



2016-2018

# GRADUATE CATALOG

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**SHIPPENSBURG  
UNIVERSITY**  
School of Graduate Studies



SHIPPENSBURG  
UNIVERSITY

## **2016-2018 Graduate Catalog**

**including curricula leading to the degrees of:**

*Doctor of Education*

*Master of Arts*

*Master of Arts in Teaching*

*Master of Business Administration*

*Master of Education*

*Master of Public Administration*

*Master of Science*

*Master of Social Work*

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# Introduction



## Mission of the University

Shippensburg University of Pennsylvania is a regional state-supported institution. It is part of the State System of Higher Education of Pennsylvania, which is made up of fourteen universities located in various geographic regions throughout the Commonwealth. Founded in 1871, Shippensburg University serves the educational, social, and cultural needs of students primarily from south-central Pennsylvania. The university enrolls students from throughout the Commonwealth of Pennsylvania, the Mid-Atlantic region, the United States, and various foreign countries as well.

Shippensburg is a comprehensive university offering bachelor's and master's degree programs in the Colleges of Arts and Sciences, Business, and Education and Human Services. A doctoral program is offered in the College of Education and Human Services. The curricula are organized to enable students both to develop their intellectual abilities and to obtain professional training in a variety of fields. The foundation of the undergraduate curriculum is a required core of courses in the arts and sciences. These courses prepare students to think logically, read critically, write clearly, and verbalize ideas in a succinct and articulate manner; they also broaden students' knowledge of the world, past and present.

The university's primary commitment is to student learning and personal development through effective and innovative teaching and a wide variety of high-quality, out-of-class experiences. The ultimate goal is to have students develop to their utmost the intellectual, personal, and social capabilities they need to perform as competent citizens prepared to embark on a career immediately upon graduation or after advanced study. The personal attention given each student at Shippensburg is reflective of the strong sense of community that exists on campus and the centrality of students within it. The university encourages and supports activities that give students many opportunities to apply the theories and methods learned in the classroom to real or practical situations, such as faculty-student research and student internships. Student life programs and activities complement the academic mission and further assist students in their personal, social, and ethical development.

Committed to public service and community-centered in its relationships to the region, the university works closely and collaboratively with other organizations at institutional, programmatic, and individual levels to develop common goals, share resources, and invest cooperatively in the future of the region.

## Mission of the School of Graduate Studies

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 School of Graduate Studies 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 School of Graduate Studies 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.

## Brief History

Shippensburg University was established in 1871 as the Cumberland Valley State Normal School. The school received official approval by the state on February 21, 1873, and admitted

its first class of 217 students on April 15, 1873. In 1917 the school was purchased by the Commonwealth of Pennsylvania.

On June 4, 1926, the school was authorized to grant the bachelor of science in education degree in elementary and junior high education. The school received a charter on October 12, 1926, making it the first normal school in Pennsylvania to become a state teachers college. On June 3, 1927, the State Council of Education authorized the name change to the State Teachers College at Shippensburg.

The business education curriculum was approved on December 3, 1937. On December 8, 1939, Shippensburg State Teachers College became the first teachers college in Pennsylvania and the fourth in the United States to be accredited by the Middle States Association of Colleges and Secondary Schools (now Middle States Commission on Higher Education).

The State Council of Education approved graduate work leading to the master of education degree on January 7, 1959. On January 8, 1960, the name change to Shippensburg State College was authorized.

The arts and sciences curriculum was authorized by the State Council of Education on April 18, 1962, and the bachelor of science in business administration degree program was initiated on September 1, 1967.

On November 12, 1982, the governor of the Commonwealth signed Senate Bill 506 establishing the State System of Higher Education. Shippensburg State College was designated Shippensburg University of Pennsylvania effective July 1, 1983.

Today, Shippensburg University is a comprehensive university offering bachelor's, master's, and doctoral degree programs in the Colleges of Arts and Sciences, Business, and Education and Human Services. Where we first served the educational needs of students from south-central Pennsylvania, we now instruct students from across the entire Commonwealth, twenty states, and fifteen countries. We are part of the State System of Higher Education, which is made up of fourteen universities throughout Pennsylvania.

## Accreditation

Shippensburg University is accredited by the Middle States Commission on Higher Education; AACSB International—the Association to Advance Collegiate Schools of Business; ABET, Inc. (Computer Science); Academy of Criminal Justice Sciences; Accrediting Council on Education in Journalism and Mass Communication (ACEJMC); the American Chemical Society (ACS); the Council on Social Work Education (CSWE); the Council for Accreditation of Counseling and Related Educational Programs (CACREP); the International Association of Counseling Services (IACS); the Council for Exceptional Children (CEC); and the Council for the Accreditation of Educator Preparation (CAEP).

## Office of the Graduate Dean

The Office of the Graduate Dean, located in Old Main 310, 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. Contact the office by calling (717) 477-1231 or sending e-mail to [gradsch@ship.edu](mailto:gradsch@ship.edu).

## Office of the Registrar

The Office of the Registrar, located in Old Main 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. Contact the office at (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 200 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
New York City	4 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 Social Equity, located in Old Main 200, coordinates the university's compliance with laws and regulations relating to equal opportunity, sexual harassment, 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.

### 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.

### Sexual Harassment

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, persistent, or pervasive that it adversely affects a student's ability to participate in or benefit from the university's activities or educational programs or creates a hostile or abusive educational environment. Sexual violence is a form of sexual harassment, prohibited by Title IX, which includes conduct that is criminal in nature. Acts may include rape, sexual assault, sexual battery, sexual coercion, unwanted touching, dating violence, and sexually motivated stalking.

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

Shippensburg University Title IX Coordinator  
Cecil Howard  
Office of Social Equity  
Old Main 200, (717) 477-1161, cehoward@ship.edu

Department of Education  
Web: <http://www2.ed.gov/about/offices/list/ocr/index.html>  
E-mail: [ocr@ed.gov](mailto: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 Disability Services

Shippensburg University is committed to serving all students, including those with documented disabilities. The Office of Disability Services (ODS) determines, coordinates, and provides 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, ODS 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 Resource Office to coordinate accommodations for campus faculty and staff with diagnosed disabilities.

Located in Suite 324 Horton Hall, the Office of Disability Services is within the School of Academic Programs and Services and is easily accessible. For further information, visit the website at [www.ship.edu/ods](http://www.ship.edu/ods), or contact the office at (717) 477-1364.

### 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 national origin.

To foster and advance the precepts of an inclusive environment, students desiring to participate in the religious observances of their particular faiths, creeds, or beliefs 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. Each academic semester students will be required to provide their faculty with the dates (in writing) of scheduled religious observances.

### 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***

In accordance with Pennsylvania's College and University Security Information Act of 1988, Shippensburg University provides information relating to crime statistics and security measures to prospective students, matriculated students, and employees. The university will also comply with all campus safety provisions of the Student Right-To-Know and Campus Security Act of 1990.

### ***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.

### ***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 complies with the requirements of Title 38, U.S. Code, Veterans Benefits.

### ***Nonimmigrant Alien Students***

Shippensburg University is authorized under federal law to enroll nonimmigrant alien students.

### ***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 with differing national, racial, religious, and cultural 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, sex, religion, national origin, and sexual lifestyle. 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 with its diverse beliefs, attitudes, and ways of thinking.

## **Catalog Provisions**

This catalog is intended to be a description of the policies, academic programs, degree requirements, and course offerings in effect for the 2016-2017 and 2017-2018 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 each and every institution that has awarded you college credit. 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.

As evidence of your ability to successfully complete a graduate program of study, you should have a cumulative undergraduate grade point average of at least 2.75 (a 2.8 minimum is required for the Master of Social Work; a 3.0 minimum is required for the Master of Education in Dual School Counseling and the M.Ed. in Reading) as determined by a grading system in which A equals 4.0 grade points. If you have less than a 2.75 undergraduate grade point average (or higher as noted by the program), you will be required to submit other evidence of your ability to successfully complete the program for which you are applying. This evidence may include a personal interview with the academic department and/or a standardized testing such as the Graduate Record Examination (GRE), Graduate Management Admission Test (GMAT), or the Miller Analogies Test (MAT).

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 [www.ship.edu/admissions/graduate](http://www.ship.edu/admissions/graduate). If you are applying for a program in a field that is different from your undergraduate major, you may be required to take additional undergraduate courses as a condition of your admission. You will be notified of this at the time you are admitted. These courses, which do not count toward your degree requirements, should be completed early in your program of study. Please note that if you take undergraduate courses while a graduate student you will be charged graduate tuition and fees for those undergraduate courses.

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 Dean of the School of Graduate Studies. You will be officially notified of a decision by the Office of Graduate Admissions. Questions on your admissions decision should be referred to the academic department to which you applied.

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 Campus Information System, 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.

## Admission Procedures

Applicants for admission to Shippensburg University should apply online at [www.ship.edu/graduate](http://www.ship.edu/graduate). They may also e-mail [gradadmiss@ship.edu](mailto:gradadmiss@ship.edu) or call (717) 477-1213 or toll free 800-822-8028 the Office of Admissions and request a paper application.

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 Graduate 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 Graduate 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 [www.ship.edu/graduate](http://www.ship.edu/graduate) 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 Reading) and may not accept testing as an alternative.

### Miller Analogies Test

Some departments require applicants to take the Miller Analogies Test (MAT). Shippensburg University is an official testing center for the MAT for NCS Pearson, Inc. Chicago, Illinois. Information regarding the test and the testing dates is available through the Placement Testing Office of Admissions or at [ship.edu/testing](http://ship.edu/testing). The fee for anyone who takes this test at Shippensburg University is \$75 (subject to change).

### Graduate Record Examination

Some departments require applicants to take the Graduate Record Examination (GRE). Shippensburg University is an official testing center for the GRE **subject test only** for the Educational Testing Service of Princeton, New Jersey.

Applications and information on the GRE General Test are available in the Office of Admissions and at [www.ets.org/gre](http://www.ets.org/gre).

### Graduate Management Admission Test

Applicants to the Master of Business Administration (MBA) who have less than five years of progressive business experience after they graduated from their bachelor's degree may be required to submit official scores for the Graduate Management Admission Test (GMAT). Information regarding the test is available in the Office of Admissions and on the web at [www.mba.com](http://www.mba.com).

### Conditional or Provisional Admission

Occasionally an applicant will present an undergraduate academic record and standardized test scores that do not provide evidence of his or her ability to successfully complete a graduate degree program. These applicants may request additional consideration based on special circumstances or other factors. The academic department may then recommend that the applicant be admitted on a conditional or provisional basis.

Conditional admission gives such students the opportunity to meet departmental administrative requirements (e.g., license/certifications/police clearances) or complete prerequisite coursework (which may include undergraduate courses) that may strengthen their academic background and prepare them to successfully complete graduate coursework. The academic department will require a certain number of credits to be completed with appropriate grades within one calendar year of matriculation. The student's status will be reevaluated by the academic department to determine if he/she has met the criteria set forth during the admissions process. If the student has met the criteria stipulated by the department the student's status will be changed to show they were admitted as a regular degree student.

Students who are currently enrolled in a bachelor's degree program but have not yet been awarded a degree may be granted conditional admission to their graduate program. Students in this category will be required to submit a finalized transcript showing the award of a bachelor's degree by a regionally accredited institution prior to the start of their first semester of coursework. Students who do not provide this transcript will have a HOLD place on their account and will be unable to schedule additional coursework.

Provisional admission gives such students the opportunity to demonstrate their ability to do course work at the graduate level. The department will require a certain number of credits to be completed (generally six to nine crs.) with appropriate grades. The student's status is then reevaluated at the end of the provisional semester to determine if he/she should be admitted as a regular degree student.

If a conditionally or provisionally admitted applicant does not complete the conditions or provisions of their admission in the manner set forth by the academic department, the student will be considered unable to meet the requirements and their application will be retroactively denied. Any student who has been denied admission must wait one full calendar year before reapplying to the institution.

### 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 <http://www.ship.edu/PCDE/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. Complete an application online at [www.ship.edu/admissions/international](http://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](mailto:eval@ece.org)  
ECE website: [www.ece.org](http://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](mailto:info@wes.org)  
WES website: [www.wes.org](http://www.wes.org)



ECE or WES will then forward their official evaluation of your credentials to the Office of Admissions. When we have received the evaluation, we will process your application for admission.

Students may begin the application process by providing evaluated academic records through their third year. Students will be required to provide an evaluated academic record including the fourth year and awarding of a degree/diploma as soon as possible after enrolling. If an updated evaluated record is not provided a **hold** will be placed on the student's account; pending fulfillment of requirements the student will be unable to schedule courses.

International applicants who have English as a second language must present an official TOEFL score report sent directly to us from the Educational Testing Service (ETS). We will accept scores from the paper-based, computer-based, or Internet-based TOEFL. We will also accept an official Intensive English Language Testing System (IELTS) score report sent directly to us from British Council et al.

All materials including admission application and fee, official TOEFL or IELTS 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, Ceddia Union Building (CUB) 221. 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, Ceddia Union Building Room 221, 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.

### Special Admission

Graduates of accredited colleges who wish to register for up to six credit hours in special programs offered by Shippensburg University may apply for special admission. No application fee is required and an undergraduate transcript does not have to be submitted.

This category of admission is restricted to certain special programs. Students in this category who subsequently wish to be admitted to a degree program must complete a regular application and pay the application fee.

# **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 2016-2017 and 2017-2018 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, graduate assistant policies, and requirements for good academic standing. Membership in the Graduate Council includes graduate faculty, college deans, the Dean of Graduate Studies, 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 Dean of Graduate Studies.

## Grading and Point System

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

### Regular Letter Grades

<i>A</i>	Excellent
<i>A-</i>	
<i>B+</i>	
<i>B</i>	Good
<i>B-</i>	
<i>C</i>	Fair
<i>F</i>	Failure

### Special Grades

<i>I</i>	Incomplete
<i>Q</i>	Deferred grade
<i>P</i>	Passed
<i>TR</i>	Transfer Credit
<i>N</i>	Audit (no credit)
<i>W</i>	Withdrawal

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. Values assigned to the letters are:

<i>A</i>	4.0 quality points
<i>A-</i>	3.7 quality points
<i>B+</i>	3.3 quality points
<i>B</i>	3.0 quality points
<i>B-</i>	2.7 quality points
<i>C</i>	2.0 quality points
<i>F</i>	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* (p. 24) 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, 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* (p. 24) 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* (p. 23).

## **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**

Nine 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 9 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:

- A. The course instructor miscalculated the final course grade.
- B. The course instructor committed an oversight in calculating the final course grade.
- C. 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.

*A. 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.*

- B. **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 that 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.*

- C. **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.

- D. **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

- E. **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 3.0 (B) or better in your total program of courses. If your cumulative QPA drops below 3.0 or you earn one C grade in a graduate course, you will be placed on academic probation.

Students on probation must raise their QPA to 3.0 by the end of the next semester (or full summer term) in which they register. An additional probationary semester may be granted at the discretion of the college dean.

If you fail to meet the conditions of academic probation you are subject to dismissal.

Some programs may require undergraduate courses be taken while a student is enrolled in a graduate program. In this event, students must follow the standards for undergraduate courses that have been determined by the department, and the university will follow those standards for dismissal when appropriate.

In addition, some programs may require higher standards than listed above because of limitations imposed by accreditation agencies and societies. Such requirements are provided by departments administering these programs.

#### Dismissal for C Grades

You may earn only one C grade in any graduate course taken at Shippensburg University. This includes any courses that have been repeated and replaced with a higher grade. If you earn two C grades you will be dismissed from the university.

A C grade earned at Shippensburg University may not be made up at another institution of higher learning for the same course.

#### Dismissal for F Grades

If you earn an F grade in any graduate course taken at Shippensburg University, you will be dismissed from the university.

An F grade earned at Shippensburg University may not be made up at another institution of higher learning for the same course.

## 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 writing a letter to your college dean (with a copy to your department chair) by the date indicated in the dismissal letter. All appeals will be considered by the Academic Review Committee.

#### **Readmission of Dismissed Students**

If you are dismissed for academic reasons, you may not apply for readmission to the university for at least one calendar year following your dismissal. Students who are dismissed may not take classes as a non-degree graduate student and may not apply for admission to a different graduate degree program at Shippensburg.

Students who have had their provisional or conditional admission terminated may not apply for readmission to the university for at least one calendar year. 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.

To apply for readmission, you must submit the appropriate application form to the Registrar's Office with the regular

application fee. Readmission is never guaranteed following academic dismissal. It may only be granted if you present compelling evidence of some fundamental change that will allow you to perform academically at the level needed to graduate.

## 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 9 and 15 credit hours. Students with less than 9 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, the student may attempt to reschedule in the Registrar's Office, subject to class availability. Payment is required at the time of rescheduling and a late fee will be charged.

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 (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.

### **Dual-Level (700) Courses**

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

## 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 pre-requisite 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/](http://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.

Students enrolled in the JCJC weekend program must notify the Registrar's Office they are withdrawing by the Friday following the first weekend of classes to be eligible for a refund. Withdrawals that occur after that time will not be eligible for a refund.

### **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 Graduate Studies and the Provost and Vice President for Academic Affairs. 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 Graduate Studies and the Provost and Vice President for Academic Affairs.

### **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.

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 Graduate Studies 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 the chapter *University Curricula* (p. 41).

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.

Commencement ceremonies are generally held on Friday evening 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 spring semester. 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 Dean of Graduate Studies. 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 or thesis, 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.

### Double Counting

The concept of "double counting" credits for two different graduate degrees is not encouraged. In certain cases, however, an academic department may recommend a maximum of nine credits earned in one graduate degree program at Shippensburg be transferred to a second graduate degree program 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 or double counted from another Shippensburg

University graduate program. For awarding two dual graduate degrees, at least 12 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.

### **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 advisor and committee members must be submitted to the Registrar's Office for approval 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. 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.

## **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 instructor's 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 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 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 a violation has occurred, he/she will complete the

Settlement of a Charge of Academic Dishonesty form. This form will include the penalty 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.

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 judicial process administered by the dean of students. The faculty member initiates a written complaint by providing details of the incident to 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 Code of Conduct and Judicial Process section of the student handbook *Swatanev* will be followed. Academic dishonesty cases must be heard by the university judicial hearing board; the judicial 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 that 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.

### **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 that 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 (2015-16 costs).

Graduate Tuition	\$470
Technology Tuition Fee	\$25
Student Union Fee	\$24
Educational Services Fee	\$74
Comprehensive Health Fee	\$14
Total	\$607

### 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 convenience fee. There is no charge for payment by e-check.

*Do not send cash by mail.*

Semester	Payments Due
First	early August
Second	mid-December

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 \$470 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 \$705 per credit, whether they are taking graduate or undergraduate courses. Out-of-state

graduate students taking online courses pay a fee of \$479 per credit hour.

*NOTE: The above fees are valid only through the summer of 2016.*

## 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 (2015-16), the technology tuition fee for graduate students is \$25 per credit in state and \$37 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	\$74
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##### Summer Sessions

Graduate per credit	\$74
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This fee is refundable according to the schedule in the section *Refunds* (p. 31).

#### 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 Cedia 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	\$24
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##### Summer Sessions

Graduate per credit	\$19
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Students taking online courses do not pay this fee.

The Student Union Fee is refundable based on the schedule in the section *Refunds* (p. 31).

### 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 (2016). Students taking online courses do not pay this fee.

### Activities Fee

The Activities Fee is required of all graduate students attending summer sessions. The fee covers the cost of supporting student organizations in athletics, lectures, entertainment, and publications. This fee is \$16 per credit hour. 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 \$80 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 2015-2016 academic year):

\$75 for the academic year  
\$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. For details, please visit <http://www.dineoncampus.com/ship/>. 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:

Through the drop period	100%
End of drop period through 2nd week	80%
3rd week	60%
4th week	50%
5th week	40%
Over 5 weeks	0%

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/](http://www.ship.edu/Student_Accounts/) under Refund Schedule.

The most current summer session refund dates may be found at [www.ship.edu/Student\\_Accounts/](http://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 Parent PLUS loan
5. Federal Pell Grant
6. ACG Grant
7. SMART Grant
8. Federal SEOG
9. 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](http://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. They provide a tuition waiver as well as compensation for work performed.

### **Eligibility and Academic Load**

To be eligible to receive a graduate assistant appointment, a student must be admitted into their first master's degree or doctoral program. Non-degree students, those working towards certification without a degree, or those working on a graduate letter of completion or graduate certificate, are not eligible. Provisionally admitted students are not permitted to work as graduate assistants during the provisional semester(s).

Graduate assistants must maintain at least a 3.0 cumulative QPA and must not have earned more than two grades of C or less in any course taken while a graduate student.

