995)
B.A., University of Virginia; M.Ed., College of William & Mary; Ph.D., University of Kansas

LYNN F. BAYNUM, Associate Professor of Teacher Education (2002)
B.S., East Stroudsburg University; M.S., University of Scranton, Ph.D., Marywood University

JOSEPH B. BECK, Associate Professor of Management/Marketing/Entrepreneurship (2010)
B.A., University of California, Berkeley; M.B.A., University of Oregon; Ph.D., University of California, Irvine

WENDY S. BECKER, Professor of Management/Marketing/Entrepreneurship (2008)
B.A., M.S. and Ph.D., Pennsylvania State University

LAURA BECKMAN, Assistant Professor of Criminal Justice (2017)
B.A., Bloomsburg University of Pennsylvania; M.S., Villanova University; Ph.D., Arizona State University

FETHI BELKHOUCHE, Associate Professor of Computer, Electrical, and Software Engineering (2022)
B.S., Universite de Tiemen-Algeria; M.S. and Ph.D., Tulane University

SAMUEL BENBOW, Associate Professor of Social Work/Gerontology (1999)
B.S. and M.S., Shippensburg University; Ph.D., Indiana University of Pennsylvania

CHAD H. BENNETT, Associate Professor of Academic Engagement and Exploratory Studies (2008)
B.A. and M.S., Shippensburg University; Ed.D., Duquesne University

SHERRI E. BERGSTEN, Associate Professor of Biology (2005)
B.S., Haverford College; Ph.D., Princeton University

CORRINE E. BERTRAM, Associate Professor of Psychology (2009)
B.A., University of Northern Iowa; M.A., Hunter College; Ph.D., The Graduate Center of the City University of New York

MICHAEL W. BIBBY, Professor of English (1993)
B.A., Ohio State University; M.A. and Ph.D., University of Minnesota

JOHN D. BLOOM, Professor of History/Philosophy (2006)
B.A. and M.A., University of California; Ph.D., University of Minnesota

CYNTHIA A. BOTTERON, Professor of Political Science (2002)
B.A., University of New Mexico; M.A., Colorado State University; Ph.D., University of Texas at Austin

DARA P. BOURASSA, Professor of Social Work/Gerontology (2006)
B.A., and M.S.W., University of Pittsburgh; Ph.D., University of Maryland-Baltimore

C. NIELSEN BRASHER, Professor of Political Science (1995)
B.A. and M.A., University of Colorado; Ph.D., American University

WILLIAM A. BRAUN, Professor of Exercise Science (2004)
B.A., Indiana University; M.S., Texas Christian University; Ph.D., University of Toledo

CLIFFORD W. BROOKS, Professor of Counselor Education (1997)
B.A., University of Richmond; M.S., Virginia Commonwealth University; Ed.S. and Ed.D., College of William & Mary

GWENDOLYN V. BROWN-JACKSON, Associate Professor of Teacher Education (2001)
B.S.Ed. and M.Ed., Shippensburg University; Ed.D., Duquesne University
PHILIP A. BROYLES, Professor of Sociology/Anthropology (1993)
B.A., M.A. and Ph.D., Washington State University

RHONDA A. BRUNNER, Associate Professor of Educational Leadership & Policy and Special Education (2017)
B.S.Ed. and M.Ed., Shippensburg University; Ed.D., Pennsylvania State University

LANCE E. BRYANT, Associate Professor of Mathematics (2009)
B.A., Berea College; Ph.D., Purdue University

STEVEN BURG, Professor of History/Philosophy (1999)
B.A., Colgate University; M.A. and Ph.D., University of Wisconsin-Madison

JAMONN CAMPBELL, Professor of Psychology (2002)
B.A., Slippery Rock University; M.A., Shippensburg University; Ph.D., Miami University-Oxford, Ohio

MICHAEL CAMPBELL, Professor of Art and Design (1990)
B.A. and M.A., Indiana University; M.F.A., Ohio University

JERRY A. CARBO, Professor of Management/Marketing/Entrepreneurship (2008)
B.B.A., Texas Christian University; M.I.L.R. and Ph.D., Cornell University; J.D., Dickinson School of Law, Pennsylvania State University

ALLISON C. CAREY, Professor of Sociology/Anthropology (2004)
B.A., Trinity College; Ph.D., University of Michigan

EDWARD J. CARLIN, Professor of Communication, Journalism, and Media (1994)
B.A., Heidelberg College; M.A. and Ph.D., Bowling Green State University

CHRISTOPHER O. CARLTON, Assistant Professor of Counseling Services (2008)
B.A., Miami University; M.A., Towson University; Ph.D., Brigham Young University

JOSEPH T. CATANIO, Associate Professor of Accounting and Management Information Systems (2010)
B.S., Rutgers University; M.S. and Ph.D., New Jersey Institute of Technology

LAURIE J. CELLA, Professor of English (2007)
B.A., State University of New York, Geneseo; M.A. and Ph.D., University of Connecticut

MATTHEW J. C. CELLA, Associate Professor of English (2012)
B.A., University of Rochester; M.A. and Ph.D., University of Connecticut