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. Students in degree programs that require more than 36 credits may hold positions for more than two years.

Students may not be appointed as graduate assistants while working toward their second Shippensburg University master's degree.

Exceptions to these eligibility requirements may only be made upon written recommendation of the student's Graduate Coordinator, and approved by the Dean of Graduate Studies.

During the academic year, full-time graduate assistants usually enroll in nine graduate credits each semester. Graduate students may be instructed by their Graduate Coordinators to take only 6 credits for a semester or two during their program, putting students in temporary part-time Graduate Assistant (GA) status so that only those courses required to graduate are covered by the tuition waiver. GA's who want to request part-time GA status should make the request of their Graduate Coordinator. If the Graduate Coordinator approves, he/she will then send an e-mail message to [studentemployment@ship.edu](mailto:studentemployment@ship.edu) and to the student's GA supervisor.

GA appointment letters will note that part-time GA's are required to work fewer hours but may work up to the full-time allocation of 250 hours. The GA will be required to note on the agreement form his/her intentions regarding the total number of hours to be worked. For those cases when the graduate student requests to enroll in less than 9 credits, as opposed to the Graduate Coordinator making the request, the Graduate Dean will consider those requests upon recommendation of the Graduate Coordinator due to extraordinary circumstances. Students approved for these temporary part-time statuses may be able to extend their GA position beyond two years upon request. During the summer sessions, all graduate assistants must register for and complete one graduate course (3 or 4 crs.) during one of the summer sessions.

When the student's academic program requires him/her to enroll in more than 9 credits, the student may request an increase in the tuition waiver. The Graduate Dean considers these requests on a case-by-case basis after review of the student's program of study and, if necessary, in consultation with the Graduate Coordinator. The Graduate Dean also considers, on a case-by-case basis, providing tuition waivers for courses that are not necessary for graduation but cover additional professional skills that add value to the master's degree.

### Application Procedures

Apply online at [www.ship.edu/graduate](http://www.ship.edu/graduate)  
<http://www.ship.edu/graduate> and navigate to Financial Assistance.

Applications will be accepted as soon as positions are posted online. Appointments may be made through the end of the sixth week of the semester as long as there is a position vacant (see also *Late Appointments* (p. 33)).

### Appointment Process

Available graduate assistantships and student payroll positions (SPPs) administered by the Graduate Dean are posted online. We recommend applicants contact supervisors directly to request interviews. Academic departments can also help to identify potential positions.

Supervisors who hire students for graduate assistantships and student payroll positions will review the applications that have been forwarded to them and consult with academic departments to identify candidates. They may conduct interviews before making a final decision. Typically, the supervisor will make a verbal offer and ask for acceptance before making the formal recommendation for appointment.

After the hire recommendation is submitted online by the supervisor, the Office of the Graduate Dean will verify the student's eligibility and then send an official letter of appointment to the student's Shippensburg University e-mail account. Students are then required to sign a memorandum of understanding and return it to the Office of the Graduate Dean. Also, new student workers will need to complete appropriate payroll forms in the Human Resources Office.

### Tuition Waiver

When an appointment is formally made, the Student Accounts Office will be notified and instructed to process a tuition waiver for 9 graduate credits (in most cases) or a refund if tuition has been paid. Graduate assistants are responsible for all tuition above 9 graduate credits and fees (including late registration, health services, educational services, student union, and graduation). Summer assistants are eligible for a tuition waiver covering one graduate course (3 or 4 graduate crs.); students are responsible for all other tuition and fees.

Exceptions to cover more than 9 graduate credits are considered on a case-by-case basis usually in situations when additional credits are required by the student's program of study.

Students having student payroll positions are not eligible for tuition waivers.

### Work and Compensation

Graduate assistants are compensated for the work they do on an hourly basis. The hourly scale is determined by the Vice President for Administration and Finance.

During each semester, full-time graduate assistants are required to work 250 hours (approximately 15 hours per week). During the summer, graduate assistants are required to work 150 hours, and part-time status is not available. Students having student payroll positions are required to work the same number of hours. GAs approved for part-time GA status will be required to work the number of hours shown below:

Number of credits scheduled	Required number of hours
8	222
7	194
6	167

Graduate assistants must work at least 90 percent of the required hours in order to qualify for the tuition waiver. Assistants working less than this amount will be required to pay for a portion of tuition on the following schedule:

Hours worked	Repayment required
80 - 89 %	10 % of tuition
70 - 79 %	20 % of tuition
60 - 69 %	30 % of tuition
50 - 59 %	40 % of tuition
50 or less %	50 % of tuition

### 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. They do not receive health benefits, sick leave, or any paid holidays or vacations. They are not eligible for STAFF parking stickers for their vehicles.

### Late Appointments

Graduate assistants may be appointed through the end of the sixth week of a semester. Up to the end of the first week of classes, students will receive the full tuition waiver as long as they work the required number of hours.

After the first week of classes, the tuition waiver will be prorated based on the following schedule: through the end of the second week, 90 percent; third week, 80 percent; fourth week, 70 percent; fifth week, 60 percent; sixth week, 50 percent.

Students accepting a late appointment may work the full number of hours. The number of hours required (see *Work and Compensation* (p. 33) section), however, will be based on the percentage of tuition received times the full number of hours. For

example, a student who accepts a position during the third week of the semester will be required to work 200 hours, or 80 percent times 250 hours.

Students accepting an assistantship after the drop/add period must be registered for the appropriate number of credit hours (see *Academic Load* (p. 32) section).

### Changing Appointment

If an assistant would like to resign from an assistant position mid-semester in order to accept a different one, the first department must give written consent. If the department chooses not to give this permission, the student may not accept the other appointment. Assistants may not circumvent this requirement by resigning from one position and then accepting another appointment.

To give permission to change positions, the department that made the original appointment should send written authorization to the Office of the Graduate Dean.

### Resignation, Dismissal, or Academic Probation

A graduate assistant may resign from a GA position during the course of a semester. 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 prorated based on the number of hours actually worked. For example, if a graduate assistant works 50 hours and then resigns, only 20 percent (50/250) of the tuition will be waived. The student will then be billed for the remaining 80 percent.

A student who withdraws from classes and no longer meets the academic load requirements will be dismissed from the assistantship. Compensation and tuition waiver policies are the same as those for a resignation.

At the discretion of the GA supervisor, a graduate assistant may be dismissed from a position. The GA supervisor must notify his/her supervisors (for example, the department chair, the academic dean, Vice President for Student Affairs) and the Dean of Graduate Studies in writing of the decision and the reasons for it. Compensation and tuition waiver policies are the same as those for a resignation.

It may be possible for a student to continue in a GA position while on academic probation after consulting with the student's graduate coordinator. A coordinator could decide not to support the continuation if it is felt that the competencies, skills, and requirements of the GA position cannot be met by a student on probation.

When students are unable to resolve issues related to their SPP/GA positions by talking with their supervisors, students are encouraged to contact the supervisor's supervisor. This could be the Department Chair, the Dean, or another individual. The Graduate Dean's Office can provide this information upon request.

### Student Payroll Positions

Student Payroll Positions (SPPs) are administered through the Graduate Dean's Office. Students working in SPPs earn hourly

wages at the current minimum wage rate but are not eligible for tuition waivers. Priority for hiring is given to graduate students, but unfilled positions will be available to undergraduate students near the beginning of the semester. All SPPs are posted online on the Graduate Assistant page and are identified in job titles as "...SPP-no tuition waiver." Appointments are awarded each semester on a competitive basis and without regard to financial need.

Students may be employed in two SPPs at the same time, or they may be employed in one GA position and one SPP at the same time. However, a student may not hold two GA positions at the same time.

Students must be in good academic standing by maintaining a QPA of at least 2.0. Graduate students must be enrolled, full-time or part-time for the academic year. Undergraduate students must be enrolled full-time for the academic year. Summer enrollment is not necessary. Students must be enrolled during the previous spring or scheduled for the upcoming fall.

### Residence Directors

Residence Directors supervise the eight 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 of the Dean of Students.

Residence Directors must be enrolled in a graduate program during their period of employment. Hiring preference is given to individuals enrolled in the counseling program, with special consideration given to those with a student personnel emphasis. 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 the Dean of Students 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 the Dean of Students.

### Loans

Federal Direct Stafford Loans are available to matriculated graduate students who are taking at least 6 credits per semester. In order to qualify, a student must complete the Free Application for Federal Student Aid (FAFSA) and a Federal Direct Stafford 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.

### **Academic Progress Requirements for Graduate Student Federal Aid**

Federal regulations require graduate students make satisfactory academic progress toward the completion of a degree in order to maintain their eligibility for the following programs: Federal Stafford Loan, Federal Work Study, and Federal Perkins Loan.

At Shippensburg University, in order to make satisfactory academic progress for federal financial aid purposes, a full-time graduate student must complete 18 new credits per year and maintain a 3.0 cumulative QPA. A part-time student must meet identical minimum QPA requirements and must complete 80 percent of all attempted credits each year.

Satisfactory Academic Progress for federal aid will be measured at the end of fall, spring and summer terms.

For complete information on Satisfactory Academic Progress, go to [www.ship.edu/Financial\\_Aid/Academic\\_Progress/](http://www.ship.edu/Financial_Aid/Academic_Progress/).

### **Veterans Benefits**

The university is approved for training veterans under the Montgomery G.I. Bill as administered by the Veterans Administration. For further information, contact the Veterans Services Office at (717) 477-1164 or visit [www.ship.edu/veterans](http://www.ship.edu/veterans).

### **Housing**

Beginning with the 2012-13 academic year, campus housing for graduate students will be provided on a "Space Availability" basis. Graduate students interested in living on campus should contact the Housing Office at (717) 477-1701.

## **Student Services**

### **Office of the Graduate Dean**

The Office of the Graduate Dean, located in Old Main 310, 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. To contact the office call (717) 477-1148.

### **Graduate Student Association Board**

The Graduate Student Association Board 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 Office of Graduate Admissions.

### **Registrar's Office/Transcripts**

You may request copies of your Shippensburg University transcripts in writing. Only three transcripts may be ordered per request. A limit of three transcripts will be mailed to the same address. The Registrar's Office reserves the right to impose a handling fee for large-volume requests. Please make your request for transcripts in one of the following ways:

1. Mail a letter or transcript request form to the Registrar's Office requesting your transcript be prepared for pick-up or sent to a specified address. The transcript request form is available at [www.ship.edu/Registrar/Requesting\\_Transcripts/](http://www.ship.edu/Registrar/Requesting_Transcripts/)

Include the following information:

- full name and student identification number — include all previous last names, if any
- dates of attendance
- graduation date and degree received
- specify graduate, undergraduate, and/or non-degree courses taken
- number of transcripts requested
- complete mailing address transcript is to be sent (A transcript sent to yourself may be considered unofficial. Faxed transcripts are also considered unofficial.)
- requestor's daytime telephone number and mailing address
- your signature is required on the request (e-mail requests are unacceptable for this reason)
- mail request to:  
Registrar's Office  
Shippensburg University  
1871 Old Main Drive  
Shippensburg, PA 17257

2. Fax a written request to (717) 477-1388 that includes all the information specified above. The request must be signed by the student.
3. Visit the Registrar's Office and complete a transcript request form.

*To pick up a transcript, you must show valid photo identification.*

Generally allow one week for processing transcript requests. Due to heavy volume of requests at the beginning and end of semesters, the processing time may be longer.

An unofficial transcript is sent to the student automatically following graduation. This transcript is sent after grades are verified and degrees posted.

Questions regarding this process should be directed to the Office of the Registrar, located in Old Main 111. To contact the office call (717) 477-1381.

### **Electronic Communication Policy**

At Shippensburg University electronic mail (e-mail) offers efficient, effective, and timely communication between members of the university community. Thus e-mail is an official means of communication and the primary method for university faculty, administrators, and staff to contact all students. Students are expected to use the campus e-mail service and check their e-mail accounts on a regular basis because correspondence about administrative requirements, academic issues, public safety and health, judicial affairs, emergencies, and general matters will be sent in this manner. Much of this correspondence will be time sensitive.

Students will be given a campus e-mail account at no cost. The account is active throughout a student's period of enrollment, including all vacation periods. Students wishing to utilize only off campus e-mail services are expected to forward their campus e-mail to that Internet provider or server. Otherwise, they are still expected to check their campus e-mail account on a regular basis. Failure to check one's campus e-mail account in a timely manner shall not be an excuse for missing deadlines or failing to meet communicated expectations.

Therefore, all students **must** do the following:

- Regularly check their accounts and read any e-mail in a timely fashion. It is preferable students read their e-mail on a daily basis but they are expected to do so at least four times per week, including all vacation and summer periods.
- Maintain their ship.edu inbox. In particular, all students are expected to ensure use of the university's computing systems and networks do not exceed current published limits, thereby interfering with one's ability to receive e-mail. All students are also expected to comply with all published policies governing computing and information networking.
- If people choose to use software to sort incoming e-mail into folders or to filter out unsolicited advertising e-mail (SPAM), they are responsible for making sure the filter rules do not accidentally delete official correspondence from the university.
- If students choose to forward e-mail from ship.edu to another e-mail server, they are responsible for making sure the e-mail is forwarded and working properly. They must also ensure their e-mail account has adequate space available to accept new messages.

### **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/](http://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 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](http://www.sufoundation.org/services/childfamilycenter).

### **Career and Community Engagement Center**

The Career and Community Engagement Center (CCEC), located in the Ceddia Union Building (CUB 108), provides student/alumni-centered career and community engagement programs, experiences, and learning opportunities to assist students to develop and achieve personal and professional goals. The Center implements career and community engagement program initiatives through service-learning, employer and alumni collaboration, and outreach on and off the university campus to foster campus and community partnerships.

The center provides resources in exploring career options, organizing job search programs such as preparing a resume, cover letter, and interview skills. In addition, the CCEC provides students with career and employer information as well as volunteer opportunities through *Ship Career Connection*, which lists on/off campus opportunities, internships, and career events.

Keeping with the Career and Community Engagement's commitment to meet students' schedules and needs, the Center conducts walk-in hours, workshops on job search and interviews, mock interviews, outreach programs for classes and organizations, appointments, and holds evening hours. Give the CCEC a call at (717) 477-1484, e-mail at [career@ship.edu](mailto:career@ship.edu), or stop by the office for more information. Visit our website at [www.ship.edu/career](http://www.ship.edu/career).

## 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](http://www.ship.edu/technology).

### Computer Labs

The university maintains five 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. General purpose labs in MCT are 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](http://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](mailto:helpdesk@ship.edu).

### Library and Multimedia Services

The mission of the Ezra Lehman Memorial 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, Instructional Design and Web Technologies, Media, Technology Support Services, and Broadcasting Departments provide a variety of services, including the following:

- Individualized assistance in locating books, articles, and other resources in the Lehman Library, Luhrs Library (juvenile collection), online, or from other libraries.
- 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, including D2L Learning Management System.

- Technology support in presentation software including video, audio, and image editing.
- Support and assistance with campus technology and student computing at the Technology Help Desk.
- Videoconferencing and classroom media support.
- Television studio production facilities and remote television production support.
- Equipment check out for digital cameras, digital camcorders, LCD projectors, laptops, etc.

Visit the library online at [library.ship.edu](http://library.ship.edu) and Multimedia Services at [www.ship.edu/media](http://www.ship.edu/media) and Technology Support Services at [www.ship.edu/technology](http://www.ship.edu/technology). For more information or assistance with an information or media-related 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 and Web Technologies	(717) 477-1816
Media Services	(717) 477-1646
Broadcast Services	(717) 477-1759
Technology Help Desk	(717) 477-4357

### Learning Center

The Learning Center, located on the first floor of the Ezra Lehman Memorial Library, is the university's primary site for tutoring services and academic support. Within the center, students are able to select from an array of options that can help them improve their academic performance, writing proficiency, and learning abilities. Outside the center, students can peruse the Learning Center's website at [www.ship.edu/learning/](http://www.ship.edu/learning/) to obtain information on tutoring options, view virtual workshops, find schedules for face-to-face workshops, access writing and study skills resources, and learn how to schedule an appointment with a tutor or a Learning Specialist. The Learning Center works with the faculty and student affairs offices to provide services and programs that enhance the learning experiences of students.

### Tutoring Services

Content Tutoring is available in most general education courses and a number of upper-level disciplinary courses. Free one-on-one tutoring, small group tutoring, and drop-in tutoring is provided through peer tutors and graduate assistants who are carefully trained, and regularly evaluated. Students seeking tutoring sessions can schedule an appointment or simply stop by the Learning Center to see if a tutor is available on a walk-in basis. For students who enjoy studying in a collaborative environment, small group tutoring offers students the chance to meet in study groups where a tutor helps explain problem areas and guides the direction of the group. Students who desire flexibility and a casual tutoring environment will enjoy the drop-in tutoring option where they can choose to meet with a tutor or

small group for as little as a few minutes or up to a few hours. The many options for tutoring provide students with choices to fit their learning styles and academic needs.

The Learning Center also offers individual appointments, workshops, and resources for helping students improve their writing or address writing concerns. Students can schedule an individual appointment with a trained writing tutor where they can discuss their work-in-progress and enhance their writing abilities. Through the Learning Center's website, students can also view on-line writing workshops, learn about interactive workshops available at the center, and access writing resources to help them throughout the writing process. Students will find that talking with a writing tutor can help them strengthen their writing skills and improve the quality of their writing assignments.

### Learning Specialists

Professional learning specialists are available to help students develop effective learning strategies and reach their academic goals. Learning specialists are equipped to help students improve their study and testing habits and learn how to manage their time, test anxiety, and stress. Not only can a learning specialist serve as a mentor to students experiencing difficulties in their academic skills, but learning specialists can also successfully help students on probation improve their academic standing. Learning specialists meet with students on a one-to-one basis, and students should schedule an appointment to meet with a Learning Specialist.

### Academic Improvement Plan

The Academic Improvement Plan (AIM) assists students on academic probation in developing strategies and skills that will help them to improve their cumulative grade point average. Learning specialists guide students in the AIM program to help them experience success in college. This structured program is designed to give students skills in studying, self-management, emotional intelligence, and personal responsibility, all of which can help them to improve their academic standing and achieve success in their courses.

The Learning Center staff endeavors to be a central resource for all learners in the university community. To learn more about the resources and services provided by the Learning Center, call (717) 477-1420 or visit the center's website at [www.ship.edu/learning/](http://www.ship.edu/learning/).

### 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 [djjeff@ship.edu](mailto:djjeff@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. The store is open Monday through Thursday, 8:00 a.m. to 7:00 p.m.; Friday, 8:00 a.m. to 5:00 p.m.; and 11:00 a.m. to 4:00 p.m. on Saturday during the school year. For additional information, call (717) 477-1600, or visit our website <http://ship.bkstr.com>.

### Veterans Services

The Veterans Service Office provides support for students who are veterans or recipients of veterans benefits. The office coordinates veterans benefits and supports students with academic and personal issues. It develops activities and programs to help vets become involved with each other and the entire campus community including picnics, Veterans Day events, fundraisers for Wounded Warriors, and a 9/11-remembrance program.

The Veterans Resource Center, located in the Ceddia Union Building (CUB 235), provides a space to gather and meet with other vets. 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/](http://www.ship.edu/veterans/).

### Women's Center

The Women's Center of Shippensburg University advances the equality and empowerment of woman-identified students, faculty and staff. In line with the Shippensburg University Mission Statement, the Women's Center assists students in their personal, social, and ethical development through educational programs, specialized resources, celebration of achievements by and for women, and the pursuit of social justice.

Using empowerment theory to guide our actions, the staff and volunteers of the Women's Center advocate for victims of sexual misconduct, intimate partner abuse, and other violent crimes. We are dedicated to fostering a safe educational environment that is both respectful and inclusive to all members of our campus.

community. All women and men are welcomed and encouraged to use the Women's Center services and resources.

Guided by empathy, integrity, open-mindedness and a strong commitment to collaboration, the Women's Center works toward equality, empowerment and ending violence for all members of the Shippensburg University community. The Women's Center serves the campus community by hosting programs, conferences, workshops and other events. The Women's Center's conference room, lounge, and library are valuable resources to members of the campus community. The Women's Center is located on the first floor of Horton Hall and is online at [www.ship.edu/womens\\_center](http://www.ship.edu/womens_center). You can contact the Women's Center at (717) 477-1790 or [womenscenter@ship.edu](mailto:womenscenter@ship.edu).

### **Other Information**

#### **Commencement**

Two commencements are held each year, one in December and one in May.

Students completing degree requirements during the fall or winter may participate in the December commencement. Students completing degree requirements in the spring or summer may participate in the May commencement.

Graduate degree candidates must submit their application for graduation and pay the graduation fee to the Registrar's Office prior to the beginning of their final term. Applications received after the deadline date will be held and processed for the next commencement.

#### **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.

### **Procedures for Reclassification**

Domicile requests for students who have earned credits at Shippensburg University should be submitted to the 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.

### **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 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.



### Weather Conditions

Information pertaining to cancellation of classes due to bad weather will be available by calling HOTLINE at (717) 477-1200 or visiting [ship.edu/weather](http://ship.edu/weather). When classes are canceled, radio stations in the general area will be notified. When classes are not canceled students should use their own good judgment as to whether they can make it to classes without taking unnecessary risks regarding their own safety. Accordingly, students who are unable to attend classes are responsible for contacting the instructor to make arrangements for making up any work missed.

# University Curricula

Graduate curricula of the university lead to the master's/doctoral degree or to post-master's certification in Educational Leadership.

## 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 in Educational Leadership (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.

## Departments and Degree Programs

Departments in each college and the graduate degree programs available for each department are listed below. Concentrations for each program are italicized.

### **College of Arts and Sciences**

Biology Department

Biology M.S.

Computer Science and Engineering Department

Computer Science M.S.

*Cybersecurity*

*IT Leadership*

*Management Information Systems*

*Software Engineering*

Communication/Journalism Department

Communication Studies M.S.

*Digital Media*

*Strategic Public Relations*

Geography/Earth Science Department

Geoenvironmental Studies M.S.

History and Philosophy Department

Applied History M.A.

Political Science Department

Public Administration M.P.A.

Psychology Department

Psychological Science M.S.

Sociology and Anthropology Department

Organizational Development and Leadership M.S.

*Business*

*Communications*

*Environmental Management*

*Higher Education Structure and Policy*

*Historical Administration*

*Individual and Organizational Development*

*Management Information Systems*

*Public Organizations*

*Social Structures and Organization*

### **John L. Grove College of Business**

Business Administration M.B.A.

*Finance*

*Health Care Management*

*Management Information Systems*

*Supply Chain Management*

### **College of Education and Human Services**

Counseling and College Student Personnel Department

Counseling M.S.

*College Counseling*

*College Student Personnel*

*Clinical Mental Health Counseling*

Counseling M.Ed.

*Dual (K-12) School Counseling*

Criminal Justice Department

Administration of Justice M.S.

Educational Leadership and Special Education Department

Educational Leadership Ed.D.

Educational Leadership M.Ed.

Special Education M.Ed.

*Behavioral Disorders*

*Comprehensive Certification*

*Intellectual and Developmental Disabilities*

*Learning Disabilities*

Social Work and Gerontology Department

Social Work M.S.W.

Teacher Education Department

Curriculum and Instruction M.Ed.

*Biology*

*Early Childhood Education*

*Elementary Education*

*Geography/Earth Science*

*History*

*Mathematics*

*Middle Level Education*

*Modern Languages*

Reading M.Ed.

STEM Education M.A.T.

## 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:

- Communication/English
- Counseling
- Early Childhood Education
- Elementary Education
- Environmental Education
- Foreign Languages
- Mathematics
- Pupil Services
- Reading
- Science
- 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.

# College of Arts and Sciences

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

## Biology Department

Todd M. Hurd, Ph.D., *Chair* (717) 477-1401

Marcie L. Baer-Lehman, Ph.D.

Sherri E. Bergsten, Ph.D.

Pablo Delis, Ph.D.

Emily B. Kramer, Ph.D.

Theo S. Light, Ph.D.

David R. Long, Ph.D.

Alison Luce-Fedrow, Ph.D.

Timothy J. Maret, Ph.D.

Michael J. McNichols, Ph.D.

William J. Patrie, Ph.D.

Gregory S. Paulson, Ph.D.

Heather F. Sahli, Ph.D.

Richard L. Stewart, Ph.D.

Nathan E. Thomas, Ph.D.

## Biology (M.S.)

The Master of Science degree program in biology is designed to provide a strong foundation in the 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 his/her graduate advisor to complete a proposed course of study form.

Each candidate for a degree must complete a minimum of 31 semester hour credits. All candidates must complete BIO 593 Biometry and BIO 515 Scientific Communication in Biology.

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.

At least 21 credits must be earned in biology courses (including courses offered by the Marine Science Consortium at Wallops Island). The remainder may be selected, with advisement, from courses such as chemistry, physics, mathematics, computer science, or geography/earth science. Candidates simultaneously working toward 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.

### 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 including at least one capstone experimental course.

### 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	3
BIO 408	Principles of Virology	3
BIO 409	Immunology	3
BIO 412	Ichthyology	3
BIO 417	Herpetology	3
BIO 418	Molecular Biology	3
BIO 419	Ornithology	3
BIO 425	Biota of Florida	2
BIO 430	Principles of Evolution	3
BIO 442	Aquatic Ecology	3
BIO 444	Conservation Biology	3
BIO 448	Field Botany and Plant Taxonomy	3
BIO 450	Endocrinology	3

BIO 461	Techniques in Biotechnology	3
BIO 485	Biological Microscopy and Imaging	3
BIO 491	Selected Topics in Biology	1-3
BIO 492	Selected Topics in Biology	3
BIO 494	Field Research Techniques	3
BIO 495	Selected Topics in Biology	3
BIO 496	Selected Topics in Biology	3
BIO 497	Selected Topics in Biology	3
BIO 498	Selected Topics in Biology	3
BIO 514	Aquatic Entomology	3
BIO 515	Scientific Communication in Biology	1
BIO 520	Plant Ecology	3
BIO 522	Community Ecology	3
BIO 524	Evolutionary Development	3
BIO 526	Medical Microbiology	3
BIO 528	Entomology	3
BIO 541	Ecosystems	3
BIO 547	Wetland Ecology	3
BIO 555	Comparative Environmental Physiology	3
BIO 559	Evolutionary Ecology	3
BIO 577	Ecomorphology	3
BIO 592	Selected Topics in Biology	1-3
BIO 593	Biometry	3
BIO 594	Selected Topics in Biology	1-3
BIO 595	Selected Topics in Biology	1-3
BIO 596	Selected Topics in Biology	1-3
BIO 598	Selected Topics in Biology	1-3
BIO 599	Independent Study	3
BIO 600	Biological Research Methods	
BIO 605	Graduate Research I	1-3
BIO 606	Graduate Research II	1-3
BIO 609	Internship	3
BIO 610	Internship II	3
BIO 612	Thesis I	3
BIO 613	Thesis II	3

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

## Science Supervisor

For information concerning the post-master's degree program leading to Pennsylvania certification as a Science Supervisor, refer to the Department of Educational Leadership and Special Education (p. 79).

## Communication/Journalism Department

Kimberly Garris, Ph.D., *Chair* (717) 477-1528  
Edward J. (Ted) Carlin, Ph.D.  
Michael Drager, Ph.D.  
Carrie A. Sipes, Ph.D.

## Communication Studies (M.S.)

A minimum of 30 graduate semester hour credits is required for the completion of the Master of Science degree in communication studies. 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 Department office and/or website.

The communication studies program is directed to the student seeking a professionally focused program for:

1. The media professional seeking career advancement and further development of digital media and skills.
2. The media professional seeking career advancement and further development of strategic public relations skills.
3. The baccalaureate degree holder in another discipline who wishes to prepare for a career in the professional communication field.

### Degree Requirements

#### REQUIRED CORE COURSES (9 crs.)

(Students must complete all three core courses.)

COM 510	Professional Seminar	3
COM 520	Applied Mass Communication Research	3
COM 603	Professional Project in Mass Communications	3

#### PROFESSIONAL TRACKS REQUIRED CORE (6 crs.)

(Students must select one option and complete both courses.)

#### Strategic Public Relations

COM 505	Public Relations Foundations	3
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COM 506 Public Relations Strategies 3

### Digital Media

COM 527 Digital Storytelling 3

COM 528 Digital Media Workshop 3

### ELECTIVES (15 crs. with advisement)

Students choose communications and related interdisciplinary courses to satisfy professional goals and personal interests. Students are limited to three interdisciplinary courses.

#### Communication Studies Electives:

COM 410 Women and the Media 3

COM 425 Feature Writing 3

COM 451 Electronic Field Production 3

COM 452 Multimedia Journalism 3

COM 460 Case Studies in Public Relations 3

COM 470 Advanced Digital Photographic Communication 3

COM 476 Magazine Design 3

COM 481 Digital Media Design 3

COM 482 Internet Communication 3

COM 484 Electronic Media Programming and Management 3

COM 490 Selected Topics in Communication/Journalism 1-3

COM 491 Selected Topics in Communication/Journalism 1-3

COM 492 Selected Topics in Communication/Journalism 1-3

COM 511 Modes of Film Communication 3

COM 526 Emerging Mass Media Technologies 3

COM 530 Law and the Media 3

COM 536 World Broadcasting Systems 3

COM 570 Fundraising and Association Public Relations 3

COM 594 Selected Topics in Communication/Journalism 1-3

COM 609 Internship I 3

COM 610 Internship II 3

#### Interdisciplinary Electives:

With their advisors' approval, students may select up to three interdisciplinary courses that enrich and broaden the communication studies curriculum.

#### 400 Level Courses

Students may include no more than 12 credits of 400 level courses in their degree program.

#### 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 at a mass media-related organization. The main objective of the internship is to provide the student with direct experience in the operation of a newspaper, magazine, radio station, television station, public relations/advertising office, or other approved media-related organization.

#### Professional Organizations

A variety of professional organizations supplement instruction. There are active chapters of the National Broadcasting Society (NBS), the Public Relations Student Society of America (PRSSA), and the Society of Professional Journalists (SPJ). 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.

## Communication/English Supervisor

For information concerning the post-master's degree program leading to Pennsylvania certification as a Communication/English Supervisor, refer to Supervisory Certification Programs in the Department of Educational Leadership and Special Education (p. 79).

## Computer Science and Engineering Department

Carol A. Wellington, Ph.D., *Chair* (717) 477-1424

Alice J. Armstrong Ph.D.

Thomas H. Briggs, Ph.D.

C. Dudley Girard, Ph.D.

Jeonghwa Lee, Ph.D.

David J. Mooney, Ph.D.

## 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 three prerequisite undergraduate courses.

Full-time graduate students will take nine graduate credits 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 credits consisting of:

#### **Core Courses**

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

- 12 credit hours of CSC electives or
- Software Engineering Concentration or
- IT Leadership Concentration or
- Cybersecurity Concentration or
- Management Information Systems Concentration

CSC 501	Algorithm Design and Analysis	3
CSC 502	Automata Theory	3
CSC 520	Computer Architecture	3
CSC 521	Operating Systems	3
CSC 523	High Performance Computing	3
CSC 570	Database Management Systems	3

#### **Electives**

Students can choose either 12 credits of Electives, 400-Level CSC courses (no more than two), or a Concentration as part of the 30 credits degree requirement.

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

### **Concentrations**

#### **Cybersecurity**

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	3
CSC 635	Biometrics	3
CSC 645	Cybersecurity Risk Management and Assessment	3
CSC 655	Wireless Networks and Security	3

#### **IT Leadership**

CSC 559	Agile Software Methods	3
CSC 563	Software Metrics and Process Management	3
SOC 550	Leadership Theory and Practice	3
SOC 560	Leadership, Change, and Innovation	3

#### **Software Engineering**

CSC 561	Agile Development Techniques I	3
CSC 562	Agile Development Techniques II	3
CSC 563	Software Metrics and Process Management	3
CSC 559	Agile Software Methods	3

#### **Management Information Systems**

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

## **Geography/Earth Science Department**

William L. Blewett, 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.  
 Kurtis Fuellhart, Ph.D.  
 Tim Hawkins, Ph.D., Graduate Coordinator (717) 477-1662  
 Claire Jantz, Ph.D.  
 Paul Marr, Ph.D.  
 George Pomeroy, Ph.D.  
 Janet S. Smith, Ph.D.  
 Kay R.S. Williams, Ph.D.  
 Christopher Woltemade, Ph.D.  
 Joseph Zume, Ph.D.

## **Geoenvironmental Studies (M.S.)**

### **Admission**

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

- a. 12 hours in geography or 12 hours in the earth sciences or a combined total of 18 hours in the two fields; or,

- b. 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.

Conditional admission may be granted by the departmental graduate faculty committee for a student lacking the required level of entrance credits with full admission granted after the deficiencies have been corrected and six hours of graduate work successfully completed. 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 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 in which teaching and research activities are focused. While one goal of the program is to provide broad training in environmental 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:

- Land Use/Human Geography
- Techniques
- Hydrology/Climatology
- Geology

### ***Requirements***

Students are required to take at least 36 credits to complete the master's degree in geoenvironmental studies. 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 crs.) OR a one semester research project (3 crs.) and internship (6 crs.)**.
- Students must take and pass the departmental practical exam.

### ***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, word 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 owns numerous pieces of field equipment that can be used for classroom applications as well as student research. This equipment includes but is not limited to: digital surveying equipment, hand held and logging hydrologic and meteorological equipment, 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***

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 Studies degree, you must complete a minimum of 36 hours of graduate work distributed as follows:

**REQUIRED COURSES:**

GEO 503 Fundamentals of Geoenvironmental Research 3

GEO 503: (restricted to Geoenvironmental majors)

**A minimum of 3 credits of geotechniques from the following:**

GEO 420 GIS III: Advanced Geographic Information Systems 3

GEO 425 Image Processing 3

GEO 440 Field Techniques 3

GEO 441 Quantitative Methods 3

GEO 517 Applied Geographic Information Systems 3

GEO 530 Mapping Sciences 3

**ELECTIVES:**

ESS 404 Applied Meteorology and Climatology 3

ESS 413 Mineral and Rock Resources 3

ESS 442 Environmental Geology 3

GEO 402 Medical Geography 3

GEO 404 Groundwater and Hydrogeology 3

GEO 415 Regional Geographic Studies 3

GEO 420 GIS III: Advanced Geographic Information Systems 3

GEO 425 Image Processing 3

GEO 440 Field Techniques 3

GEO 441 Quantitative Methods 3

GEO 444 Environmental Land-Use Planning 3

GEO 446 Water Resources Management 3

GEO 450 Geography-Geology Field Studies 1-3

GEO 490 Selected Topics in Geography 1-3

GEO 517 Applied Geographic Information Systems 3

GEO 522 Geoenvironmental Hydrology 3

GEO 528 Sustainable Systems and the Spatial Economy 3

GEO 530 Mapping Sciences 3

GEO 531 Geomorphology 3

GEO 532 Disease and the Environment 3

GEO 536 Problems of the Atmospheric Environment 3

GEO 542 Land-Use Regulations 3

GEO 546 Geoenvironmental Research I 3

GEO 548 Geoenvironmental Research II 3

GEO 594 Selected Topics in Geography 1-3

GEO 599 Independent Study 3

**INTERNSHIP OR THESIS:**

Six credits of internship or thesis must be taken. If an internship is taken, a 3-credit research course (GEO 546 or GEO 548) is required.

GEO 609 Internship I 3

GEO 610 Internship II 3

GEO 612 Thesis I 3

GEO 613 Thesis II 3

Students pursuing both a Master of Science in Geoenvironmental Studies AND Teacher Certification in Geography-Social Studies or Earth-Space Science, may use EDU 495 Student Teaching and Professional Practicum (6 crs.) in place of GEO 609 Internship I and Internship II.

**NATURAL/SOCIAL SCIENCE ELECTIVES:**

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

## History and Philosophy Department

Steven Burg, Ph.D., *Chair* (717) 477-1189

Douglas Birsch, Ph.D.

John D. Bloom, Ph.D.

Catherine Clay, Ph.D.

Betty A. Dessants, Ph.D.

Allen Dieterich-Ward, Ph.D.

James Edwards, Ph.D.

David F. Godshalk, Ph.D.

Kim Klein, Ph.D.

Chandrika Paul, Ph.D.

Gretchen Pierce, Ph.D.

John Quist, Ph.D.

Christine Senecal, Ph.D.

Robert Shaffer, Ph.D.

Jonathan Skaff, Ph.D.

Mark E. Spicka, Ph.D.

Allan A. Tulchin, Ph.D.

Brian Ulrich, Ph.D.

## 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.

## 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. For those seeking careers in the field of public history, the program offers coursework and professional internships to prepare students for employment in museums and historical institutions. Educators will find a diverse array of courses in United States history, world history, and historical methods that will deepen their historical knowledge and provide new resources for classroom use. (All courses can be used to help satisfy Pennsylvania's Act 48 requirements.) The curriculum provides a rigorous historical training that can also prepare students for further graduate work in history or library studies. Recent graduates have secured teaching positions at community colleges, obtained research and editorial positions in both public and private sector, and started public history careers with organizations such as History Associates Incorporated, the U.S. Army Heritage and Education Center, the U.S. Army Military History Institute, and the National Park Service.

### **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**

The degree can be earned in approximately one and one-half years of full-time study or several years of part-time study. To be awarded a Master of Arts in Applied History, you must complete a minimum of 30 hours of graduate work distributed as follows:

#### **REQUIRED COURSES (12 crs.)**

HIS 600	Historical Research Methods	3
	OR	
HIS 601	Research in Local and Regional History	3
	AND	
HIS 501	Introduction to Applied History	3
	AND	
HIS 609	Internship I	3
	AND	
HIS 610	Internship II	3
	OR	
HIS 612	Thesis I	3
	AND	
HIS 613	Thesis II	3

### **RESTRICTED ELECTIVES (9 crs.)**

Chosen within the following fields:

#### **I. History of the Americas (3 crs.)**

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

HIS 490, HIS 592, HIS 599: With advisement

HIS 601: (if not used to satisfy the research requirement)

#### **II. Global Connections and Comparisons (3 crs.)**

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

Selected Topics in History and Reading in History with Departmental Approval.

#### **III. Applied History Skills (3 crs.)**

HIS 433	Oral History	3
HIS 460	Archives and Public History	3
HIS 502	Introduction to Archives	3
HIS 505	Advanced Topics in Public History	3
HIS 594	Selected Topics in History	1-3

HIS 594 with advisement

#### **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.

## Political Science Department

Curtis R. Berry, Ph.D.  
 Cynthia A. Botteron, Ph.D.  
 C. Nielsen Brasher, Ph.D., Chair  
 Alison D. Dagnes, Ph.D.  
 Michael Greenberg, Ph.D.  
 Sara A. Grove, Ph.D., J.D.  
 Steven B. Lichtman, Ph.D., J.D.  
 Mark D. Sachleben, Ph.D.  
 Lonca Bailey, Ph.D.  
 Ronnie B. Tucker, Ph.D.

## 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 and at the Dixon University Center in Harrisburg.

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. MPA students are leaders in the Public Administration Student Association, the campus professional development organization. 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	3
PLS 502	Human Resources Management	3
PLS 503	Public Budgeting and Financial Management	3
PLS 601	Research Methods	3
PLS 603	Public Policy Analysis and Program Evaluation	3
PLS 605	Capstone Seminar: Applied Public Management	3

### ELECTIVES (12 crs.)

PLS 431	Pennsylvania Local Government	3
PLS491	Selected Topics in Political Science	3
PLS 504	Ethics for Public Service Managers	3
PLS 511	State Government	3
PLS 512	Intergovernmental Relations	3
PLS 521	Labor Relations in the Public Sector	3
PLS 522	Advocacy in Public Administration	3
PLS 523	Communication for the Public Manager	3
PLS 553	Public Policy Implementation	3
PLS 561	Administrative Law	3
PLS 591	Selected Topics in Political Science	3
PLS 623	Field Research I	3
PLS 624	Field Research II	3

### EXPERIENTIAL REQUIREMENTS (6 crs.)

PLS 611	Internship I	3
PLS 612	Internship II	3
	OR	

### EXPERIENTIAL SKILLS ELECTIVES (for internship waiver - 3 Crs.)

PLS491	Selected Topics in Political Science	3
	OR	
PLS 591	Selected Topics in Political Science	3
PLS 521	Labor Relations in the Public Sector	3
PLS 522	Advocacy in Public Administration	3
PLS 523	Communication for the Public Manager	3
PLS 623	Field Research I	3
PLS 624	Field Research II	3
BSN 510	Economic and Information Systems Environment	4
BSN 512	Essentials of Accounting and Finance	4
GEO 517	Applied Geographic Information Systems	3

ISS 515	Information Systems Project Management	3
ISS 550	Database Design	3
ISS 570	Information Analysis	3
COM 570	Fundraising and Association Public Relations	3

PLS 491/591 (if applicable)

## Psychology Department

Lea Adams, Ph.D., *Chair* (477-1115)  
 Angela M. Bartoli, Ph.D.  
 Corrine Bertram, Ph.D.  
 Jamonn Campbell, Ph.D.  
 James D. Griffith, Ph.D.  
 Steven J. Haase, Ph.D.  
 Robert L. Hale, Ph.D.  
 Scott F. Madey, Ph.D.  
 Suzanne M. Morin, Ph.D.  
 Kathryn Potoczak, Ph.D., BCBA-D  
 Toru Sato, Ph.D.  
 Ashley Seibert, Ph.D.  
 Kim Weikel, Ph.D.