LINDA M. CHALK, Assistant Professor of Counseling Services (2011)
B.A., Kalamazoo College; M.A. and Ph.D., University of Notre Dame

DHIMAN CHATTOPADHYAY, Assistant Professor of Communication, Journalism, and Media (2019)
B.A. and M.A., Calcutta University-India; Ph.D., Bowling Green State University (OH)

JI YOUNG CHOI, Professor of Mathematics (2002)
B.A. and M.S., Pusan National University; Ph.D., Iowa State University

SUNHEE CHOI, Associate Professor of Management/Marketing/Entrepreneurship (2012)
B.A., Chonbuk National University; M.B.A., Marshall University; Ph.D., Texas Tech University

JACQUELYN CHOVA NES, Assistant Professor of Educational Leadership and Policy and Special Education (2018)
B.A. & M.Ed., University of Pittsburgh; Ed.D., Lehigh University

JENNIFER A. CLEMENTS, Professor of Social Work/Gerontology (2005)
B.A./B.S.W., M.S.W. and Ph.D., University of Maryland
MICHAEL R. COHEN, Assistant Professor of Physics (1994)
B.A., University of Chicago; M.S. and Ph.D., Cornell University

NEIL O. CONNELLY, Professor of English (2010)
B.A., Pennsylvania State University; M.F.A., McNeese State University

MICHAEL K. COOLSEN, Professor of Management/Marketing/Entrepreneurship (2003)
B.A., Lafayette College; M.S., Shippensburg University; Ph.D., University of North Carolina at Chapel Hill

SEAN R. CORNELL, Associate Professor of Geography/Earth Science (2006)
B.A., University of Rochester; M.S. and Ph.D. University of Cincinnati

THOMAS C. CROCHUNIS, Associate Professor of English (2005)
B.A., Swarthmore College; M.A., Middlebury College; Ph.D. Rutgers University

BENJAMIN R. CULBERTSON, Associate Professor of Art and Design (2005)
B.A. Berea College; M.F.A., Alfred University

FRED S. DADE, Assistant Professor of Music/Theatre Arts (2002)
B.M., Wheaton College; M.M., Roosevelt University

ALISON D. DAGNES, Professor of Political Science (2003)
B.A., St. Lawrence University; M.A., University of Massachusetts at Amherst; Ph.D., University of Massachusetts

VIET T. DAO, Professor of Accounting and Management Information Systems (2008)
B.Sc., Hanoi University of Technology; M.Sc., University of Leeds; Ph.D., University of Oklahoma

ARLEN DAVIS, Associate Professor of Teacher Education (2006)
B.A., Xinzhou Teachers University; M.S. and Ph.D., Old Dominion University

PABLO DELIS, Professor of Biology (2002)
B.S., University of Sevilla, Spain; M.S., University of South Florida; Ph.D., University of Florida

JOAO PAULO DIAS, Assistant Professor of Civil and Mechanical Engineering (2019)
B.S. & M.S., Sao Paulo State University-Brazil; Ph.D., Federal University of Santa Catarina-Brazil

ALLEN DIETERICH-WARD, Professor of History/Philosophy (2008)
B.A., College of Wooster; M.A. and Ph.D., University of Michigan

AARON W. DOBBS, Professor of the Library (2006)
B.A., Wagner College; M.S., University of Tennessee; M.S., Austin Peay State University

STEVEN M. DOLBIN, Professor of Art and Design (2000)
B.A., Shippensburg University; M.F.A., Pratt Institute

MARCY J. DOUGLASS, Associate Professor of Counselor Education (2007)
B.A., Lebanon Valley College; M.S., University of Nevada; Ph.D., College of William & Mary

MICHAEL W. DRAGER, Associate Professor of Communication, Journalism, and Media (2001)
B.A., Millersville University of Pennsylvania; M.S., Shippensburg University; Ph.D., Michigan State University

SCOTT A. DRZYZGA, Professor of Geography/Earth Science (2004)
B.A., State University of New York at Geneseo; M.A., Michigan State University

JAMES G. EDWARDS, Associate Professor of History/Philosophy (2001)
B.A., University of Iowa; M.A. and Ph.D., Indiana University
YANCY D. EDWARDS, Associate Professor of Management/Marketing/Entrepreneurship (2018)
B.A., Franklin and Marshall College; M.S., Johns Hopkins University; Ph.D., Ohio State University

LAWRENCE EPPARD, Associate Professor of Sociology/Anthropology (2017)
B.S., College of Saint Rose; M.S., Syracuse University

TREVER R. FAMULARE, Associate Professor of Music/Theatre Arts and Director of Bands (2001)
B.S., College of Saint Rose; M.S., Syracuse University

ALISON E. FEENEY, Professor of Geography/Earth Science (1998)
B.A., University of Connecticut; M.S., Portland State University; Ph.D., Michigan State University

THOMAS P. FEENEY, Professor of Geography/Earth Science (1997)
B.S., State University of New York; M.S., Western Kentucky University; Ph.D., University of Georgia