## Psychological Science (M.S.)

The Master of Science in psychological science degree is a two-year program designed to provide 1) advanced general knowledge of the field, 2) specialized knowledge of subfields, and 3) opportunities to develop appropriate research skills. By providing three separate tracks, the program is flexible enough for students to design a course of study appropriate for their specific needs. Students must declare their commitment to a track by the beginning of their second year.

1. The Research Track is appropriate for those students seeking degrees beyond the master's level. This track allows students to specialize in a subarea of psychology via elective selection and a required thesis (Thesis I and II).
2. The Applied Track is appropriate for graduates who are trying to secure employment in industry, government, or nonprofits immediately after graduation. Students have opportunities to take courses with more applied emphases (e.g., Human Factors, Cognitive Science) and have two semesters of real-world experience (Field Experience I and II) in industry settings.
3. The General/Reading Track is designed to meet the needs of those seeking to continue education or advance in their current place of employment. Students will take basic required scientific courses, fulfill cluster requirements, and take additional coursework to broaden their scope. Their competence will be demonstrated by passing a comprehensive exam.

To be considered for the M.S. in psychological science program, the following minimum requirements must be met. An applicant must:

- Have a baccalaureate degree from an accredited college or university
- Have a minimum 2.75 quality point average
- Have a minimum of six credit hours, successfully completed, in psychology
- Have at least one course, successfully completed, in statistics

While admission is on a rolling basis, students begin the program of study during the fall semester only.

### 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 (6 crs.)

PSY 500	Advanced Research Design and Statistics I	3
PSY 501	Advanced Research Design and Statistics II	3

Note: PSY 500 has a residency requirement—it must be taken from the Department of Psychology

#### II. CORE COURSES (12 crs.)

(Choose one from each of the following four areas)

##### Learning and Motivation

PSY 512	Theories of Learning	3
PSY 516	Motivation	3
PSY 535	Behavioral Assessment	3
PSY 536	Behavioral Research and Ethics	3
PSY 540	History of Psychology	3

##### Developmental and Social

PSY 527	Studies in the Psychology of Adolescence	3
PSY 529	Psychology of Successful Aging	3
PSY 533	Advanced Social Psychology	3
PSY 545	Psychological Development of the Child: Theories and Research	3
PSY 590	Introduction to Group Dynamics	3

##### Personality and Abnormal

PSY 515	Theories of Personality	3
PSY 518	Introduction to Behavior Analysis	3
PSY 530	Studies in the Psychology of the Exceptional Child	3
PSY 534	Survey of Research in Abnormal Behavior	3
PSY 543	Behavioral Treatment and Systems Support	3

##### Cognitive

PSY 531	Advanced Cognitive Psychology	3
PSY 565	Human Factors	3

PSY 570 Seminar in Cognitive Science 3

### III. ELECTIVES (6 crs.)

PSY 594 Selected Topics in Psychology 3

PSY 595 Selected Topics in Psychology 3

PSY 596 Selected Topics in Psychology 3

Additional Cluster Courses (up to four)

### IV. ADDITIONAL PROGRAM REQUIREMENTS

#### Research Track (6 crs.)

PSY 612 Thesis I 3

PSY 613 Thesis II 3

*Students completing Thesis I must also complete Thesis II to be awarded credit for Thesis I.*

#### Applied Track (6 crs.)

PSY 621 Field Experience I 3

PSY 622 Field Experience II 3

#### General/Reading Track (12 total crs. of electives)

PSY 6 credits of electives

Comprehensive Exam

Visit our website at [www.ship.edu/psychology/](http://www.ship.edu/psychology/) for the most current program information.

## Sociology/Anthropology Department

Barbara J. Denison, Ph.D., *Chair, Director, Organizational Development and Leadership Program (717) 477-1257*

Philip Broyles, Ph.D.

Allison Carey, Ph.D.

Debra Cornelius, Ph.D.

Cynthia Drenovsky, Ph.D.

Chad Kimmel, Ph.D.

Robert Pineda-Volk, Ph.D.

Ying Yang, Ph.D.

## Organizational Development and Leadership (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 3

SOC 560 Leadership, Change, and Innovation 3

PLS 501 Organizational Theory and Behavior 3

PLS 601 Research Methods 3

#### CAPSTONE EXPERIENCE (6 crs.)

(recommended after 18-21 crs.)

SOC 570 Applied Organizational and Leadership Analysis 3

SOC 609 Sociology Graduate Internship 3

(Internship within concentration area)

#### CONCENTRATION AREAS and SELECT RECOMMENDED ELECTIVES (12 crs.)

##### Business

BSN 510 Economic and Information Systems Environment 4

BSN 511 Business Operations and Analysis 4

BSN 512 Essentials of Accounting and Finance 4

BSN 513 Organizational Behavior and Marketing 4

MBA 547 Management Information Systems and Applications 3

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

##### Communications

COM 410 Women and the Media 3

COM 460 Case Studies in Public Relations 3

COM 482 Internet Communication 3

COM 484 Electronic Media Programming and Management 3

COM 490 Selected Topics in Communication/Journalism 1-3

COM 516 Photographic Communication 3

COM 526 Emerging Mass Media Technologies 3

COM 530 Law and the Media 3



COM 536	World Broadcasting Systems	3
COM 570	Fundraising and Association Public Relations	3
COM 520	Applied Mass Communication Research	3

(ODL students in this concentration are advised COM 520 may be taken to replace 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.

#### Environmental Management

GEO 415	Regional Geographic Studies	3
GEO 440	Field Techniques	3
GEO 444	Environmental Land-Use Planning	3
GEO 446	Water Resources Management	3
GEO 490	Selected Topics in Geography	1-3
GEO 522	Geoenvironmental Hydrology	3
GEO 528	Sustainable Systems and the Spatial Economy	3
GEO 532	Disease and the Environment	3
GEO 536	Problems of the Atmospheric Environment	3
GEO 542	Land-Use Regulations	3
GEO 594	Selected Topics in Geography	1-3

Other courses as directed in consultation with the ODL advisor.

#### Higher Education Structure and Policy

CNS 562	Student Personnel Work in Higher Education	3
ESC 400	Methods of Coaching	3
PLS 504	Ethics for Public Service Managers	3
PLS 603	Public Policy Analysis and Program Evaluation	3
PSY 516	Motivation	3
SOC 435	Gender, Organizations, and Leadership	3
SOC 445	Sexuality and Sexual Orientation: A Social Approach	3
SOC 530	Sociology of Higher Education	3
SOC 594	Selected Topics in Sociology	3

ESC 400: (restricted see ODL advisor)

Other courses as directed in consultation with the ODL advisor.

#### Historical Administration

HIS 433	Oral History	3
HIS 501	Introduction to Applied History	3
HIS 502	Introduction to Archives	3
HIS 505	Advanced Topics in Public History	3
HIS 513	Seminar in U.S. Women's History	3
HIS 515	Seminar in 20th Century U.S. Social History	3
HIS 594	Selected Topics in History	1-3
HIS 599	Readings in History	3-6

HIS 600	Historical Research Methods	3
	OR	

HIS 601	Research in Local and Regional History	3
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(ODL students in this concentration are advised to select HIS 600 or HIS 601 to replace 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

#### Individual and Organizational Development

PSY 512	Theories of Learning	3
PSY 515	Theories of Personality	3
PSY 529	Psychology of Successful Aging	3
PSY 533	Advanced Social Psychology	3
PSY 565	Human Factors	3
PSY 590	Introduction to Group Dynamics	3
PSY 595	Selected Topics in Psychology	3
PSY 596	Selected Topics in Psychology	3
PSY 597	Independent Study	3

Other courses as directed in consultation with the ODL advisor.

#### Management Information Systems

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

#### Public Organizations

PLS 502	Human Resources Management	3
PLS 504	Ethics for Public Service Managers	3
PLS 511	State Government	3
PLS 512	Intergovernmental Relations	3
PLS 561	Administrative Law	3
PLS 591	Selected Topics in Political Science	3
PLS 603	Public Policy Analysis and Program Evaluation	3

Other courses as directed in consultation with the ODL advisor.

#### Social Structures and Organization

SOC 410	Family and Society	3
SOC 435	Gender, Organizations, and Leadership	3
SOC 440	Global Leadership for Global Society	3
SOC 445	Sexuality and Sexual Orientation: A Social Approach	3
SOC 490	Selected Topics in Sociology	1-3
SOC 530	Sociology of Higher Education	3
SOC 594	Selected Topics in Sociology	3

Other courses as directed in consultation with the ODL advisor.

Additional courses are available with the approval of the program director.

***Applied Experiences (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.



# **John L. Grove College of Business**

John G. Kooti, Ph.D., *Dean, John L. Grove College of Business*  
(717) 477-1435  
Anthony Winter, D.Ed., *Associate Dean, John L. Grove College of Business* (717) 477-1620  
Robert Stephens, Ph.D., *MBA Director* (717) 477-1684

Joseph Beck, Ph.D., Management  
Sarah Bryant, Ph.D., Finance  
Jerry Carbo, Ph.D., Management  
Joseph Catano, Ph.D., Management Information Systems  
Michael Coolsen, Ph.D., Marketing  
Azim Danesh, Ph.D., Management Information Systems  
Viet Dao, Ph.D., Management Information Systems  
Louise Hatfield, Ph.D., Management  
David Hwang, Ph.D., Supply Chain Management  
Ian Langella, Ph.D., Supply Chain Management  
Shelley Morrisette, Ph.D., Management  
Robert Neidigh, Ph.D., Supply Chain Management  
William Oberman, Ph.D., Management  
June Pham, Ph.D., Finance  
Edward Pitingolo, Ph.D., Accounting  
Robert Setaputra, Ph.D., Supply Chain Management  
Robert Stephens, Ph.D., Management  
Vicki Taylor, Ph.D., Human Resource Management  
Brian Wentz, Ph.D., Management Information Systems

## Advanced Supply Chain and Logistics Management

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

There is no admission fee for the certificate program. 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/](http://ship.edu/PCDE/Registration_Information/).

For tuition information please go to [ship.edu/Student\\_Accounts](http://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](http://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	Introduction to Logistics and Transportation Management	3
SCM 570	Supply Chain Management Theory and Practice	3
SCM 515	Procurement Management	3
SCM 555	Supply Chain Quality Management	3
SCM 590	Warehousing and Distribution Management	3
BSN 511	Business Operations and Analysis	4

BSN511 Business Operations and Analysis (4 crs.) 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.

## Business Administration (MBA)

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 crs.), which includes eight core courses and two elective courses. 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: part time, full time, and online. The requirements are the same in each of the three delivery formats. Students can also select the Supply Chain Management Concentration, Management Information Systems Concentration, or Finance Concentration.

### Part time

The Ship MBA-Professional is a hybrid format program designed for working professionals. Students can complete the program part time in two years, taking two classes one night a week. One-third of each course is composed of online content, while two-thirds of each course is taught in an electronic classroom and broadcast synchronously to remote sites via video-conferencing technology, thus providing students the opportunity to interact with the professor and other students face-to-face from multiple sites. These sites include:

- Shippensburg University campus
- Dixon University Center, Harrisburg
- East Stroudsburg University campus

Most class meetings are digitally recorded, so that when students cannot attend class due to work requirements, they may view the missed classes online via video streaming. Employers desiring to have their electronic conference room added as a video conferencing site for the Shippensburg MBA should contact the MBA office.

### Online

The Ship MBA is also delivered in a convenient 100 percent online format. Online courses allow students more flexibility in scheduling their time, but each course also includes optional opportunities to interact with the faculty member and other students directly through web-conferencing. Classes are offered in accelerated eight-week sessions.

Some exams may be proctored and require students to arrange an appointment at an approved proctoring site. Students can

complete the entire program in an online format on a part-time basis in two years.

### Admission Requirements

Undergraduate coursework and degree, relevant work experience, essay, and GMAT score 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.
- Provide a GMAT score of 450 or higher if applicant has less than five years of mid-level experience, including management experience, or for whom additional evaluation is needed.

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 Basic Oral Communication

### Course Requirements

#### Foundation Courses (may be waived based on completed undergraduate coursework)

BSN 510	Economic and Information Systems Environment	4
BSN 511	Business Operations and Analysis	4
BSN 512	Essentials of Accounting and Finance	4
BSN 513	Organizational Behavior and Marketing	4

All foundation courses are offered only in a 100% online format

#### CORE COURSES (21 crs.)

Students must complete any seven of the following eight courses.

MBA 502	Managerial Accounting	3
MBA 529	Corporate Financial Management	3
MBA 548	IT Management and Innovation	3
MBA 554	International Business	3
MBA 556	Organizational Leadership	3

MBA 565	Contemporary Decision Making	3
MBA 570	Marketing Management	3
MBA 577	Supply Chain Management	3

**Capstone Course (all students must complete this course)**

MBA 593	Strategic Management	3
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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 532	Marketing Research	3
MBA 533	Business Operations and Logistics Planning	3
MBA 534	Buyer Behavior	3
MBA 547	Management Information Systems and Applications	3
MBA 550	European Business Environment	3
MBA 552	Entrepreneurship	3
MBA 557	Negotiation	3
MBA 558	Ethics and Sustainability	3
MBA 561	Human Resources and Development	3
MBA 571	International Marketing Management	3
MBA 575	Global Supply Chain Management	3
MBA 590	Selected Topics	3
MBA 591	Selected Topics	3
MBA 594	Selected Topics	3
MBA 595	Selected Topics	3
MBA 596	Business Practicum	3
MBA 599	Independent Studies	3
FIN 512	Investment Analysis	3
FIN 520	Financial Risk Management	3
FIN 525	Multinational Business Finance	3
FIN 533	Applied Financial Analysis	3
ISS 515	Information Systems Project Management	3
ISS 550	Database Design	3
ISS 570	Information Analysis	3
SCM 510	Introduction to Logistics and Transportation Management	3
SCM 570	Supply Chain Management Theory and Practice	3
SCM 515	Procurement Management	3
SCM 555	Supply Chain Quality Management	3
SCM 590	Warehousing and Distribution Management	3
MBA 581	Health Information Technology	3
MBA 582	Health Care Financial Management	3
MBA 583	Health Care Law	3
MBA 584	Health Care Strategic Management	3

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

**Finance Concentration**

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.

**Concentration Requirements (36 crs.)**

Students take the eight required MBA core courses (24 crs.) plus four finance specific courses (12 crs.). Before taking any of the finance concentration courses, students must first complete the core courses MBA 529 Financial Management and MBA 502 Managerial Accounting. All Finance concentration courses are offered only in a 100 percent online format.

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

**Health Care Management**

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

**Concentration Requirements**

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

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

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

**Management Information Systems Concentration**

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

**Concentration Requirements (36 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	3
ISS 550	Database Design	3
ISS 570	Information Analysis	3
MBA 547	Management Information Systems and Applications	3

## Supply Chain Management Concentration

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.

### Concentration Requirements (36 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 courses are offered only in a 100 percent online format.

SCM 510	Introduction to Logistics and Transportation Management	3
SCM 515	Procurement Management	3
SCM 555	Supply Chain Quality Management	3
SCM 570	Supply Chain Management Theory and Practice	3
SCM 590	Warehousing and Distribution Management	3

## Finance Certificate

### REQUIRED COURSES (15 crs.)

MBA 529	Corporate Financial Management	3
FIN 512	Investment Analysis	3
FIN 520	Financial Risk Management	3
FIN 525	Multinational Business Finance	3
FIN 533	Applied Financial Analysis	3

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 (3 crs.) 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.

## 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.

### 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, 511, 512 and 513), or by having completed equivalent undergraduate courses.

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

## 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 select four courses from five offerings 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:

- 4 credits
- 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.

There is no admission fee for the certificate program. Applications must be submitted no later than the completion of 8 credits in the program.



**Registration**

For registration information please go to  
[http://www.ship.edu/PCDE/Registration\\_Information/](http://www.ship.edu/PCDE/Registration_Information/)

For tuition information please go to  
[http://www.ship.edu/Student\\_Accounts](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](https://www.ship.edu/Student_Accounts/Forms).

**Degree Requirements****Courses (4 crs. each)**

BSN 510	Economic and Information Systems Environment	4
BSN 511	Business Operations and Analysis	4
BSN 512	Essentials of Accounting and Finance	4
BSN 513	Organizational Behavior and Marketing	4
BSN 514	Strategic Management and Leadership	4

**MBA Option**

Option to transfer to MBA program:

- BSN 510, BSN 511, BSN 512, and BSN 513 may be used to satisfy MBA prerequisite/foundation requirements.
- Those individuals who earn a certificate with a 3.0 or better in each course, and have taken BSN 510, BSN 511, BSN 512, and BSN 513 may apply to the MBA without taking the GMAT, and will be accepted based on space availability, if they have a baccalaureate degree from an accredited college or university.
- Application to the MBA program must be made no later than the completion of 12 credits.

## Management Information Systems (MIS) Graduate Certificate

Shippensburg University offers 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: the Management Information Systems Graduate Certificate.

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 the Dixon University Center 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 core 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 [www.ship.edu/PCDE/Non-Degree/](http://www.ship.edu/PCDE/Non-Degree/).
- Complete the paper application specific to this program posted at [www.ship.edu/PCDE/MIS/Admissions](http://www.ship.edu/PCDE/MIS/Admissions).

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	3
ISS 550	Database Design	3
ISS 570	Information Analysis	3
MBA 547	Management Information Systems and Applications	3

**MAT 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.

# **College of Education and Human Services**

James R. Johnson, Ph.D., *Dean, College of Education and Human Services* (717) 477-1373

## Counseling and College Student Personnel Department

Kurt L. Kraus, Ed.D., *Chair* (717) 477-1668  
 Clifford W. Brooks, Jr., Ed.D.  
 Andrew L. Carey, Ph.D.  
 Marcy J. Douglass, Ph.D.  
 Rose Merrell-James, Ed.D.  
 Kathryn Newton, Ph.D.  
 Matthew R. Shupp, Ed.D.  
 Todd K. Whitman, Ph.D.

### *Department Mission and Student Learning Goals*

The mission of the Department of Counseling and College Student Personnel, 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 multifaceted 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, psycho education 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, College 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 Counseling and College Student Personnel 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 48-hour Master's of Science degree in College Counseling or College Student Personnel, and (c) a 60-hour Master's of Science degree in Clinical Mental Health Counseling.

### **Admission to Program**

All applicants for admission to the Department of Counseling and College Student Personnel program must begin by applying to the Office of Graduate Admissions. The Office of Graduate Admissions will supply the applicant with required departmental application forms.

Admission to the Department of Counseling and College Student Personnel is a process rather than a one-step event. Generally, the admission procedure requires a full academic semester for processing applications, credentials, references, supplemental data form, and the on-campus interview. Students are encouraged to begin this process at least six months prior to the desired starting date. Students must be interviewed and admitted to the counseling department before they will be allowed to enroll in counseling courses.

Applicants for admission to the program must meet the requirements for the specialization and for the Department of Counseling and College Student Personnel 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 applicants to the Clinical Mental Health, College Counseling, and the College Student Personnel Programs, have less than a 2.75, they must successfully complete the Graduate Record Exam (GRE) or Miller Analogies Test (MAT).

Applicants are required to submit a resume, three references on department forms, and supplemental data forms. If the applicant meets the initial requirements, the Admission Committee will invite the applicant for a group interview. The applicant will be notified by mail of this decision. The group interview is an opportunity to observe your interpersonal skills.

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 CNS585 Practicum 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 Counseling and College Student Personnel's *Student Manual* made available online at [www.ship.edu/counsel/](http://www.ship.edu/counsel/).

## **Counseling Certification**

The Department of Counseling and College Student Personnel offers a graduate program leading to certification in school counseling.

### **Requirements**

Completion of the appropriate program in counseling is required for certification. A quality point average of 3.0 must be maintained. Additionally, a grade of B or better must be earned in the following courses to qualify for continuation in the program and department endorsement for certification.

#### **Courses**

CNS 578	Pre-practicum in Counseling	3
CNS 585	Practicum in Counseling	3
CNS 580	Clinical Field Experience I	3
CNS 589	Clinical Field Experience II	3

## **Couples and Family Counseling Certificate**

### **Meeting Your Needs**

- The Professional Counselor Licensure Bill requires counselors in the field to have 60 graduate credits. Most Counselor Education/Counseling graduate programs require only 48 credits.
- In addition, school counselors in the public schools in Pennsylvania must fulfill the ACT48 professional development requirements, which can be satisfied with the completion of six graduate credits every five years.
- Finally Licensed Professional Counselors and National Certified Counselors must complete professional development requirements every five years.

### **Program Description**

- The post-master's graduate certificate, offered at the Dixon University Center in Harrisburg, was developed by faculty in the Department of Counseling and College Student Personnel 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	3
CNS 527	Models and Techniques in Couples, Marital, and Family Therapy	3
CNS 526	Brief Therapy for Martial, Family, and Couples Counseling	3
CNS 529	Systemic Counseling with Individuals, Couples and Families	3

**Counseling Licensure**

The Department of Counseling and College Student Personnel 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.

**Counseling (M.S.)**

**College Counseling Concentration**

**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 the semester they are enrolled in Practicum.

**Phase I 15 crs.**

CNS 559	Introduction to the Helping Services	3
CNS 600	Research and Statistics	3
CNS 515	Career Development	3
CNS 519	Implications for Human Development for Counseling	3
CNS 578	Pre-practicum in Counseling	3

**Phase II 27 crs.**

CNS 585	Practicum in Counseling	3
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CNS 522	Assessment Techniques	3
CNS 509	Multicultural Counseling	3
CNS 573	Theories of Counseling	3
CNS 512	Group Counseling and Leadership Skills	3
CNS 560	Principles of College Student Personnel	3
CNS 565	The College Student and the College Environment	3
CNS 588	Counseling Strategies and Techniques	3
CNS 524	The DSM and Psychopathology for a CNS Perspective	3

**Phase III 6 crs**

CNS 580	Clinical Field Experience I	3
CNS 589	Clinical Field Experience II	3

Additional classes may be taken with approval of advisor.

Minimum = 48 crs.

**College Student Personnel Concentration**

**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 I 12 crs.**

CNS 559	Introduction to the Helping Services	3
CNS 600	Research and Statistics	3
CNS 515	Career Development	3
CNS 578	Pre-practicum in Counseling	3

**Phase II 21 crs.**

CNS 585	Practicum in Counseling	3
CNS 522	Assessment Techniques	3
CNS 509	Multicultural Counseling	3
CNS 512	Group Counseling and Leadership Skills	3
CNS 560	Principles of College Student Personnel	3
CNS 565	The College Student and the College Environment	3
CNS 587	Research Seminar in Counseling	3

**Phase III 15 crs.**

CNS 562	Student Personnel Work in Higher Education	3
CNS 580	Clinical Field Experience I	3
CNS 589	Clinical Field Experience II	3
	CNS Elective - Course selected with	

approval of advisor  
Leadership Elective—Course selected  
with approval of advisor

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, Advanced Research Seminar in Counseling. The completed project must be submitted to the student's advisor one month prior to graduation.

### **Clinical Mental Health Counseling Concentration**

#### **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	3
CNS 578	Pre-practicum in Counseling	3
CNS 568	Professional Orientation to Mental Health Counseling	3
CNS 573	Theories of Counseling	3
CNS 512	Group Counseling and Leadership Skills	3
CNS 524	The DSM and Psychopathology for a CNS Perspective	3

#### **Phase II 27 crs.**

#### **The following courses must be taken prior to enrolling in Clinical Field Experience I:**

CNS 585	Practicum in Counseling	3
CNS 600	Research and Statistics	3
CNS 588	Counseling Strategies and Techniques	3
CNS 510	Drug and Alcohol Counseling	3
CNS 508	Marital, Couple, and Family Counseling	3

#### **The following courses must be taken anytime during the program:**

CNS 509	Multicultural Counseling	3
CNS 515	Career Development	3
CNS 519	Implications for Human Development for Counseling	3
CNS 522	Assessment Techniques	3

#### **Electives 6 crs.**

Two of the following electives may be taken at anytime during Phase II or III in the program:

CNS 564	Grief and Loss Issues in Counseling	3
CNS 567	Counseling Children	3

CNS 570	Working with Dreams, Sandtrays, and Music in Counseling	3
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#### **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	3
CNS 589	Clinical Field Experience II	3
CNS 603	Advanced Practice Seminar	3

Minimum = 60 crs

## **Counseling (M.Ed.)**

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.

### **K-12 School Counseling (M.Ed. and certification)**

#### **REQUIRED COURSES (51-60 crs.)**

Courses are organized into three phases and should be taken 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	3
CNS 559	Introduction to the Helping Services	3
CNS 515	Career Development	3
CNS 519	Implications for Human Development for Counseling	3
CNS 578	Pre-practicum in Counseling	3
CNS 600	Research and Statistics	3
EEC 526	Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except	3
ELP 516	Curriculum Assessment and Instructional PK-12 for Diverse Student Populations	3
RDG 413	Teaching Reading to English Language Learners	3

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	3
CNS 573	Theories of Counseling	3
CNS 522	Assessment Techniques	3
CNS 512	Group Counseling and Leadership Skills	3
CNS 509	Multicultural Counseling	3

CNS 505	Organization and Administration of School Counseling Services	3
CNS 588	Counseling Strategies and Techniques	3
CNS 567	Counseling Children	3

CNS 585: Mandatory attendance at Practicum/Field Orientation the prior semester and pre-registration

**Phase III – 6 crs.**

CNS 580	Clinical Field Experience I	3
CNS 589	Clinical Field Experience II	3

**Electives – 3 crs.**

Choose one from the following:

CNS 508	Marital, Couple, and Family Counseling	3
CNS 510	Drug and Alcohol Counseling	3
CNS 524	The DSM and Psychopathology for a CNS Perspective	3
CNS 564	Grief and Loss Issues in Counseling	3
CNS 570	Working with Dreams, Sandtrays and Music in Counseling	3

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 (p. 71).

## Criminal Justice Department

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 Matthew D. Fetzer, Ph.D.  
 Billy W. Henson, Ph.D.  
 Stephanie A. Jirard, J.D.  
 Cynthia A. Koller, Ph.D.  
 Carrie Maloney, Ph.D.  
 E. Britt Patterson, Ph.D.  
 Laura A. Patterson, Ph.D.

### *Admission Requirements*

Applicants for admission to graduate study with specialization in administration of 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 the Miller Analogies Test (MAT).

### *Mission Statement*

The Department of Criminal Justice offers two programs of graduate study, each of which lead to the Master of Science degree in administration of justice. The evening program on campus is designed for both pre- and in-service students pursuing graduate study under a traditional format. The weekend program is designed specifically for juvenile probation officers employed in the Commonwealth of Pennsylvania. A minimum of 36 semester hours of graduate level credits is required to complete each program.

As the systems designed to deliver justice services are continually asked to function effectively in an increasingly complex society, the need for capable criminal justice professionals becomes more and more pressing. The mission of the Department of Criminal Justice graduate programs is to provide current and future criminal justice professionals with the background and skills that will enable them to think critically about the problems of crime and justice and to be effective decision makers in the criminal justice arena. Central to achieving this mission is an integrated program of study designed to provide graduate students with the knowledge and skills to undertake independent, critical investigation of issues related to crime control and justice policy.

The specific objectives of the Department of Criminal Justice's graduate programs are to:

1. Develop an academic environment that will be intellectually challenging and stimulating to both student and faculty.
2. Foster a commitment to pursuing the activities of education, scholarship, and public service in a manner that is consistent with the intellectual traditions of social science inquiry.
3. Provide an intellectual environment that values human diversity and encourages independent and critical thought.
4. Provide an intellectual environment that encourages teaching and scholarship from a diversity of theoretical perspectives and research methodologies.

5. Provide graduate curricula that will provide the knowledge and skills fundamental to criminal justice professionalism.
6. Provide a sound foundation for the pursuit of a doctoral degree in criminal justice.
7. Provide the opportunity for students who are currently criminal justice professionals to extend their knowledge and skills in their area of specialization.
8. Develop professional leadership in the criminal justice field.
9. Introduce students to the research techniques that will enable them to undertake independent research in their areas of specialization and effectively interpret and make use of the research conducted by other professionals.
10. Provide an understanding of the relationship between public policy formulation and criminal justice system behavior.
11. Provide individuals and agencies within the college's service area with needed programs and consultant services appropriate to the resources of the department.

## Administration of Justice (M.S.)

### Degree Requirements

#### REQUIRED CORE COURSES (24 crs.)

CRJ 501	Foundations of Justice	3
CRJ 520	Justice Administration and Management	3
CRJ 550	Graduate Seminar	3
CRJ 560	Theories of Crime and Delinquency	3
CRJ 590	Justice Policy Analysis	3
CRJ 600	Research Methods	3
CRJ 610	Quantitative Analysis	3
CRJ 635	Restorative Justice	3

#### CRIMINAL JUSTICE ELECTIVES (12 crs.)

CRJ 570	Legal Trends and Issues	3
CRJ 575	Mental Illness and the Administration of Justice	3
CRJ 580	Juvenile Justice System	3
CRJ 585	Treatment and Rehabilitation	3
CRJ 593	Independent Study	3
CRJ 594	Selected Topics in Criminal Justice	3
CRJ 595	Practicum I	3
CRJ 597	Practicum II	3
CRJ 612	Thesis I	3
CRJ 613	Thesis II	3
CRJ 617	Internship I	3
CRJ 618	Internship II	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 Special Education, Government/Public Administration, History, and Psychology. These may be substituted for Criminal Justice electives up to a maximum of nine (9) credits.

## Educational Leadership and Special Education Department

Christopher L. Schwilk, Ph.D., *Chair* (717) 477-1591  
 David F. Bateman, Ph.D.  
 William K. Cowden, Ed.D.  
 Phillip F. Diller, Ed.D., *Ed Leadership program coordinator* (717) 477-1591  
 Gerald L. Fowler, Ph.D.  
 Thomas C. Gibbon, Ed.D.  
 Cheryl H. Zaccagnini, Ed.D.

### Programs Offered

The Department of Educational Leadership and Special Education offers graduate programs leading to the 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 in twelve fields of specialization and a post-master's degree program leading to the Superintendent's Letter of Eligibility (SLE). SLE courses comprise the content core of the Doctorate of Education in Educational Leadership.

Jointly offered with Millersville University, Shippensburg University's doctoral program in educational leadership leverages the expertise of 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 the program a great option for school personnel that are currently employed in professional positions.

The coursework is delivered in blended online and face-to-face, 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.

The master's in special education programs lead to Pennsylvania certification in special education at the PreK-8 and 7-12 levels. Additionally, the department offers master's degree programs leading to advanced study in learning disabilities, behavioral disorders, and intellectual disabilities.



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.

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 in educational leadership programs are not required to take courses in a specified sequence. 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.

Students in special education are not required to take courses in a particular order except for practicum and student teaching, which are to be taken after other coursework is completed.

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.

## **Doctorate of Education in Educational Leadership**

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.

### **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 your goals and objectives for doctoral study in educational leadership and how this program will assist you in achieving those outcomes
- Teaching certifications and endorsements currently held (optional)

### **Program Highlights**

- Poverty and Digital Learning Focus
- 62-credit program (includes 9 dissertation-related crs.). All Shippensburg University Letter of Legibility 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 500-700 hours of field work)
- Upon completion of the residencies, candidates will be eligible for the Superintendent's Letter 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.

### Requirements

#### Foundations (12 crs)

ELP 832	Introduction to Executive Leadership	3
ELP 822	Communication Theory for School District Administrators	3
ELP 828	Emergent Technologies and Instructional Practices	3
ELP 829	Political/Social Context for Educational Leadership	3

#### Research (9 crs)

ELP 820	Action/Applied Research in an Organizational Environment	3
ELP 831	Educational Statistics	3
ELP 830	Qualitative/Quantitative Research	3

#### Residency Core (24 crs)

ELP 721R	Residency: Strategic Leadership in District Governance	4
ELP 723R	Residency: Negotiations and Personnel Strategic Decision Making	4
ELP 724R	Residency: Ethical and Legal Decision-making at the District Level	4
ELP 725R	Residency: The Impact of Facilities and Plant Management Decisions on School Effectiveness	4
ELP 726R	Residency: Optimizing Financial Resources to Support District Level Achievement	4
ELP 727R	Residency: Instructional and Technology Leadership at the Executive Level	4

#### Other (2 crs)

ELP 890	Research in Educational Leadership Part I	1
ELP 891	Research in Educational Leadership Part II	1

#### Dissertation Core (9 crs)

ELP 898	Dissertation Seminar	3
ELP 899	Dissertation Research	6

#### Suggested Cognate Courses (6 crs)

ELP 510	Special Education Law	3
SWK 515	Social Welfare Policy	3
CNS 509	Multicultural Counseling	3
ELP 634	Legal and Ethical Issues in Online Instruction	3

ELP 614—Survey Development and Measurement

## 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.

- Beginning Level (Tier 1) students should schedule Tier 1 courses but may elect a Tier 2 course if no Tier 1 courses are available. Tier 1 students are not eligible to take Tier 3 courses.
- Tier 2 Level students may schedule courses from Tier 1 and Tier 3.
- Tier 3 Level students may schedule courses from all Levels.

A student is considered a Tier 1 Level student when he/she enters the program. A student advances to the subsequent Tier when he/she completes all of the required courses in the preceding Tier. Tier 1 students, who, because of scheduling difficulty need to select a course from Tier 2, must seek advice from their advisors.

Minimum 33 semester hour credits required for a master's degree.

### Requirements

#### Required Educational Leadership Core Courses

##### Tier 1

ELP 515	The Role of Research and Data Informed Decision-Making for School Leaders	3
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##### Tier 2

ELP 517	Leadership in Technology and Effective Program Delivery	3
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##### Tier 3

ELP 569	Seminar: Diversity in Education	3
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#### Required Pennsylvania Inspired Leadership Core Courses

##### Tier 1

ELP 516	Curriculum Assessment and Instructional PK-12 for Diverse Student Populations	3
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##### Tier 2

ELP 518	The Role of Supervision in Promoting Student Achievement	3
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ELP 519	Advanced Leadership and the School Principal PK-12	3
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##### Tier 3

ELP 520	School Finance and Student Learning	3
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ELP 521	Legal and Ethical Issues that Impact on Student Learning	3
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ELP 522	Practicum II Advanced Leadership Field Experiences at the Building Level	3
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ELP 514	Practicum I Leadership Field Experiences at the Building Level	3
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**Electives (3 crs.)****Electives**

The master of education degree program requires 33 total credits hours, which includes 440 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.

ELP 490	Selected Topics in Educational Leadership and Policy	1-3
ELP 500	General School Administration	3
ELP 510	Special Education Law	3

The master of education degree program requires 33 total credit hours, which includes 440 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 (M.Ed.)**

A graduate program that leads to a Master of Education degree in special education is offered. Applicants are required to present evidence of previous successful experience in working with children and display a commitment to teaching children with disabilities through an interview.

Those candidates who apply for the teacher certification program in special education and hold no educational certification in another field must complete additional requirements that are determined after a review of their official transcripts. 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.

**The Master of Education degree programs are designed to serve these groups:**

1. Those who wish to add special education certification to the teaching certificate they presently hold in another field.
2. Certified Special Education teachers who wish to pursue advanced study in one area of their field (i.e., learning disabilities, intellectual disabilities, or behavior disorders).
3. Elementary and secondary classroom teachers who are interested in increasing their professional competencies in working with children with special needs in the general education classroom.

There are four options in the Master of Education special education program:

1. Certification

2. Learning Disabilities
3. Intellectual Disabilities/Developmental Disabilities
4. Behavioral Disorders

*Note: While it is possible to complete the program as a part-time student, the practicum will require extensive work in schools during the school year.*

**The Programs**

The Master of Education (M.Ed.) in Special Education has four tracks. One can earn comprehensive certification in special education while earning the master of education degree. Alternatively, someone holding special education certification or other educational certifications can pursue work in the specialty areas of behavior disabilities, learning disabilities, or intellectual disabilities without certification. The department offers the following graduate degree tracks in special education:

- M.Ed. in Special Education with Comprehensive Certification (PK-8 and/or 7-12)
- M.Ed. in Special Education with an Emphasis in Behavioral Disabilities
- M.Ed. in Special Education with an Emphasis in Learning Disabilities
- M.Ed. in Special Education with an Emphasis in Intellectual Disabilities/Developmental Disabilities

**Master's Degree with Special Ed Certification**

The master's degree with certification requires a minimum of 33 credit hours of course work plus 9 credit hours of student teaching. It is designed for individuals who already hold either a Pennsylvania elementary (K-6, PreK-4) middle (4-8), secondary (7-12), or reading specialist (K-12) teaching certification. 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 Introduction to Exceptionalities)
- Inclusion of Students with Disabilities: (EEC423 Effective Instructional Strategies for Children with Exceptionalities)
- Assessment of Students with Disabilities: (EEC483 Assessing Children With Exceptionalities for Curricular Decision-Making)
- English Language Learners (ELL): (RDG413 Teaching Reading to English Language Learners)

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). Additionally, applicants for the program must hold a current Pennsylvania teaching certificate prior to applying for the special education

certification. Applicants from other states must obtain a Pennsylvania certificate prior to applying for special education certification from PDE. The following certifications are approved as prerequisite teaching credentials for the special education certificates:

- Early Childhood (PK-4)
- Elementary (K-6)
- Secondary (7-12)
- Middle Level (4-8)
- Reading Specialist (K-12)

Candidates who apply for the master's degree with special education certification program who do not hold educational certification in another field must complete significant additional requirements to meet the above requirements. Those requirements are determined after a review of their official transcripts.

Applicants are required to participate in an interview with a faculty member and to present evidence of previous successful experience in working with children and display 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. 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 cause dismissal from the program.

The program of study appropriate for the individual's professional goals will be developed during the applicant's admission interview from the following course organizations.

**Requirements**

The program of study appropriate for the individual's professional goals will be developed from the following course organizations:

**M.Ed. – Special Education and Certification**

*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	3
EEC 545	Applied Behavior Analysis/Positive Behavior Supports	3
EEC 548	Direct Instruction	3
EEC 550	Instruction for Students with High Incidence Disabilities	3
EEC 551	Subject Area Content Access for Students with Learning Disabilities in a Standards Aligned System	3
EEC 561	Instruction for Students with Low Incidence Disabilities	3
EEC 565	Instruction for Students with Autism Spectrum Disorders	3
EEC 571	Instruction for Students with Social,	3

	Emotional, and Behavior Disorders	
EEC 600	Research in Special Education	3
EDU 495	Student Teaching and Professional Practicum	9-15

**Grades 7-12 Certification**

EEC 546	Transition to Adult Life for Students with Disabilities	3
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Total hours Comprehensive Certification: 39

If the applicant does not hold an education certificate, a program of background courses as prescribed by the chair of the Department of Educational Leadership and Special Education must be completed. This program will include a sixteen-week student teaching experience.

**M.Ed.—Learning Disabilities (Post or non-certificate study)**

*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	3
EEC 545	Applied Behavior Analysis/Positive Behavior Supports	3
EEC 548	Direct Instruction	3
EEC 550	Instruction for Students with High Incidence Disabilities	3
EEC 551	Subject Area Content Access for Students with Learning Disabilities in a Standards Aligned System	3
ELP 510	Special Education Law	3
EEC 590	Practicum I in Special Education	3
EEC 600	Research in Special Education	3
	Electives (9)	

Program total is a minimum of 33 credits. Electives chosen based on advisement.

**M.Ed.—Intellectual Disabilities/Developmental Disabilities**

*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	3
EEC 545	Applied Behavior Analysis/Positive Behavior Supports	3
EEC 548	Direct Instruction	3
EEC 561	Instruction for Students with Low Incidence Disabilities	3
ELP 510	Special Education Law	3
EEC 590	Practicum I in Special Education	3
EEC 600	Research in Special Education	3
	Electives (12 crs.)	12

Program total is a minimum of 33 credits. Electives chosen based on advisement.

**M.Ed.—Behavioral Disorders**

*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	3
EEC 545	Applied Behavior Analysis/Positive Behavior Supports	3
EEC 548	Direct Instruction	3
ELP 510	Special Education Law	3
EEC 565	Instruction for Students with Autism Spectrum Disorders	3
EEC 571	Instruction for Students with Social, Emotional, and Behavior Disorders	3
EEC 590	Practicum I in Special Education	3
EEC 600	Research in Special Education	3
	Electives (9)	

Program total is a minimum of 33 credits. 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 (p. 79).

**Principal Certification Programs****Post-Master's Degree Curricula Leading to Certification of K-12 Principals**

Students who have earned an M.Ed. in educational leadership 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 in educational leadership 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/](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. Preferably, 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 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.
8. Pennsylvania Department of Education requires a passing score on the Pennsylvania Department of Education School Leader Licensure Assessment. Go to <https://www.ets.org/praxis/pa/requirements> for more information.