MATTHEW D. FETZER, Professor of Criminal Justice (2011)
B.S. and M.S., Shippensburg University; M.A. and Ph.D., University at Albany

ELIZABETH A. FISHER, Professor of Social Work/Gerontology (2004)
B.A., Millersville University of Pennsylvania; M.S.W., University of Maryland; Ph.D., University of Maryland-Baltimore

MIRANDA S. FISHER, Assistant Professor and Assistant Director of Sports Medicine (2013)
B.S., Lock Haven University; M.S., California University of Pennsylvania

REBECCA S. FITZ, Assistant Professor and Associate Director of Sports Medicine (2008)
B.S., East Stroudsburg University of Pennsylvania; M.S., Shippensburg University

SAMUEL FORLENZA, Associate Professor of Exercise Science (2014)
B.A., State University of New York at Geneseo; M.S., Miami University; Ph.D., University of Marylan-Baltimore

ERICA D. GALIOTO, Associate Professor of English (2007)
B.A., Boston College; M.A. and Ph.D., State University of New York at Buffalo

HOLLY GARNER, Assistant Professor of Teacher Education (2019)
B.S. and M.Ed., Shippensburg University

VEENA M. GEEBAN, Assistant Professor of Counseling Services (2019)
B.S., M.A., and Psy.D., Marywood University

THOMAS C. GIBBON, Assistant Professor of Educational Leadership & Policy and Special Education (2001)
B.A., Gettysburg College; M.S., Western Maryland College

CHARLES D. GIRARD, Associate Professor of Computer Science and Engineering (2004)
B.S., Furman University; Ph.D., University of South Carolina

NATHAN W. GOATES, Associate Professor of Management/Marketing/Entrepreneurship (2006)
B.S., Brigham Young University; M.B.A., University of Utah; Ph.D., Vanderbilt University

JOHNNY P. GOBLE, Assistant Professor of Mathematics (2019)
B.S., Franciscan University of Steubenville; M.S. & Ph.D., Florida State University

DEBORAH L. GOCHEANUR, Associate Professor of Mathematics (2010)
B.S., Pennsylvania State University; M.S., Shippensburg University; Ph.D., American University

DAVID F. GODSHALK, Professor of History/Philosophy (1994)
B.A., University of South Carolina; M.A. and Ph.D., Yale University
TOMOKO K. GRABOSKY, Professor of Counseling Services (2004)
B.A., State University of New York; M.S. and Ph.D., Syracuse University

MICHAEL E. GREENBERG, Associate Professor of Political Science (2005)
B.A., Temple University; Ph.D., University of Texas at Austin

JAMES D. GRIFFITH, Professor of Psychology (2003)
B.A., Waynesburg College; M.A., Central Michigan University; Ph.D., Texas Christian University

ASHLEY GRIMM, Associate Professor and Associate Director of Athletics (2012)
B.S. and M.B.A., Clarion University of Pennsylvania

SARA A. GROVE, Professor of Political Science (1992)
B.A., Pennsylvania State University; M.A. and Ph.D., University of North Carolina at Chapel Hill; J.D., Dickinson School of Law

STEVEN J. HAASE, Professor of Psychology (2002)
B.S., University of Illinois at Urbana-Champaign; M.S. and Ph.D., University of Wisconsin-Madison

ROBERT HALE, Professor of Psychology (1992)
B.A., University of Maine; M.S., Northwestern State University of Louisiana; Ph.D., University of Oklahoma

JAMES E. HAMBLIN, Professor of Mathematics (2002)
B.A., Cornell University; Ph.D., University of Wisconsin-Madison

M. BLAKE HARGROVE, Professor of Management/Marketing/Entrepreneurship (2012)
B.A., State University of New York; M.A., Webster University; Ph.D. University of Texas at Arlington

REBECCA HARRIS, Assistant Professor of Academic Engagement and Exploratory Studies (2017)
B.A. and M.S., Shippensburg University; Ph.D., Indiana University of Pennsylvania

WILLIAM C. HARRIS, Professor of English (2001)
B.A., Amherst College; M.A. and Ph.D., Johns Hopkins University

SHARON HARROW, Professor of English (2000)
B.A., University of Michigan; M.A. and Ph.D., University of Arizona

MARK L. HARTMAN, Associate Professor of Music/Theatre Arts (2008)
B.A., University of Winnipeg; M.M. and D.M.A., University of North Carolina

THOMAS C. HATVANY, Assistant Professor of Psychology (2018)
B.S. and B.A., Green Mountain College; M.S. and Ph.D., Oklahoma State University

TIMOTHY W. HAWKINS, Professor of Geography/Earth Science (2004)
B.A., Colgate University; M.A. and Ph.D., Arizona State University

RUSSELL C. HEDBERG II, Assistant Professor of Geography/Earth Science (2018)
B.A., Colgate University; M.A. and Ph.D., Arizona State University

KYLE R. HEIM, Associate Professor of Communication, Journalism, and Media (2015)
B.A., Macalester College; M.S., Northwestern University; Ph.D., University of Missouri-Columbia