**Post-Master's Degree Certification Program for School Principals**

A minimum of 15 semester hour credits is required as outlined below. 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.

The program course work is organized into three tiers. Tier 1 represents work appropriate for the beginning or introductory phase of a student's program. Tier 2 indicates courses that are appropriate for students who are midway in their programs. Tier 3 courses are for more advanced work and come with the expectation that students have a strong background from Tier 1 and Tier 2 work in order to be successful.

Courses do not follow a strict prerequisite model but must be scheduled using Approved Individual Student Program Plans as follows:

- Beginning Level (Tier 1) students should schedule Tier 1 courses but may elect a Tier 2 course if no Tier 1 courses are available. Tier 1 students are not eligible to take Tier 3 courses.
- Tier 2 Level students may schedule courses from Tier 1 and Tier 3.
- Tier 3 Level students may schedule courses from all levels.

A student is considered a Tier 1 Level student when he/she enters the program. A student advances to the subsequent Tier when he/she completes all of the required courses in the preceding Tier. Tier 1 students who, because of scheduling difficulty need to select a course from Tier 2, must seek advice from their advisors.

### Requirements

#### Required Pennsylvania Inspired Leadership Core Courses

##### Tier 1

ELP 516	Curriculum Assessment and Instructional PK-12 for Diverse Student Populations	3
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##### Tier 2

ELP 518	The Role of Supervision in Promoting Student Achievement	3
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ELP 519	Advanced Leadership and the School Principal PK-12	3
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##### Tier 3

ELP 520	School Finance and Student Learning	3
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ELP 521	Legal and Ethical Issues that Impact on Student Learning	3
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ELP 522	Practicum II Advanced Leadership Field Experiences at the Building Level	3
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ELP 514	Practicum I Leadership Field Experiences at the Building Level	3
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## Superintendent's Letter of Eligibility Program

The Superintendent's Letter of Eligibility enables the holder, when requested by a district's board of education, to be commissioned by the Commonwealth of Pennsylvania to serve in the following positions: district superintendent, assistant district superintendent, intermediate unit executive director, intermediate unit assistant executive director. Other positions are also

authorized under the Superintendent's Letter of Eligibility. Students should consult the Pennsylvania Department of Education for further information.

The program of studies completely satisfies all standards of the Commonwealth and provides the student with the knowledge, competencies, and skills needed to function in roles requiring this certification.

Individuals desiring to pursue this certification will, in all probability, have had considerable graduate coursework in educational leadership and/or related fields and more than likely hold certification as a principal or supervisor. Such graduate coursework and credit hours shall be considered and credited if applicable toward the requirements for this certification.

The Superintendent's Letter of Eligibility can be obtained at Shippensburg University by enrolling in a field-based program of study, the Leadership Residency Program.

### *Leadership Residency Program (Superintendent's Letter)*

The Leadership Residency Program at Shippensburg University is a nationally recognized program (CAEP) and includes a series of six field residencies leading to the Superintendent's Letter of Eligibility, or in the case of alternative pathway students, eligibility for a commission as a superintendent/assistant superintendent. Each residency is 4 credits. These residencies are spread over an eighteen-month field based program in the candidate's school district of origin or in a district that has agreed to accept a residency candidate. Residencies are organized around six critical leadership content areas spread over six semesters.

- Strategic Leadership in District Governance and Community Relations (ELP 721R)
- Ethical and Legal Decision-Making at the District Level (ELP 724R)
- Negotiations and Personnel Strategic Decision Making (ELP 723R)
- Optimizing Financial Resources to Support District Level Achievement (ELP 726R)
- Instructional and Technology Leadership at the Executive Level (ELP 727R)
- The Impact of Facilities and Plant Management Decisions on School Effectiveness (ELP 725R)

As part of each residency a series of intensive seminars are included. These seminars are conducted by Leadership Fellows (invited experts currently practicing in the field), university faculty, and invited experts in the field.

The Residency Program is designed to meet the needs of school leaders who want a field-based experience as they pursue a study of district leadership. This program, approved by the Pennsylvania Department of Education, is based on twenty-first century leadership that will enable students to work with regional district leaders and content experts as they are guided and supported by university supervisors.

**Requirements for Admission to the Superintendent's Letter of Eligibility Program**

Applicants must:

1. File an application with the dean of Graduate Admissions for admission to the Residency Program.
2. Attend the Leadership Residency Program orientation.
3. Hold a master of education degree.
4. Currently hold a Pennsylvania administrative and/or supervisory certificate.
5. Currently serve in a certified administrative/supervisory position.
6. Complete the Leadership Residency Application and Practicum Memorandum of Understanding between their school district and the educational leadership program.
7. Have an official transcript sent to the dean of Graduate Admissions from any institution at which the applicant has taken undergraduate and graduate work.
8. Take a minimum of fifteen (15) credit hours within the Department of Educational Leadership and Special Education at Shippensburg University.
9. Submit two references: One completed by a chief school officer (district superintendent or intermediate unit executive director) in the school district in which the candidate is currently employed or has been most recently employed; and one by another school administrator. Obtain forms at the department web site [http://www.ship.edu/ELSE/Educational\\_Leadership/Forms/](http://www.ship.edu/ELSE/Educational_Leadership/Forms/).
10. Possess a GPA of at least a 3.0 in all graduate work taken prior to application to this program.

Applicants who have satisfied their master's degree and certification requirements at another college or university or earned their advanced degree outside the field of educational leadership at Shippensburg University may be required to successfully complete an oral review conducted by the faculty of the Department of Educational Leadership and Special Education. This review will be conducted after the applicant has taken six (6) hours of graduate work within the department.

Final recommendation for admission to this certification program will be determined by the faculty of the Department of Educational Leadership and Special Education.

**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****Required Prerequisite Courses****Tier 1**

ELP 515	The Role of Research and Data Informed Decision-Making for School Leaders	3
ELP 516	Curriculum Assessment and Instructional PK-12	3

for Diverse Student Populations

**Required Pennsylvania Inspired Leadership Courses**

**Tier 1**

ELP 621	Practicum I Strategic Leadership in District Governance	3
ELP 622	The Superintendent as a School and Community Leader	3

**Tier 2**

ELP 623	Negotiations and Personnel Strategic Decision Making	3
ELP 624	Ethical and Legal Decision-making at the District Level	3

**Tier 3**

ELP 625	The Impact of Facilities and Plant Management Decisions on School Effectiveness	3
ELP 626	Optimizing Financial Resources to Support District Level Achievement	3
ELP 627	Practicum II Strategic Instructional Leadership	3

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.

**Supervisory I Certification**

Post-master's degree programs leading to the Supervisory I Certificate issued by the Pennsylvania Department of Education are offered in the following fields:

- Communication/English
- Counseling
- Early Childhood Education
- Elementary Education
- Environmental Education
- Foreign Languages
- Mathematics
- Pupil Services
- Reading
- Science
- Social Studies
- Special Education

Requirements vary according to specialty area, with a minimum of 15 credits required. All work must be completed within a five-year period. To be recommended for the supervisory certificate, candidates must obtain a minimum quality point average equivalent to a grade of B with no more than one C grade. A second C grade will cause the student to be dismissed from the university.

**Requirements for Admission to the Supervisory Program**

1. An earned master's degree with at least 15 graduate credits in subject field or educational specialist area.
2. Two references: One 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; and one from a principal or immediate supervisor. Obtain forms from the department website at [http://www.ship.edu/ELSE/Educational\\_Leadership/Forms/](http://www.ship.edu/ELSE/Educational_Leadership/Forms/)
3. Submit a completed Apprenticeship Application and Practicum Memorandum of Understanding between their school district and the program.
4. School of Graduate Studies approval. The admission letter will outline each student's program, including any additional requirements needed.

**Supervisory I Certificate Requirements**

The candidate shall:

1. Take 6 to 9 graduate credits in the field of supervision to qualify for a practicum experience. (Enrollment in a minimum of 15 credits is required at Shippensburg University for the student to be recommended for certification.)
2. Complete the appropriate curriculum outlined in the letter of admission.
3. Present a copy of an Instructional II or Educational Specialist II certificate in the subject area in which the supervisory certificate is desired.
4. Complete a recent graduate research course in the appropriate field or show evidence of having completed comparable applied research in the field.
5. Complete five years of successful professional experience in the supervisory area desired prior to being recommended for certification.
6. Pennsylvania Department of Education requires a passing score on Praxis: Educational Leadership, Administration and Supervision.

**Curricula Leading to Supervisory I Certification**

Each candidate, in addition to completing the course requirements specified for the specialty area, must demonstrate, through appropriate practicum activities, the identified competencies have been attained.

**Counseling/Pupil Services**

Applicants for admission to the graduate program for counselor supervisors must hold a valid elementary or secondary school guidance counselor certificate, or present evidence of having had at least three years of counseling experience in the public schools, and be recommended as having potential as a supervisor of school counseling services. Applicants who have not completed



appropriate supervised practicum courses must do so before admission is granted.

To be recommended for certification as a supervisor of school counseling services, a candidate must complete the approved program outlined below and present evidence of having had at least five years of full-time experience as a counselor in the public schools.

#### Courses

CNS 505	Organization and Administration of School Counseling Services	3
CNS 512	Group Counseling and Leadership Skills	3
CNS 581	Counselor Supervision	3
ELP 500	General School Administration	3
ELP 514	Practicum I Leadership Field Experiences at the Building Level	3
ELP 516	Curriculum Assessment and Instructional PK-12 for Diverse Student Populations	3
ELP 518	The Role of Supervision in Promoting Student Achievement	3
ELP 521	Legal and Ethical Issues that Impact on Student Learning	3
ELP 517	Leadership in Technology and Effective Program Delivery	3
	OR	
ELP 520	School Finance and Student Learning	3
ELP 619	Leadership for Pupil Services	3

#### Communication/English, Early Childhood Education, Elementary Education, Environmental Education, Foreign Languages, Mathematics, Pupil Services, Reading, Science, Social Studies, and Special Education

ELP 500	General School Administration	3
ELP 510	Special Education Law	3
ELP 514	Practicum I Leadership Field Experiences at the Building Level	3
ELP 516	Curriculum Assessment and Instructional PK-12 for Diverse Student Populations	3
ELP 518	The Role of Supervision in Promoting Student Achievement	3
ELP 521	Legal and Ethical Issues that Impact on Student Learning	3
ELP 517	Leadership in Technology and Effective Program Delivery	3
	OR	
ELP 520	School Finance and Student Learning	3

## Social Work and Gerontology Department

Deborah F. Jacobs, Ph.D., *Chair* (717) 477-1717  
 Sam Benbow, Ed.D.  
 Dara Bourassa, Ph.D.  
 Jennifer Clements, Ph.D.  
 Elizabeth A. Fisher, Ph.D.

Marita Flagler, Ph.D.  
 Jayleen Galarza, Ph.D.  
 Charlene Lane, D.S.W.,  
 Michael J. Lyman, Ph.D.  
 Dorlisa Minnick, Ph.D.

## Social Work (MSW)

### 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.

### Mission

The mission of the MU-SU MSW program is to provide accessible social work graduate education in the south-central region of Pennsylvania in order to prepare students for advanced generalist practice and to provide professional leadership and contribute to the development and dissemination of social work practice knowledge.

### Program Goals

The MU-SU MSW program seeks to:

1. Prepare students for competent advanced generalist practice, with a focus on rural client systems, through the acquisition and demonstration of social work knowledge, skills, and values.
2. Provide leadership and service for the social welfare systems and the social work profession.
3. Foster commitment to professional development and the creation and dissemination of knowledge.

### 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 will be admitted full or part time. Courses are offered evenings with some Saturday classes, which are electives. State-of-the-art technology will permit students to acquire social work knowledge, skills, and values through multiple educational methods including teleconferencing and web-based activities. Students will take all courses on the campus where they are enrolled, while benefiting from the quality faculty and resources of 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. Regular standing admission is for students who completed a baccalaureate degree with a major from other than a CSWE-

accredited social work program and for students who did graduate from a CSWE-accredited social work program within the past eight years but did not meet the QPA requirements for advanced standing. Students may apply for advanced standing admission if they graduated from a CSWE-accredited social work program within the past eight years and do meet the QPA requirements as described in the admission guidelines.

### **Admission Guidelines**

#### **Campus**

Candidates may choose to apply through either Millersville or Shippensburg University. If all seats are full at one campus, successful applicants will be given the option to enroll through the other campus, if seats are available. Applicants desiring admission to a specific campus may also be placed on a waiting list if all seats are full.

#### **QPA**

Applicants for Regular Standing admission must have a minimum cumulative quality point average of 2.8 on a 4.0 scale from a regionally accredited undergraduate institution. In exceptional cases, applicants who lack the required quality point average but whose other qualifications are outstanding may be admitted on a probationary basis. Applicants admitted on probation must earn a 3.0 quality point average by the end of the first 12 credits.

Applicants for Advanced Standing admission must have earned a baccalaureate degree in the last eight years from a CSWE-accredited social work program with an overall QPA of 3.0 in all undergraduate coursework and a major QPA of 3.25 or higher on a 4.0 scale.

#### **Exemption from Foundation (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 first-year foundation 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 send a letter notifying the applicant of the exemptions.

#### **Waivers**

Students may apply for waivers from courses when they have already demonstrated proficiency in the course content at a graduate level with a grade of a B or higher. When requesting consideration for a waiver, a student must submit a Request for Waiver form and course syllabi to the program co-director. A waiver will not reduce the number of required credits for graduation but will allow a student to take a more advanced course or an elective course.

#### **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 evidence 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. Applicants will complete a written personal statement. Forms are available through the Graduate Admissions Office. 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.

#### **Prerequisites**

Students must demonstrate they have successfully completed coursework in each of the following areas: Human Biology, Economics, Government/Political Science, Psychology, Sociology/Anthropology, and Statistics. Applicants can be admitted with up to two course deficiencies. These course deficiencies must be completed by the end of the foundation year (30 crs.) of the MSW program.

#### **Transfers**

Students may receive up to 9 credits earned at other regionally accredited institutions prior to admission. Graduate credits earned more than five years prior to admission do not qualify for transfer. Students may only transfer credits 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.

### *Evaluation of Students*

A formal Admission to Candidacy process takes place after a minimum of 12 credits have been completed. MU-SU MSW faculty members evaluate students to determine if they have the potential for completing the requirements of the social work program. Qualifications are based on academic performance in line with university standards and demonstrated ethical behavior, values, and commitment to social work as a career. The social work faculty has the right to dismiss at any time students found not qualified for social work practice.

### *Degree Requirements*

Students enrolling in the Regular Program must complete 60 credits of graduate study including: 15 credits of field practicum, 6 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: 9 credits of field practicum, 9 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 full time (four courses per academic semester plus summer courses) or four years part time (two courses a semester). The Advanced Standing Program can be completed in one year, full time or two years, part time. Both programs are year round.

## Courses

Students enroll in either the regular (60 crs.) or the advanced (36 crs.) program. Students in the regular program take both the required foundation year and the concentration year courses including two elective courses. Students in the advanced program take the required advanced bridge course, the concentration year courses, and three elective courses.

### **Foundation Year Courses**

SWK 501	Principles and Philosophies of Social Work	3
SWK 505	Understanding Social Work Practice with Diverse Populations	3
SWK 510	Human Behavior in the Social Environment I	3
SWK 511	Human Behavior in the Social Environment II	3
SWK 515	Social Welfare Policy	3
SWK 520	Micro/Mezzo Social Work Practice	3
SWK 521	Macro Social Work Practice	3
SWK 525	Research Methods	3
SWK 530	Field Practicum I	3
SWK 531	Field Practicum II	3

### **Advanced Standing (Bridge Course)—3 crs.**

SWK 601	Integrative Seminar	3
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## Concentration Year Courses

### **Advanced Courses—all students including Advanced Standing—24 crs.**

SWK 610	Advanced Human Behavior in the Social Environment	3
SWK 615	Advanced Social Welfare Policy	3
SWK 620	Advanced Practice with Groups and Families	3
SWK 621	Advanced Macro Social Work Practice	3
SWK 625	Advanced Research Methods	3
SWK 630	Advanced Field Practicum I	5
SWK 631	Advanced Field Practicum II	4

### **Electives—6–9 credits required**

SWK 602	Behavioral Health Care Settings	3
SWK 603	Gender Issues	3
SWK 604	Health Care Settings	3
SWK 605	Child Welfare Settings	3
SWK 606	School Settings	3
SWK 607	Emergency Mental Health and Trauma	3
SWK 608	Program Management	3
SWK 609	Introduction to Art Therapy	3
SWK 611	Children and Youth at Risk	3
SWK 612	Social Work and the Law	3
SWK 613	Mediation in Social Work Practice	3
SWK 614	Social Work Survey Development and Measurement	3
SWK 616	Leadership Dynamics in Social Work Practice	3
SWK 617	Social work Practice in the Field of Addictions	3
SWK 618	Human Rights in Social Work	3
SWK 619	Global Perspectives in Social Work	3
SWK 640	Selected Topics in Social Work	3

## Teacher Education Department

Christine Royce, Ed.D., *Chair* (717) 477-1688

Julie Q. Bao, Ph.D.

Lynn Baynum, Ph.D.

Janet Bufalino, Ed.D.

Kent Chrisman, Ed.D.

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Christopher Keyes, Ph.D.

Han Liu, Ph.D.

Andrea Malmont, Ed.D.

Laureen Nelson, D.Ed.

Eucabeth Odhiambo, Ed.D.

Donald Philpot, Ph.D.

Jennifer Pyles, Ph.D.

Cheryl Slattery, Ed.D.

Rebecca Ward, Ph.D.

Robert Ziegenfuss, Ph.D.

James Zullinger, M.Ed.

### ***Programs Offered***

The Department of Teacher Education offers graduate programs leading to the Master of Education degree in two areas: curriculum and instruction, and reading.

Curriculum and instruction 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 for those who hold elementary, middle level, or special education certification; and M.Ed. with state certification for those who have no previous teaching certification or a certificate other than elementary, special education, or middle school education.

The M.Ed. in Reading includes certification as a reading specialist.

### ***Admission to Teacher Education Programs***

All applications for admission to our Teacher Education programs must begin with application to the School of Graduate Studies. 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.

Applicants to the Teacher Education programs must provide review materials by the specified date to ensure consideration. If the applicant is interested in starting in the spring semester all materials must be received by September 1. If the applicant is interested in starting in the summer semester(s) all materials must be received by February 1. If applicants are interested in starting in the fall semester all materials must be received by April 1. Students must be interviewed and admitted to the program before they will be allowed to enroll in courses.

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 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.

## **Elementary Education Supervisor**

For information concerning the post-master's degree program leading to Pennsylvania certification as an Elementary Education Supervisor, refer to Supervisory Certification Programs in the Educational Leadership and Special Education Department (p. 79).

## **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 cluster and the middle level cluster 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 cluster you select and option within the cluster, the credit requirements vary. The M.Ed. without certification is a 36-credit M.Ed. program. Clusters that lead to certification vary in their credit requirements.

In addition to the core courses, students will select one of the following clusters of 18 credits:

- Early Childhood Education
- Elementary Education
- Middle Level Education
- Middle Level Education with Post-Bac Certification
- Secondary Biology Education
- Secondary Geography/Earth Science Education
- Secondary History Education
- Secondary Mathematics Education
- Secondary Modern Languages Education

Students in the early childhood, elementary, and middle level clusters are all required to take TCH 609 Internship and Action Research Seminar. 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	3
TCH 511	Elementary School Curriculum and Assessment	3
TCH 524	Middle School Curriculum and Assessment	3
ELP 516	Curriculum Assessment and Instructional PK-12 for Diverse Student Populations	3

#### **EFFECTIVE TEACHING AND LEADERSHIP (6 crs.)**

##### **Effective Teaching (3 crs.)**

TCH 501	Effective Teaching: Theory and Practice	3
TCH 502	Strategies for Critical Thinking and Problem-Solving	3

##### **Leadership (3 crs.)**

ECH 563	Leadership in Early Childhood Education	3
ELP 518	The Role of Supervision in Promoting Student Achievement	3

#### **THE LEARNER (6 crs.)**

##### **Development (3 crs.)**

TCH 575	Advanced Child Development	3
PSY 527	Studies in the Psychology of Adolescence	3
ECH 530	Cognitive and Language Development in Early Childhood Education	3

##### **Individual Differences (3 crs.)**

ECH 510	Diversity and Inclusion in Early Childhood Education	3
EEC 526	Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except	3
EEC 423	Effective Instructional Strategies for Children with Exceptionalities	3

#### **FOCUS ON RESEARCH (3 crs.)**

TCH 600	Elements of Research	3
BIO 605	Graduate Research I	1-3
GEO 546	Geoenvironmental Research I	3
HIS 600	Historical Research Methods	3
HIS 601	Research in Local and Regional History	3

(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.

### **Early Childhood Cluster**

#### **OPTION A: M.Ed. in Curriculum and Instruction—Early Childhood Education specialization**

##### **Core Courses (18 crs.)**

ECH 577	Early Childhood Curriculum and Assessment	3
TCH 501	Effective Teaching: Theory and Practice OR	3
TCH 502	Strategies for Critical Thinking and Problem-Solving	3
ECH 563	Leadership in Early Childhood Education	3
TCH 575	Advanced Child Development	3
ECH 510	Diversity and Inclusion in Early Childhood Education	3
TCH 600	Elements of Research	3

##### **Early Childhood Education Specialization (12 crs.)**

ECH 520	Social and Emotional Development in Early Childhood	3
ECH 530	Cognitive and Language Development in Early Childhood Education	3
ECH 540	Families and Early Childhood Education	3
TCH 609	Action Research	3

##### **Electives with Advisement (6 crs.)**

ECH 410	Physical, Motor, and Sensory Development in Early Childhood	3
ECH 490	Selected Topics in Early Childhood OR	3
TCH 490	Selected Topics in Teacher Education	1-3
RDG 528	Foundations of Literacy Development	3

Or other electives with advisement.

#### **OPTION B: M.Ed. and Early Childhood teaching Certification for students who already hold certification in elementary, special education, or middle school education.**

Meet all requirements for Option A (36 credits—includes core course). Must select RDG528 and EEC unless similar courses are on transcript.

Applicants with current certification who wish to pursue Pre K-4 certification will follow the Option C plan after an individual evaluation of coursework.

##### **Early Childhood Block (12 crs.)**

ECH 340	Preschool and Kindergarten Curriculum	3
ECH 460	Family School and Community Partnerships	3
ECH 470	Language Development, Literacy, and Play in Early Childhood Education	3
ECH 462	Practicum in Early Childhood Concentration with Administrative Field Experiences	3

**OPTION C: M.Ed. and Early Childhood Certification for students without any existing certification.**

Meet all requirements for Options A and B.

TCH 560	Making Social Studies Dynamic	3
TCH 546	Teaching Science in the Elementary School	3
ECH 540	Families and Early Childhood Education	3
ECH 415	Professional Practicum in PK-4	3
RDG 528	Foundations of Literacy Development	3
TCH 542	Modern Elementary School Mathematics	3
RDG 443	Reading Measures and Interventions in PK-4	4
EEC 526	Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except	3
EEC 423	Effective Instructional Strategies for Children with Exceptionalities	3
EEC 483	Assessing Children with Exceptionalities for Curricular Decision-Making	3
RDG 383	English Language Learners in PK-4	2
ECH 489	Early Childhood Student Teaching	12
ECH 563	Leadership in Early Childhood Education	3
ECH 577	Early Childhood Curriculum and Assessment	3
ECH 520	Social and Emotional Development in Early Childhood	3
ECH 530	Cognitive and Language Development in Early Childhood Education	3

Note: TCH 600 and TCH 609 are required to complete the master's degree in Early Childhood Education.

**Elementary Education Cluster**

**Elementary Content Area (9 crs.)**

RDG 528	Foundations of Literacy Development	3
TCH 542	Modern Elementary School Mathematics	3
TCH 546	Teaching Science in the Elementary School	3
TCH 560	Making Social Studies Dynamic	3

**Elementary Electives (6 crs.)**

TCH 445	Strategies for Effective Classroom Management	3
TCH 490	Selected Topics in Teacher Education	1-3
TCH 505	Instructional Technology for Today's Educator	3
TCH 543	Diagnostic Techniques in Teaching Mathematics in the Elementary School	3
TCH 545	Earth Science for Elementary Teachers	3
TCH 620	Curricular Decision Planning: Standards, Assessment, and Accountability	3

**Required Internship**

TCH 609	Action Research	3
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**Middle School Cluster**

**Middle School Content Area (9 crs.)**

TCH 423	Integrating Literature in Middle Grades	3
TCH 445	Strategies for Effective Classroom Management	3
TCH 505	Instructional Technology for Today's Educator	3
TCH 543	Diagnostic Techniques in Teaching Mathematics in the Elementary School	3
TCH 545	Earth Science for Elementary Teachers	3
TCH 620	Curricular Decision Planning: Standards, Assessment, and Accountability	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	Action Research	3
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**Middle Level Post Bac Certification**

**Core Courses**

**Focus on Curriculum (3 crs.)**

TCH 524	Middle School Curriculum and Assessment	3
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**Focus on Teaching and Leadership (6 crs.)**

TCH 501	Effective Teaching: Theory and Practice	3
	OR	
TCH 502	Strategies for Critical Thinking and Problem-Solving	3
TCH 581	Integrating Classroom Instruction and Leadership	3

**Focus on Learner (6 crs.)**

TCH 575	Advanced Child Development	3
EEC 526	Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except	3

**Focus on Research (3crs.)**

TCH 600	Elements of Research	3
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**Middle School Required Competency Areas (9 crs.)**

EEC 483	Assessing Children with Exceptionalities for Curricular Decision-Making	3
EEC 551	Subject Area Content Access for Students with Learning Disabilities in a Standards Aligned System	3
RDG 413	Teaching Reading to English Language Learners	3

**Student Teaching Practicum (12 crs.)**

TCH 597	Student Teaching Practicum and Integrated Action Research	12
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**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](mailto:tjmare@ship.edu).

**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 420	GIS III: Advanced Geographic Information Systems	3
GEO 425	Image Processing	3
GEO 440	Field Techniques	3
GEO 441	Quantitative Methods	3
GEO 450	Geography-Geology Field Studies	1-3
GEO 517	Applied Geographic Information Systems	3
GEO 530	Mapping Sciences	3

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 404	Applied Meteorology and Climatology	3
ESS 413	Mineral and Rock Resources	3
ESS 442	Environmental Geology	3
ESS 490	Selected Topics in Earth Science	1-3
ESS 594	Selected Topics in Earth Science	1-3
GEO 402	Medical Geography	3
GEO 404	Groundwater and Hydrogeology	3
GEO 415	Regional Geographic Studies	3
GEO 444	Environmental Land-Use Planning	3
GEO 446	Water Resources Management	3
GEO 490	Selected Topics in Geography	1-3
GEO 594	Selected Topics in Geography	1-3
GEO 503	Fundamentals of Geoenvironmental Research	3
GEO 522	Geoenvironmental Hydrology	3
GEO 528	Sustainable Systems and the Spatial Economy	3
GEO 531	Geomorphology	3
GEO 532	Disease and the Environment	3

GEO 533	Science of Land Use Change	3
GEO 536	Problems of the Atmospheric Environment	3
GEO 542	Land-Use Regulations	3

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.

**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	3
HIS 413	Pennsylvania History	3
HIS 428	Issues in the Gilded Age and Progressive Era	3
HIS 430	U.S. Cultural History	3
HIS 513	Seminar in U.S. Women's History	3
HIS 515	Seminar in 20th Century U.S. Social History	3
HIS 516	Seminar in African American History	3
HIS 519	Seminar in International Relations	3
HIS 525	Seminar in U.S. Regional History	3
HIS 526	Seminar in the Civil War Era	3

**Global Connections (3 crs.)**

HIS 407	Women in Comparative Perspective	3
HIS 454	China and the Outside World	3
HIS 534	Seminar in Modern German History	3
HIS 535	Seminar in Medieval Studies	3
HIS 558	Seminar in East Asia and the Modern World	3
HIS 562	Seminar in African History	3

**History Electives (12 crs.)**

Any of the above courses or:

HIS 490	Selected Topics in History	1-3
HIS 594	Selected Topics in History	1-3
HIS 598	Independent Study	3
HIS 599	Readings in History	3-6

### 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	3
MAT 410	Numerical Analysis	3
MAT 413	Statistics II	3
MAT 421	Number Theory and Cryptography	3
MAT 422	Partial Differential Equations	3
MAT 425	Advanced Algebraic Structures	3
MAT 430	Complex Analysis	3
MAT 441	Real Analysis I	3
MAT 450	Combinatorics	3
MAT 456	Deterministic Methods of Operations Research	3
MAT 476	Probability	3
MAT 486	Mathematical Statistics	3
MAT 490	Selected Topics in Mathematics	3

**Must take at least 12 credits from any 500-level MAT courses.**

MAT 516	Mathematical Modeling	3
MAT 527	Number Theory Discovery	3
MAT 528	Algebra for Teachers of Mathematics	3
MAT 534	Geometrical Concepts	3
MAT 543	Concepts of Calculus	3
MAT 572	Probability for Middle and High School Teachers	3
MAT 573	Statistics for Middle and High School Teachers	3
MAT 594	Selected Topics in Mathematics	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.

### 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	3
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SPN 515	Hispanic Poetry	3
SPN 520	Hispanic Fiction	3
SPN 525	Hispanic Culture	3
SPN 530	Spanish Linguistics	3
SPN 535	History of Spanish Language	3

#### French

FRN 510	French Theater	3
FRN 515	French Poetry	3
FRN 520	French Fiction	3
FRN 525	French Speaking Countries	3
FRN 530	French Linguistics	3
FRN 535	History of French Language	3

#### Language Education Methods

EDU 522	Advanced Methods for the Teaching of World Languages	3
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## 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 500	Foundations of English Language Learner Instruction	3
TESL 510	Second Language Acquisition: Theory, Models, and Principles	3
TESL 520	Literacy and Linguistically Diverse Cultures and Communities	3
TESL 530	Instructional Methods and Assessment of English Language Learners	4
TESL 540	Practicum: Teaching English Language Learners	3

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](mailto: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	3
ONLE 560	Designing and Implementing Online Educational Systems #1 (Macro View)	3
ONLE 570	Designing and Implementing Online Educational Systems #2	3
ONLE 580	Online Educational Resources for Instruction and Learning	3
ONLE 590	Capstone: Online Course Design, Development, and Implementation	3

### **Early Childhood Supervisor**

For information concerning the post-master's degree program leading to Pennsylvania certification as an Early Childhood Education Supervisor, refer to Supervisory Certification Programs in the Educational Leadership and Special Education Department (p. 79).

### **Literacy Studies Certificate**

The Literacy Studies Certificate provides an educational opportunity for practitioners, specifically classroom teachers, thereby developing and deepening candidates' literacy knowledge, skills, and dispositions toward teaching diverse students in elementary and middle level classrooms. Utilizing standards for classroom teachers outlined in the International Literacy Association (ILA), the National Council of Teachers of English (NCTE), as well as the PDE ELA standards, the Literacy Studies Certificate addresses a wide variety of competencies. Candidates have the opportunity to explicitly investigate specific topics within and among courses in order to build a comprehensive perspective of teaching reading and writing simultaneously. The Literacy Studies Certificate supports candidates' learning preferences, specifically through an online delivery of content and the enhancement of candidates' technology-based literacy and pedagogical skills. In essence, candidates use technology as a tool to direct their investigations into effective literacy practices, while also balancing their understanding of technology as a literacy tool in elementary and middle-level classrooms.

### **Certificate Requirements**

#### **Required Courses (15 crs.)**

LST 500	Literacy Studies in 21st Century	3
LST 510	Multiple Literacies in a Digital World	3
LST 520	Motivating and Engaging Readers and Writers Across the Content Areas	3
LST 540	Creating and Managing a Literate Environment	3
LST 550	Assessment and Evaluation as a Framework for Literacy Instruction	3

### **Reading (M.Ed.)**

A graduate program leading to the Master of Education degree with specialization in reading is offered for fully certified elementary and secondary school teachers. After the successful completion of all program requirements, a teacher is certified as a K-12 Reading Specialist in the state of Pennsylvania.

#### **Admission**

Admission into the reading program is offered throughout the year. To become a candidate in the reading program, an application must be completed through the admissions office. The reading 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 reading program facilitator who assigns the candidate an advisor. The advisor will contact the candidate for an interview. During the interview, the advisor will determine if program background courses are met. Required for entrance into the program is successful completion of one Literacy course at the undergraduate or graduate level—Teaching of Reading or Teaching of Language Arts. If the candidate is lacking the background course, admission into the program will be delayed until the course requirement is met. If the requirement is met, the applicant is awarded foundational status.

#### **Foundational Status**

The first category for candidates is called foundational status. When a candidate is granted foundational status, he/she may enroll in the following courses:

#### **Courses**

See Planning Sheet for two special education courses.

RDG 524	Diversity's Impact on Literacy Instruction in a Standards Aligned System	3
RDG 527	Inquiry Approaches to Literacy	3
RDG 528	Foundations of Literacy Development	3
RDG 529	Reading and Reasoning Beyond the Primary Grades	3
RDG 520	Tutoring Secondary Students	3

Following successful completion of all foundational level courses with a minimum grade of B, candidates enroll, complete and pass a written exam administered by the searching faculty. Following successful completion of all foundational status requirements, candidates are awarded practicum status.

### **Practicum Status**

The second category for candidates is practicum status. Candidates who have been awarded practicum status are eligible to enroll in the following courses:

#### **Courses**

RDG 537	Brain Based Strategies for Literacy Learners Experiencing Difficulties	3
RDG 532	Diagnosis and Assessment in Reading	3
RDG 533	Advanced Diagnosis and Assessment in Reading	3
RDG 534	Laboratory Practicum in Reading	3
RDG 535	Seminar in Literacy, Language, and Reading	3

RDG 533 and RDG 534 must be taken together

Courses must be completed with a minimum grade of B, also candidates are required to reach the passing score on the Praxis exam for Reading Specialist as set by the Pennsylvania Department of Education. Following successful completion of all practicum status requirements, candidates are awarded program completion status.

### **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/reading](http://ship.edu/reading).

## **Reading Supervisor**

For information concerning the post-master's degree program leading to Pennsylvania certification as a Reading Supervisor, refer to Supervisory Certification Programs in the Educational Leadership and Special Education Department (p. 79).

## **Reading Recovery**

Reading Recovery is an early intervention program used in school districts for at-risk first grade students. The program helps to

develop early reading/writing skills and to build successful literacy experiences. Shippensburg University is the State Site for Reading Recovery. The Pennsylvania Department of Education, Ohio State University, and the National Diffusion Network collaborated in developing and funding this state site.

## **Teacher Leader Training—Post-Master's Degree**

The teacher leader training program is an 18-credit hour post-master's program that includes the following required courses:

### **Requirements**

#### **Fall semester**

RDG 554	Practicum in Reading	3
RDG 601	Language Development Theory	3
RDG 607	Reading Recovery Training for Teachers I	3

#### **Spring semester**

RDG 555	Practicum in Assessment	3
RDG 602	Reading Thoughts and Processes	3
RDG 608	Reading Recovery Training for Teachers II	3

Interested persons must submit an application (available from the College of Education and Human Services) and be accepted as a Teacher Leader participant. Participants must be sponsored by a school district or Intermediate Unit Consortium. Included with the training program and the required course work for two semesters, participants will be expected to complete extensive field work, work individually with four Reading Recovery children each day, demonstrate teaching in front of a one-way observation window with at least three of their own Reading Recovery children, lead a seminar of Reading Recovery teachers to learn the techniques of a Teacher Leader, perform arranged special collaborative activities designed to help the Teacher Leader candidate explore the full role of the Teacher Leader, and collect and maintain data on children in accordance with guidelines for evaluation. All course work must be taken during one academic year.

Specific information on the teacher leader program and the application process can be obtained by contacting Dr. Janet Bufalino, the Trainer of Teacher Leaders at Shippensburg University, at (717) 477-1166.

## **Teacher Training—Post-Baccalaureate Degree**

The Reading Recovery teacher training program is a 6-credit graduate program that includes one 3-credit course in the fall semester and one 3-credit course in the spring semester. These courses are taught through approved teacher training sites by Teacher Leaders in school-based sites. Interested individuals should contact the Office of the Dean of Education and Human Services at (717) 477-1373 for information on teacher training sites across Pennsylvania, Maryland, Virginia, and West Virginia.

## STEM Education (M.A.T. with Teacher 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](http://www.ets.org)). Applicants may be conditionally admitted if PRAXIS scores are pending.

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.

For more information contact: Office of Professional, Continuing, and Distance Education Studies, (717) 477-1502, [pcde@ship.edu](mailto:pcde@ship.edu), [www.ship.edu/SciEd](http://www.ship.edu/SciEd)

### **Course Requirements**

#### **Program Core (15 crs.)**

STEM 510	Foundations of STEM Education in the United States	3
STEM 520	Research and Contemporary Issues in STEM Education	3
STEM 530	Instructional Strategies and Technology in the STEM Education	3
STEM 540	Assessment in STEM Education	3
STEM 560	Accommodating all Students in STEM Education	3

#### **Choose appropriate course based on certification area (3 crs)**

SCED 550	Safety and Welfare in Science Education	3
STEM 555	STEM Foundations of Teaching Business and Technology	3
MAT 527	Number Theory Discovery	3

#### **All students then complete (12 crs)**

STEM 590	Student Teaching in STEM Practicum	3
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# **Courses of Instruction**

Course descriptions are organized in alphabetical order by subject. Information on courses can be found under appropriate headings in the below sequence.

### **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.

### **Dual-Level (700) Courses**

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

## **ACC - Accounting**

### **ACC 401 - Advanced Accounting (3 crs.)**

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: ACC311 (C grade or better). This class is available for graduate credit.

### **ACC 404 - Auditing (3 crs.)**

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: ACC311 (C grade or better). This class is available for graduate credit.

### **ACC 406 - Advanced Tax Accounting (3 crs.)**

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: ACC306 (C grade or better). This class is available for graduate credit.

### **ACC 412 - Advanced Cost Analysis and Control (3 crs.)**

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: ACC312 (C grade or better). This class is available for graduate credit.

### **ACC 418 - Accounting Information and Control Systems (3 crs.)**

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: ACC312 (C grade or better). This class is available for graduate credit.

### **ACC 490 - Selected Topics in Accounting (3 crs.)**

Considers contemporary accounting issues affecting society and businesses (private, public, and not-for-profit) in both the national and international spheres. Prerequisites: ACC311 (C grade or better) or departmental permission. This class is available for graduate credit.

## **ART - Art and Design**

### **ART 400 - Contemporary Methods in Art Education (3 crs.)**

Explores studio materials, art-making processes, and modes of thought from a culturally diverse perspective and current methods regarding studio art instruction in the fields of elementary and secondary education. Exploring their personal artwork, students introduced in role of art teacher as facilitator, guide, and mentor, plus the various instructional strategies and models currently employed for success in the field. Besides exploring a cross section of contemporary art-making processes, students will analyze how they create in order to allow others to understand that process. Students will gain competency in lesson planning, organization, classroom management, and assessment. Student emerges with a clearer understanding of the relationship between ideas, process, critique, and the vital role of the studio teacher. Consists of classroom lecture/presentation and intense studio activity. Includes an early field experience, designing, and implementing a studio art project with elementary-age students at the campus laboratory school. All artworks, projects, and experiences will culminate in critique and evaluation. This class is available for graduate credit.

### **ART 425 - Computer Design IV (3 crs.)**

Fourth-level course taught on the Macintosh computer. Learning the art of animation and multimedia production including sound and video editing and compositing. Using page composition and illustration/painting/digital photography techniques learned in Computer Design I, II, and III, students learn to compile text, paintings, and photographs into a composite multimedia program. Using paint and ink effects, information will be enhanced, with sound and video added to it. Elements and principles of design, working between software programs, the use of a color scanning device, video and still camera capturing devices, and CD authoring will be covered. Content includes techniques directed at creating visually strong multimedia productions. Prerequisite: ART217. This class is available for graduate credit.

### **ART 430 - Computer Design V (3 crs.)**

Fifth-level course taught on the Macintosh computer. Learning the art of animation and multimedia production including sound and video editing and compositing for web design. Using page composition and illustration/painting/digital photography techniques learned in Computer Design I, II and III, students will learn how to compile text, paintings, and photographs into a composite web program. Using transparency and vector embedding

techniques, information will be enhanced with added sound and video. Elements and principles of design, working between software programs, the use of a color scanning device, video and still camera capturing devices, and CD authoring will be covered. Content includes techniques directed at creating visually sound and effective web design. This class is available for graduate credit.