SHARNINE S. HERBERT, Associate Professor of Communication Studies (2002)
B.S., Morgan State University; M.A., University of South Carolina; Ph.D., Howard University

SHARI L. HORNER, Professor of English (1998)
B.A., Luther College; Ph.D., University of Minnesota
CHEN HUO, Assistant Professor of Computer, Electrical, and Software Engineering (2017)
B.A., Luther College; Ph.D., University of Minnesota

TODD M. HURD, Professor of Biology (2000)
B.S., State University of New York College of Environmental Science and Forestry; M.S., University of Maine; Ph.D., State University of New York College of Environmental Science and Forestry

DAVID W. HWANG, Associate Professor in Finance and Supply Chain Management (2013)
B.U.E. and M.T.E., Hanyang University; M.B.A. and Ph.D., University of Toledo

GRANT L. INNERST, Assistant Professor of Mathematics (2019)
B.S., Shippensburg University; M.S. and Ph.D., Baylor University

CLAIRE A. JANTZ, Professor of Geography/Earth Science (2005)
B.A., University of Tennessee; M.A. and Ph.D., University of Maryland

DIANE L. JEFFERSON, Assistant Professor and Director of Multicultural Student Affairs (1984)
B.A., Shippensburg University; M.A., University of Northern Iowa; M.S., Divinity, Payne Theological Seminary

STEPHANIE A. JIRARD, Professor of Criminal Justice (2003)
B.A., Cornell University; J.D., Boston College Law School

KAREN JOHNSON, Associate Professor of Academic Engagement and Exploratory Studies (2009)
B.S., University of Southern Mississippi; M.Ed., Pennsylvania State University; Ed.D., Liberty University

DAVID E. KALIST, Professor of Economics (2003)
B.S., Oakland University; M.S., Walsh College; Ph.D., Wayne State University

JEB S. KEGERREIS, Associate Professor of Chemistry and Biochemistry (2009)
B.S., Shippensburg University; Ph.D., University of Illinois

DAVID I. KENNEDY, Associate Professor of Mathematics (2005)
B.A., Bates College; M.S. and M.Ed., University of Massachusetts; Ph.D., West Virginia University

CHRISTOPHER KEYES, Associate Professor of Teacher Education (2012)
B.A., University of Utah; M.Ed., Westminster College; Ph.D., Vanderbilt University

HYUNPYO KIM, Associate Professor of Accounting and Management Information Systems (2019)
B.A., B.B.A., and M.B.A., Chung-Ang University-South Korea; M.S., Texas Tech University; Ph.D., Sungkyunkwan University-South Korea

CHAD M. KIMMEL, Associate Professor of Sociology/Anthropology (2003)
B.A., Millersville University of Pennsylvania; M.A., Indiana University of Pennsylvania; Ph.D., Western Michigan University

KIM M. KLEIN, Professor of History/Philosophy (1997)
B.A. and M.A., Creighton University; Ph.D., Johns Hopkins University

MISTY L. KNIGHT Professor of Human Communication Studies (2008)
B.A. and M.A., West Texas A&M University; Ph.D., University of Southern Mississippi

RICHARD A. KNIGHT, Associate Professor of Human Communication Studies (2006)
B.A., Seton Hall University; M.A., Bloomsburg University of Pennsylvania; Ph.D., University of Southern Mississippi

CYNTHIA A. KOLLER, Associate Professor of Criminal Justice (2012)
B.S. and M.S., University of Wisconsin; Ph.D., University of Cincinnati
JANET KOSCIANSKI, Professor of Economics (1990)
B.A., Rowan University; M.S. and Ph.D., Southern Illinois University-Carbondale

EMILY B. KRAMER, Associate Professor of Biology (2013)
B.S., Wilkes University; M.S., Bloomsburg University of Pennsylvania; Ph.D., University of Maryland

KURT L. KRAUS, Professor of Counselor Education (1998)
B.S., M.Ed. and Ed.D., University of Maine

CARLA T. KUNGL, Associate Professor of English (2001)
B.A., Wittenberg University; M.A. and Ph.D., Case Western Reserve University

IAN M. LANGLELLA, Professor of Finance and Supply Chain Management (2008)
B.S., Maine Maritime Academy; M.A. and Ph.D., University of Magdeburg

KARA A. LASKOWSKI, Professor of Communication Studies (2004)
B.A., Juanita College; M.A. and Ph.D., Pennsylvania State University

JEONGHWA LEE, Associate Professor of Computer Science (2006)
B.S. and M.S., Chonnam National University; Ph.D., University of Kentucky

SANGKOOK LEE, Assistant Professor of Computer Science and Engineering (2014)
B.S. and M.S., Sogang University; M.S. and Ph.D., State University of New York at Buffalo

GRETCHEN LEITNER, Instructor of Communication Studies (2020)
B.A., Central College; M.A., Shippensburg University

ROBERT LESMAN, Associate Professor of Modern Languages (2006)
B.A., Brown University; M.A. and Ph.D., University of Texas at Austin

MICHAEL LEVINESTEIN, Assistant Professor of Academic Engagement and Exploratory Studies (2019)
B.S., University of Pittsburgh; M.Ed. and Ph.D., Kent State University

SANDRA M. LEWIS, Assistant Professor of Teacher Education (2020)
B.A., Bloomsburg University of Pennsylvania; M.Ed., Shippensburg University; M.Ed., Pennsylvania State University

STEVEN B. LICHTMAN, Associate Professor of Political Science (2006)
B.A. and Ph.D., Brandeis University; J.D., New York University

THEO S. LIGHT, Professor of Biology (2004)
B.S., University of California-Berkley; Ph.D., University of California-Davis

FAN LIU, Associate Professor of Finance and Supply Chain Management (2013)
B.A., Tongji University; M.S., Katholieke Universiteit Leuven; Ph.D., Georgia State University

YUCONG LIU, Associate Professor of Accounting and Management Information Systems (2017)
B.E., Chongqing University-China; M.B.A., Pittsburg State University; Ph.D., University of Kansas

JAMES B. LOHREY, Assistant Professor of Communication, Journalism, and Media (1993)
B.A. & M.A., State University of New York at Buffalo

KARL G. LORENZ, Professor of Sociology/Anthropology (1993)
B.A., University of Colorado; M.A. and Ph.D., University of Illinois

XIN-AN (LUCIAN) LU, Associate Professor of Human Communication Studies (2000)
B.A., Shaanxi Teachers University; M.A., Foreign Affairs College; Ph.D., Southern Illinois University-Carbondale
ALISON LUCE-FEDROW, Associate Professor of Biology (2015)
B.S., University of Pittsburgh; M.S., Shippensburg University; Ph.D., Kansas State University

MARGARET E. LUCIA, Professor of Music/Theatre Arts (1996)
B.M. and M.M., Indiana University; Ph.D., University of California

MICHAEL J. LYMAN, Professor of Social Work/Gerontology (2001)
B.S., Brigham Young University; M.S.W. and Ph.D., University of Utah

ARELIES MADERO, Associate Professor of Criminal Justice (2017)
B.S., Universidad de los Andes-Venezuela; M.S. and Ph.D., University of Cincinnati

WESLEY R. MALLICONE, Assistant Professor and Director of Sports Medicine (2008)
B.S., Duquesne University; M.S., Shippensburg University

ANDREA M. MALTOM, Associate Professor of Teacher Education (2002)
B.S. and M.Ed., University of Great Falls, Ed.D, Duquesne University

TIMOTHY J. MARET, Professor of Biology (1996)
B.S., Eastern New Mexico University; M.S., University of Wyoming; Ph.D., Arizona State University

PAUL G. MARR, Professor of Geography/Earth Science (1996)
B.A. and M.S., University of North Texas; Ph.D., University of Denver

SABRINA MARSHALL, Assistant Professor of Academic Services (2011)
B.S., M.Ed., and Ph.D., University of Maryland

OTSO MASSALA, Associate Professor of Finance and Supply Chain Management (2016)
M.S., Lappeenranta University of Technology-Finland; M.S. and Ph.D., INSEAD; Ph.D., Sorbonne University-France

ROBIN L. McCANN, Associate Professor of Chemistry and Biochemistry (2002)
B.S., Philadelphia College of Pharmacy and Science; Ph.D., Pennsylvania State University

KATHERINE G. McGIVNEY, Professor of Mathematics (2000)
B.S., University of Hartford; M.S., Northeastern University; Ph.D., Lehigh University

MELISSA J. McNELIS, Assistant Professor of Communication Studies (2018)
B.A., James Madison University; M.A., Auburn University; Ph.D., University of Arizona

DIANE T. McNICHOLS, Professor of Mathematics (1987)
B.A., Hunter College; M.S. and Ph.D., University of South Carolina

LUIS A. MELARA, Associate Professor of Mathematics (2008)
B.S., University of California; M.A. and Ph.D., Rice University

ALISON MELLOTT, Assistant Professor of Teacher Education (2020)
B.S. & M.Ed., Shippensburg University; Ph.D., Liberty University

BENJAMIN W. MEYER, Associate Professor of Exercise Science (2009)
B.S, University of Minnesota; M.S. and Ph.D., Indiana University

CARRIE A. MICHAELS, Professor and Senior Associate Director of Athletics (2008)
B.S., Duquesne University; M.S., Slippery Rock University of Pennsylvania

JEFFREY A. MICHAELS, Professor and Director of Athletics (2005)
B.A., Lycoming College; M.S., Slippery Rock University of Pennsylvania
TANYA L. MILLER, Assistant Director of Sports Medicine, (2013)
B.S., Shippensburg University; M.S., Bloomsburg University of Pennsylvania

DORLISA J. MINNICK, Associate Professor of Social Work/Gerontology (2007)
B.A., Shippensburg University; M.S.W., State University of New York at Stony Brook; Ph.D., Catholic University of America

BLANDINE M. MITAUT, Associate Professor of Modern Languages (2008)
M.A., Universite de Bourgogne; M.A., Miami University; Ph.D., Emory University

KIRK A. MOLL, Associate Professor of Library (2005)
B.A., Cook College, Rutgers University; M.Div., New Brunswick Theological Seminary; M.S., Columbia University

MICHAEL C. MOLTZ, Associate Professor of Political Science (2017)
B.A. & M.Ed., University of Nevada, Reno; Ph.D., University of Tennessee, Knoxville

DAVID B. MONAGHAN, Associate Professor of Sociology/Anthropology (2017)
B.A., Tufts University; Ph.D., The Graduate Center, City University of New York

ANA MORAÑA, Professor of Modern Languages (2002)
B.A. and M.A., Instituto de Profesores "Artigas"; Ph.D., Ohio State University

SUZANNE MORIN, Professor of Psychology (1991)
B.S., Nebraska Wesleyan University; M.A. and Ph.D., University of Connecticut

SHELLEY MORRISSETTE, Associate Professor of Management/Marketing/Entrepreneurship (2002)
B.S., M.B.A. and M.A., Old Dominion University; Ph.D., University of Mississippi

SHANNON R. MORTIMORE, Associate Professor of English (2009)
B.A., M.A., and Ph.D., Western Michigan University

GHOLOMREZA NASER, Associate Professor of Civil and Mechanical Engineering (2019)
B.A.Sc., University of Shiraz-Iran; M.A.Sc., University of Tarbit-Modarres-Iran; Ph.D., University of Toronto

ROBERT O. NEIDIGH, Assistant Professor of Finance and Supply Chain Management (2003)
B.S.B.A., Shippensburg University; M.M.M., and Ph.D., Pennsylvania State University

KATHRYN S. NEWTON, Assistant Professor of Counselor Education (2007)
B.A., University of California at San Diego; M.S. and Ph.D., Georgia State University

AMBER E. Q. NORWOOD, Assistant Professor of Psychology (2018)
B.S., Towson University; M.A. & Ph.D., University of Maryland, Baltimore County

WILLIAM D. OBERMAN, Associate Professor of Management/Marketing/Entrepreneurship (2004)
B.A., M.E., and Ph.D., University of Pittsburgh

EUCABETH A. ODHIAMBO, Professor of Teacher Education (2003)
B.A., University of Eastern Africa-Kenya; M.Ed., Ed.D., Tennessee State University

MICHELLE M. OLEXA, Assistant Professor of Counseling Services (2003)
B.S., Wilkes University; M.A., Johns Hopkins University; Ph.D., University of Albany

MING-SHIUN PAN, Professor of Finance and Supply Chain Management (1989)
B.A., Fu-Jen Catholic University; M.A. and Ph.D., University of Alabama
ANNE PAPALIA, Assistant Professor of Educational Leadership & Policy and Special Education (2018)
B.S.Ed. and M.S.Ed., State University of New York at Geneseo; M.S.Ed., Alfred University; Ph.D., Pennsylvania State University

WILLIAM J. PATRIE, Associate Professor of Biology (1993)
B.A., Hope College; Ph.D., Cornell University

JAYLEEN PATTERSON, Associate Professor of Social Work/Gerontology (2013)
B.A., East Stroudsburg University of Pennsylvania; M.S.W., M.Ed. and Ph.D., Widener University

CHANDRIKA PAUL, Professor of History/Philosophy (1996)
B.A., University of Calcutta-India; M.A. and Ph.D., University of Cincinnati

DUNG A. PHAM, Associate Professor in Finance and Supply Chain Management (2013)
B.S., Hanoi Foreign Trade University; M.B.A., Marshall University; Ph.D., University of South Florida

DONALD K. PHILPOT, Assistant Professor of Teacher Education (2011)
B.E., University of Manitoba; M.A. and Ph.D., University of British Columbia

GRETCHEN K. PIERCE, Associate Professor of History/Philosophy (2009)
B.A., Arizona State University; M.A. and Ph.D., University of Arizona

MARCELA PINEDA-VOLK, Associate Professor of Global Languages and Cultures (2000)
B.A., Rutgers University; M.A., Middlebury College; Ph.D., Indiana University; Ph.D., Indiana University

EDWARD PITINGOLO, Associate Professor of Accounting and Management Information Systems (2014)
B.S.B.A., Pennsylvania State University-Harrisburg; M.B.A., Kutztown University of Pennsylvania; D.Mgt., University of Maryland

GEORGE POMEROY, Professor of Geography/Earth Science (1999)
B.A.Ed. and M.S., Western Washington University; Ph.D., University of Akron

KATHRYN M. POTOCZAK, Associate Professor of Psychology (2005)
B.S., M.A. and Ph.D., Western Michigan University

ADAM POWELL, Associate Professor of Management/Marketing/Entrepreneurship (2015)
B.S., Wilmington University; M.B.A., Brigham Young University; Ph.D., University of Tennessee

ALLISON H. PREDECKI, Associate Professor of Chemistry and Biochemistry (2002)
B.A., Mary Baldwin College; Ph.D., Wake Forest University

KIMBERLY J. PRESSER, Professor of Mathematics (2000)
B.S., Pepperdine University; M.S., North Carolina University; Ph.D., University of South Carolina

FEI QIN, Associate Professor of Finance and Supply Chain Management (2017)
B.S. and M.S., Fudan University-China; M.E. and M.B.A., Iowa State University; Ph.D., University of Cincinnati

JOHN W. QUIST, Professor of History/Philosophy (1997)
B.A., Brigham Young University; M.A. and Ph.D., University of Michigan

MOHAMMAD RAHMAN, Associate Professor of Management/Marketing/Entrepreneurship (2018)
B.S.B.A. and M.B.A., University of Houston-Clear Lake; Ph.D., University of Newcastle-Australia
SHANNON S. RAINES, Assistant Professor of Teacher Education (2019)  
B.S.Ed., Shippensburg University; M.Ed., Wilkes University

MATTHEW C. RAMSEY, Associate Professor of Human Communication Studies (2011)  
B.A., Arkansas Tech University; M.A., Arkansas State University; Ph.D., University of Southern Mississippi

AHMED RASHED, Associate Professor of Physics (2018)  
B.S., African Institute for Mathematical Science-South Africa; M.A. and Ph.D., University of Mississippi

MARC RENAUT, Professor of Mathematics (2002)  
B.S. and M.A., Wake Forest University; Ph.D., Temple University

CRISTINA RHODES, Assistant Professor of English (2019)  
B.A., Longwood University; M.A., Texas A&M University-Corpus Christi; Ph.D., Texas A&M University-Commerce

JOSE G. RICARDO OSORIO, Associate Professor of Global Languages and Cultures (2005)  
B.A., Universidad del Atlantico-Colombia; M.A. and Ed.D., University of Arkansas

JOHN N. RICHARDSON, Professor of Chemistry and Biochemistry (1994)  
B.S., Hampden-Sydney College; Ph.D., University of North Carolina

MELISSA L. RICKETTS, Professor of Criminal Justice (2007)  
B.S., Pennsylvania State University; M.A. and Ph.D., Indiana University of Pennsylvania

CARLOS ROJAS, Associate Professor of Criminal Justice (2017)  
B.S., Universidad de los Andes-Venezuela; M.S. and Ph.D., University of Cincinnati

CHRISTINE A. ROYCE, Professor of Teacher Education (2002)  
B.S., Cabrini College; M.A., University of Scranton; Ed.D., Temple University

MARK SACHLEBEN, Professor of Political Science (2006)  
B.A., Berea College; M.A., Marshall University; Ph.D., Miami University

HEATHER F. SAHLI, Associate Professor in Biology (2009)  
B.S. and B.A., College of William & Mary; Ph.D. Michigan State University

JOOHEE I. SANDERS, Professor of Exercise Science (2008)  
B.A., Pepperdine University; M.S., Bloomsburg University of Pennsylvania; Ph.D., Temple University

NICOLE SANTALUCIA, Associate Professor of English (2017)  
B.A., State University of New York at Binghamton; M.F.A., The New School; Ph.D., State University of New York at Binghamton

TORU SATO, Professor of Psychology (2000)  
B.A., Kwansei Gakuin University; M.A. and Ph.D., York University

ASHLEY C. SEIBERT, Associate Professor of Psychology (2009)  
B.S., University of Pittsburgh; M.A. and Ph.D, Kent State University

CHRISTINE senecal, Associate Professor of History/Philosophy (2000)  
B.A., University of California at Santa Barbara; M.A. and Ph.D., Boston College

ROBERT SETAPUTRA, Professor of Finance and Supply Chain Management (2005)  
B.A., Gadjah Mada University; M.S. and Ph.D., University of Wisconsin-Milwaukee

SHISHIR SHAKYA, Assistant Professor of Economics (2020)  
B.A. and M.A., Tribhuvan University-Nepal; M.A. and Ph.D., West Virginia University
JOSEPH W. SHANE, *Professor of Chemistry and Biochemistry* (2005)
B.S., University of Delaware; M.S. and Ph.D., Purdue University

KATHRYN S. SHIRK, *Associate Professor in Physics* (2013)
B.S., Shippensburg University; B.S., Pennsylvania State University; Ph.D., Purdue University

ELIZABETH L. SHOENFELT, *Assistant Professor of Music/Theatre Arts* (2019)
B.S., Messiah College; M.M., Pennsylvania State University; D.M.A., Shenandoah Conservatory of Shenandoah University

MATTHEW R. SHUPP, *Associate Professor in Counselor Education* (2013)
B.A. and M.S., Shippensburg University; D.Ed. Widener University

FREDDY SIAHAAN, *Associate Professor of Economics* (2007)
B.A., Bogor Agricultural University; M.A., New York University; Ph.D., Graduate Center of the City University of New York

CARRIE A. SIPES, *Associate Professor of Communication, Journalism, and Media* (2006)
B.A. and M.S., Shippensburg University; Ph.D., Pennsylvania State University

JONATHAN K. SKAFF, *Professor of History/Philosophy* (1999)
B.A., Hobart College; M.A. and Ph.D., University of Michigan

CHERYL A. SLATTERY, *Professor of Teacher Education* (2003)
B.S., Saint Joseph's University; M.Ed., Kutztown University of Pennsylvania; Ed.D., Widener University

JOSEFINE SMITH, *Assistant Professor of the Library* (2017)
B.A. and M.L.I.S., University of Pittsburgh; M.A., Pennsylvania State University-Harrisburg

TAMARA SMITH-MOORE, *Assistant Professor of Teacher Education* (2018)
B.A. & M.A., Shippensburg University

MARK E. SPICKA, *Professor of History/Philosophy* (2002)
B.A., Lehigh University; M.A. and Ph.D., Ohio State University

ROBERT D. STEPHENS, *Associate Professor of Management/Marketing/Entrepreneurship* (2005)
B.A., Brigham Young University; M.B.A., University of Pittsburgh; Ph.D., Indiana University

RICHARD L. STEWART, *Professor of Biology* (2002)
B.S. and M.S., Indiana University of Pennsylvania; Ph.D., Ohio State University

PAUL T. TAYLOR, *Associate Professor of Mathematics* (2006)
B.S., University of Saskatchewan; Ph.D., University of Wisconsin-Madison

VICKI F. TAYLOR, *Associate Professor of Management/Marketing/Entrepreneurship* (2005)
B.S., Shippensburg University; M.A., St. Francis College; Ph.D. Temple University

NATHAN E. THOMAS, *Associate Professor of Biology* (2008)
B.S., Indiana University of Pennsylvania; Ph.D., University of South Dakota

KENG-MING TIEN, *Associate Professor of Accounting and Management Information Systems* (2019)
B.S., Chung Yuan Christian University-Taiwan; M.S., Feng-chia University-Taiwan; Ph.D., National Cheng-Chi University-Taiwan

ALLAN A. TULCHIN, *Associate Professor of History/Philosophy* (2006)
B.A., Yale University; M.A. and Ph.D., University of Chicago
BRIAN J. ULRICH, Professor of History/Philosophy (2009)
B.A, Quincy University; M.A. and Ph.D., University of Wisconsin

ANDREW P. VASSALLO, Associate Professor of Economics, (2013)
B.A., La Salle University; M.S., Carnegie Mellon University; J.D., George Mason University; M.A. and Ph.D., Rutgers University

HONG WANG, Associate Professor of Human Communication Studies (2002)
B.A., Changsha Tiedao University; M.A., University of Essex-Great Britain; Ph.D., Southern Illinois University-Carbondale

TRAVIS M. WATERS, Associate Professor of Educational Leadership & Policy and Special Education (2021)
B.A., Cheyney University of Pennsylvania; M.A., Pennsylvania State University; Ed.D., Shippensburg University

ALLISON D. WATTS, Associate Professor of Management/Marketing/Entrepreneurship (2008)
B.S., Bloomsburg University; M.S., University of Pennsylvania; Ph.D., Temple University

DAVID WEAVER, Assistant Professor of History/Philosophy (2022)
B.A., Pennsylvania State University; M.A., Shippensburg University; Ph.D., Pennsylvania State University

KIM A. WEIKEL, Associate Professor of Psychology (1994)
B.A., Lycoming College; M.A., University of Dayton; Ph.D., Kent State University

CAROL A. WELLINGTON, Professor of Computer Science and Engineering (1997)
B.S., University of Delaware; M.S., Villanova University; Ph.D., North Carolina State University

BRIAN J. WENTZ, Professor in Accounting and Management Information Systems (2013)
B.S., Summit University; M.S., Pennsylvania State University; D.Sc., Towson University

WILLIAM G. WHITELEY, Assistant Professor of Art and Design (2004)
B.A., Findlay University; M.F.A., Cranbrook Academy of Art

TODD K. WHITMAN, Associate Professor of Counselor Education (2005)
B.A., Colgate University; M.S., State University of New York; Ph.D., University of Virginia

DAVID WILDERMUTH, Associate Professor of Global Languages and Cultures (2012)
B.A., State University of New York College at Cortland; M.A., Bowling Green State University; Ph.D., Middlebury College

JORDAN WINDHOLZ, Associate Professor of English (2018)
B.A., Messiah College; M.F.A., University of Colorado; Ph.D., Fordham University

YING YANG, Associate Professor of Sociology/Anthropology (2011)
A.A., Hunan Workers and Staff College Petro; A.A., Central South University of Technology; M.A., Indiana University of Pennsylvania; Ph.D., University of South Carolina

CURTIS M. ZALESKI, Professor of Chemistry and Biochemistry (2006)
B.S., John Carroll University; M.S. and Ph.D., University of Michigan

JOSEPH T. ZUME, Professor of Geography/Earth Science (2007)
B.S., University of Jos; M.S., Ahmadu Bello University; Ph.D., University of Oklahoma

RICHARD ZUMKHAWALA-COOK, Professor of English (2001)
B.A., Colby College; M.A. and Ph.D., Miami University, Oxford, Ohio