**ART 435 - Computer Design VI (3 crs.)**

Sixth-level course taught on the Macintosh computer. Examines the book as a physical artifact, as the material embodiment of text and visual imaging. Topics include the transitions between hand production and mechanical production, methods of bookmaking, printers and publishers, letter forms and typography, paper, page formats and layouts, illustrations, bindings, and the purpose of the book with special emphasis on the relationships between meaning and physical form and the complex conventions of the book. The art of typographic design, calligraphy, book and portfolio design, papermaking, and bookmaking skills following both traditional and nontraditional techniques are covered. Using page composition and illustration/painting/digital photography techniques learned in Computer Design I, II, and III, students enlarge and enhance their knowledge of typography and how to use it in book design. They will use their computer illustration, painting, and digital photographic skills to add visuals into the composite book. Elements and principles of design, working between software programs, the use of a color scanning device and digital camera capturing devices will be covered. Content includes techniques directed at creating visually and thematically strong and unique artist's portfolios and books. Prerequisite: ART217. This class is available for graduate credit.

**ART 485 - Selected Topics in Art (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 490 - Selected Topics in Art (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 491 - Selected Topics in Art (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 492 - Selected Topics in Art (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 493 - Selected Topics in Art (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 494 - Selected Topics in Art (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 495 - Selected Topics in Art (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 496 - Selected Topics in Art (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 497 - Selected Topics in Art (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 498 - Selected Topics in Art (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ART 499 - Selected Topics in Art (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

## BIO - Biology

**BIO 406 - Mammalogy (3 crs.)**

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. Prerequisites: BIO 161 and BIO 162. This class is available for graduate credit.

**BIO 408 - Principles of Virology (3 crs.)**

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. Prerequisites: BIO 260; BIO 385 pre- or co-requisite. (Offered fall semester). This class is available for graduate credit.

**BIO 409 - Immunology (3 crs.)**

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. Prerequisites: BIO 260, BIO 385 pre- or co-requisite. This class is available for graduate credit.

**BIO 412 - Ichthyology (3 crs.)**

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) Prerequisites: Principles of Biology: Organismal diversity and

Ecology (BIO 162 and 242) OR graduate status. This class is available for graduate credit.

**BIO 417 - Herpetology (3 crs.)**

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. Prerequisites: BIO161 and BIO162. This class is available for graduate credit.

**BIO 418 - Molecular Biology (3 crs.)**

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 online resources for analysis of DNA sequences. Graduate students must complete additional course requirements. Prerequisites: BIO 260. This class is available for graduate credit.

**BIO 419 - Ornithology (3 crs.)**

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. Prerequisites: BIO 161 and BIO 162. This class is available for graduate credit.

**BIO 425 - Biota of Florida (2 crs.)**

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 one hour class meeting plus and 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). This class is available for graduate credit.

**BIO 430 - Principles of Evolution (3 crs.)**

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. Prerequisites: BIO161, BIO162, and BIO260. (Offered spring semester). This class is available for graduate credit.

**BIO 442 - Aquatic Ecology (3 crs.)**

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. Prerequisites: BIO 162 or graduate standing. BIO 242 and one year of chemistry strongly recommended. (Offered fall semester, even years) This class is available for graduate credit.

**BIO 444 - Conservation Biology (3 crs.)**

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. Prerequisite: Grade of D or better in BIO242. (Offered spring semester, even years). This class is available for graduate credit.

**BIO 448 - Field Botany and Plant Taxonomy (3 crs.)**

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. Prerequisite: BIO 100 or BIO 162 (Offered Fall semester) This class is available for graduate credit.

**BIO 450 - Endocrinology (3 crs.)**

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. Prerequisite: BIO 350 or BIO 351. (Offered fall semester). This class is available for graduate credit.

**BIO 461 - Techniques in Biotechnology (3 crs.)**

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. Prerequisites: BIO 385 or BIO 418 or CHM 301. (Offered spring semester). This class is available for graduate credit.

**BIO 485 - Biological Microscopy and Imaging (3 crs.)**

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. Prerequisite: Upper division or graduate standing. (Offered spring semester, odd years). This class is available for graduate credit.

**BIO 491 - Selected Topics in Biology (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses. This class is available for graduate credit.

**BIO 492 - Selected Topics in Biology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses. This class is available for graduate credit.

**BIO 494 - Field Research Techniques (3 crs.)**

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. Prerequisite: Graduate or upper division standing. (Offered summers only). This class is available for graduate credit.

**BIO 495 - Selected Topics in Biology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses. This class is available for graduate credit.

**BIO 496 - Selected Topics in Biology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses. This class is available for graduate credit.

**BIO 497 - Selected Topics in Biology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses. This class is available for graduate credit.

**BIO 498 - Selected Topics in Biology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by regular courses. This class is available for graduate credit.

**BIO 514 - Aquatic Entomology (3 crs.)**

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: Entomology, graduate status, or permission of instructor.

**BIO 515 - Scientific Communication in Biology (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 (3 crs.)**

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: Ecology.

**BIO 522 - Community Ecology (3 crs.)**

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: BIO242.

**BIO 524 - Evolutionary Development (3 crs.)**

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: BIO260.

**BIO 526 - Medical Microbiology (3 crs.)**

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 528 - Entomology (3 crs.)**

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 541 - Ecosystems (3 crs.)**

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: Ecology.

**BIO 547 - Wetland Ecology (3 crs.)**

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 (3 crs.)**

Considers comparative aspects of life functions in selected representatives of the animal kingdom with respect to their different environments. Prerequisite: Animal Physiology or Human Physiology or permission of instructor.

**BIO 559 - Evolutionary Ecology (3 crs.)**

Lectures and discussion periods cover topics of physiological ecology, interspecific interactions, population ecology, community structure, the ecological niche, coevolution, and biogeography. Prerequisite: A previous college ecology course or permission of instructor.

**BIO 577 - Ecomorphology (3 crs.)**

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) also could be considered. Course is a combination of



lectures, student presentations, and discussions of current scientific literature. Prerequisite: BIO 363 Vertebrate Zoology or BIO 370 Comparative Vertebrate Anatomy or permission of instructor.

#### **BIO 592 - Selected Topics in Biology (1 to 3 crs.)**

Department opportunity to offer courses in areas of major interest not covered by regular courses.

#### **BIO 593 - Biometry (3 crs.)**

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: At least 14 credit hours of college biology.

#### **BIO 594 - Selected Topics in Biology (1 to 3)**

Department opportunity to offer courses in areas of major interest not covered by regular courses.

#### **BIO 595 - Selected Topics in Biology (1 to 3)**

Department opportunity to offer courses in areas of major interest not covered by regular courses.

#### **BIO 596 - Selected Topics in Biology (1 to 3)**

Department opportunity to offer courses in areas of major interest not covered by regular courses.

#### **BIO 598 - Selected Topics in Biology (1 to 3)**

Department opportunity to offer courses in areas of major interest not covered by regular courses.

#### **BIO 599 - Independent Study (3 crs.)**

Opportunity to pursue special studies in biology or biology education on topics not available in other courses.

#### **BIO 605 - Graduate Research I (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 (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: BIO 605

#### **BIO 609 - Internship (3 crs.)**

Opportunity for students to gain practical experience in their chosen career area.

#### **BIO 610 - Internship II (3 crs.)**

Opportunity for students to gain practical experience in their chosen career area.

#### **BIO 612 - Thesis I (3 crs.)**

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 (3 crs.)**

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: BIO 612.

## **BSN - Business**

#### **BSN 510 - Economic and Information Systems Environment (4 crs.)**

Introduction to macroeconomic and microeconomic principles with an emphasis on applications to modern business problems. Major topics include supply and demand, consumer behavior, theory of the firm, market structure and competition, monetary and fiscal policy, and international trade. The role of information technology in business environment is also discussed, including such topics as doing business on the Internet, database management, client-server networks, and information security. This course is part of the graduate business certificate and does not count toward the MBA degree.

#### **BSN 511 - Business Operations and Analysis (4 crs.)**

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 512 - Essentials of Accounting and Finance (4 crs.)**

Introduces the basics of financial accounting and financial management. The accounting concepts, practices, and principles that guide the preparation of the balance sheet, income statement, and the statement of cash flows are all presented. Financial management concepts and techniques are used to evaluate the financial performance of the firm. Topics include financial statement analysis, working capital management, and capital budgeting. Emphasis is placed on the interpretation and limitations of financial reports and their use in evaluating the performance of the firm. This course is part of the graduate business certificate and does not count toward the MBA degree.

#### **BSN 513 - Organizational Behavior and Marketing (4 crs.)**

The organizational behavior component 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. The marketing component examines marketing planning, marketing research, buyer behavior, market segmentation and targeting, as well as the key elements of a marketing strategy. This course is part of the graduate business certificate and does not count toward the MBA degree.

#### **BSN 514 - Strategic Management and Leadership (4 crs.)**

Explores strategic vision and direction. The importance of achieving a fit between the internal and external environment for organizational survival and success is a central issue. The strategic concepts of competitive advantage, strategy formulation and implementation, power and influence, organizational change, and leadership will be addressed. Case studies, business articles, and text material will be used to examine strategy and leadership theory, heuristics, and practice. This course is part of the graduate business certificate and does not count toward the MBA degree.

## BUS - Business Ed of Administration

### BUS 490 - Selected Topics in Business (2 crs.)

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

## CHM - Chemistry

### CHM 481 - Advanced Inorganic Chemistry (4 crs.)

This course will focus on solid-state chemistry, acid and base chemistry, oxidation and reduction chemistry, physical techniques of inorganic chemistry, reactions of coordination complexes, d-metal organometallic chemistry, nanotechnology, cluster chemistry, and bioinorganic chemistry. The topics will build upon the material from CHM 381. Three periods lecture and three periods lab/week. Prerequisite: CHM 381. This course is available for graduate credit.

### CHM 490 - Selected Topics in Chemistry (1-3 crs.)

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is not available for graduate credit.

### CHM 491 - Selected Topics in Chemistry (3 crs.)

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is not available for graduate credit.

### CHM 496 - Introduction to Research I (1-3 crs.)

Includes original investigations in analytical, organic, physical, biochemistry, or inorganic chemistry. A formal, comprehensive research report and a seminar presentation are required upon completion of these experimental studies. A combined total of a minimum of 2 credits in research courses are required for all chemistry majors expecting American Chemical Society accreditation. Course credit is a variable 1-3 credits per semester. To enroll in research students must have a cumulative GPA of 2.8 and maintain a minimum grade of C in all courses during the research semesters. All seniors applying to do research must have completed the Junior Competency Examination. These courses are restricted to undergraduate students. This class is not available for graduate credit.

### CHM 497 - Introduction to Research II (1-3 crs.)

Includes original investigations in analytical, organic, physical, biochemistry, or inorganic chemistry. A formal, comprehensive research report and a seminar presentation are required upon completion of these experimental studies. A combined total of a minimum of 2 credits in research courses are required for all chemistry majors expecting American Chemical Society accreditation. Course credit is a variable 1-3 credits per semester. To enroll in research students must have a cumulative GPA of 2.8 and maintain a minimum grade of C in all courses during the research semesters. All seniors applying to do research must have completed the Junior Competency Examination. These courses are restricted to undergraduate students. This class is not available for graduate credit.

### CHM 596 - Selected Topics in Chemistry (3 crs.)

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is not available for graduate credit.

## CNS - Couns College Stu Personnel

### CNS 490 - Selected Topics in Counseling (1-3 crs.)

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is not available for graduate credit.

### CNS 503 - Advanced Field Experience (3 crs.)

Continuation of the CNS 580/589 field experience in schools. Prerequisites: CNS 580/589, advisor's approval, and pre-registration form. Site selection must be approved by advisor.

### CNS 504 - Introduction to School Counseling (3 crs.)

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 (3 crs.)

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. Prerequisites: Completion of Phase I of program and CNS 585.

### CNS 508 - Marital, Couple, and Family Counseling (3 crs.)

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: Completion of Phase I or permission of instructor, CNS 578.

### CNS 509 - Multicultural Counseling (3 crs.)

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 (3 crs.)

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: Completion of Phase I or permission of instructor.

### CNS 512 - Group Counseling and Leadership Skills (3 crs.)

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: CNS 578 or concurrent registration with permission of instructor.

**CNS 515 - Career Development (3 crs.)**

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 519 - Implications for Human Development for Counseling (3 crs.)**

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 521 - Emotionally Intelligent Leadership (3 crs.)**

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 (3 crs.)**

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: CNS 578.

**CNS 524 - The DSM and Psychopathology for a CNS Perspective (3 crs.)**

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.

**CNS 526 - Brief Therapy for Martial, Family, and Couples Counseling (3 crs.)**

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 and Techniques in Couples, Marital, and Family Therapy (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 531 - Advanced Study in Multicultural Issues (3 crs.)**

Designed for current practitioners in helping services who already have earned a master's degree who desire to expand knowledge and skills in working with diverse populations and in creating a society where "freedom and justice for all" can become a reality. Prerequisite: A master's degree in counseling or its equivalent.

**CNS 532 - Advanced Drug and Alcohol Counseling (3 crs.)**

Acquaints student with the concept of alcohol and drug dependence as a primary, progressive, chronic, potentially fatal, and symptomatic disease that impacts the entire family system. Explores the disease from a bio-psycho-social and spiritual perspective as well as demonstrating various multidisciplinary approaches to arresting and successfully treating the illness. Attention to principles of early intervention, prevention, special populations, and standards necessary for achieving certification as an addiction counselor in Pennsylvania. Explores the developmental models of recovery, relapse prevention methods, and treating the dually diagnosed client. Course is designed to prepare students as facilitators who can utilize addiction concepts and skills in a variety of counseling settings. Prerequisite: Master's degree in counseling or its equivalent.

**CNS 536 - Counseling Challenging Adolescents (3 crs.)**

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: Master's degree in counseling or its equivalent.

**CNS 538 - Selected Topics in Counseling (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 539 - Advanced Field II (3 crs.)**

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. Prerequisites: Completion of CNS 580, approval of adviser, and pre-registration form.

**CNS 551 - Clinical Supervision Group I (2 crs.)**

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 (2 crs.)**

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 (3 crs.)**

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 that 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 (3 crs.)**

**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 (3 crs.)**

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. Prerequisites: Completion of Phase I, CNS 560, and CNS 565.

**CNS 563 - Professional Orientation to Community Counseling (3 crs.)**

Designed to provide a comprehensive overview of the rapidly evolving field of community counseling. Studies basic philosophy, principles, and current trends in the provision of community counseling services. Students gain understanding of topics such as: psychoeducational and developmental counseling, health-

promotive services, indirect counseling services, crisis counseling, and ethical and legal issues.

**CNS 564 - Grief and Loss Issues in Counseling (3 crs.)**

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: Completion of Phase I or permission of instructor, CNS 578.

**CNS 565 - The College Student and the College Environment (3 crs.)**

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: CNS 560.

**CNS 567 - Counseling Children (3 crs.)**

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. *Prerequisites: completion of Phase I.*

**CNS 568 - Professional Orientation to Mental Health Counseling (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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: CNS 578.

**CNS 573 - Theories of Counseling (3 crs.)**

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: CNS 559 or concurrent registration with permission of instructor.

**CNS 574 - Selected Topics in Counseling (3 crs.)**

Department opportunity to offer courses in areas of major interest not covered by regular courses.

**CNS 576 - Selected Topics in Counseling (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 577 - Selected Topics in Counseling (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 578 - Pre-practicum in Counseling (3 crs.)**

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: CNS 559.

**CNS 580 - Clinical Field Experience I (3 crs.)**

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. Prerequisites: Completion of Phases I and II, adviser's approval, attendance at orientation meeting the prior semester, pre-registration form, and candidacy. CNS 589 is required to satisfy the six credits for field placement.

**CNS 581 - Counselor Supervision (3 crs.)**

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. Note: Restricted to students enrolled in the Supervisory Certificate Program through Educational Administration and Foundations Department.

**CNS 585 - Practicum in Counseling (3 crs.)**

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. Prerequisites: A grade of B or higher in CNS 578, permission of adviser, attendance at orientation meeting the prior semester, and pre-registration form.

**CNS 586 - Advanced Practicum in Counseling (3-6)**

Extension of CNS 585, permits student to gain greater specialized competencies in the same general setting. Prerequisites: CNS 585, consent of adviser, attendance at orientation meeting the prior semester, and pre-registration form.

**CNS 587 - Research Seminar in Counseling (3 crs.)**

Presents the advanced student an opportunity to examine, evaluate, synthesize, and bring into final form previous learning and research to a consistent philosophical approach. Prerequisite: CNS 600.

**CNS 588 - Counseling Strategies and Techniques (3 crs.)**

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. Prerequisites: Completion of Phase I and CNS 573.

**CNS 589 - Clinical Field Experience II (3 crs.)**

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. Prerequisites: Completion of CNS 580, approval of adviser, and pre-registration form.

**CNS 590 - Advanced Clinical Field Experiences (3 crs.)**

Continuation of the CNS 580/589 field experience. Course offered on a pass/fail basis. Prerequisites: Completion of CNS 580/589, adviser's approval, and pre-registration form. Site selection must be approved by adviser.

**CNS 596 - Selected Topics in Counseling (1-3)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 597 - Selected Topics in Counseling (1 cr.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 598 - Selected Topics in Counseling (1 cr.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**CNS 599 - Independent Study (3 crs.)**

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: Permission of adviser.

**CNS 600 - Research and Statistics (3 crs.)**

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 (3 crs.)**

Continuation of the CNS 580/589 field experience in schools. Prerequisites: CNS 580/589, advisor's approval, and pre-registration form. Site selection must be approved by advisor.

**CNS 603 - Advanced Practice Seminar (3 crs.)**

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: Completion of CNS 585 and 580.

**CNS 609 - Internship (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**CNS 610 - Internship II (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**CNS 612 - Thesis I (3 crs.)****CNS 613 - Thesis II (3 crs.)****COM - Communication Journalism****COM 410 - Women and the Media (3 crs.)**

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: COM111 and COM112 or permission of instructor. This class is available for graduate credit.

**COM 425 - Feature Writing (3 crs.)**

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: COM111 and COM112 or permission of instructor. This class is available for graduate credit.

**COM 451 - Electronic Field Production (3 crs.)**

Designed to develop and train visual essayists—single-camera videographers who link pictures, words, and sound to create electronic stories. Creates, develops, and polishes skills and techniques needed to produce video documentaries, corporate videos, and live event productions. Skills and techniques include telling the visual story without words; writing and shooting long-form TV stories, interviews, and features; learning visual grammar; perfecting video editing; and developing on-camera performance abilities. Prerequisites: COM 224 and COM 284, or permission of instructor. This class is available for graduate credit.

**COM 452 - Multimedia Journalism (3 crs.)**

Focus is preparation for careers as professional multimedia journalists. The course emphasizes development of news judgment, journalistic responsibilities, and journalistic ethics in the digital environment. Students work in classroom and television environments to acquire and improve reporting, writing, and technical skills needed to succeed in the modern television newsroom. Introduces the culture of the broadcast news environment, including meeting deadlines, reporting on numerous digital platforms and working in a team environment both in the field and in the newsroom. Prerequisites: COM224 and COM284 or permission of instructor. This class is available for graduate credit.

**COM 460 - Case Studies in Public Relations (3 crs.)**

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:

COM111 and COM112 or permission of instructor. This class is available for graduate credit.

**COM 470 - Advanced Digital Photographic Communication (3 crs.)**

Introduces principles of digital photography and teaches basic competencies to apply standard photo concepts to the realm of digital imaging. Students study history of digital photography, techniques of composition, and basic processes of producing digital photographs from electronic and traditional camera images. Emphasis on practical technique with electronic equipment (cameras, scanners, photo CDs, and other methods of image acquisition) and the manipulation of images through applications like Adobe Photoshop. Students are expected to develop an understanding of the relationship of digital photography to their professional goals. Different evaluation criteria applied to graduate/undergraduate students. Prerequisite: COM 360 Basic Digital Photographic Communication or permission of the instructor. This class is available for graduate credit.

**COM 476 - Magazine Design (3 crs.)**

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: COM111 and COM112 or permission of instructor. This class is available for graduate credit.

**COM 481 - Digital Media Design (3 crs.)**

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. This class is available for graduate credit.

**COM 482 - Internet Communication (3 crs.)**

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: COM111 and COM112 or permission of instructor. This class is available for graduate credit.

**COM 484 - Electronic Media Programming and Management (3 crs.)**

Provides students with insights into the programming and management 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, audience evaluation of programs, and the management of station/system/network personnel. Prerequisite: COM111 and COM112 or permission of instructor. This class is available for graduate credit.

**COM 490 - Selected Topics in Communication/Journalism (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Junior standing. This class is available for graduate credit.

**COM 491 - Selected Topics in Communication/Journalism (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Junior standing. This class is available for graduate credit.

**COM 492 - Selected Topics in Communication/Journalism (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Junior standing. This class is available for graduate credit.

**COM 493 - Selected Topics in Communication/Journalism (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Junior standing. This class is available for graduate credit.

**COM 494 - Selected Topics in Communication/Journalism (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Junior standing. This class is available for graduate credit.

**COM 505 - Public Relations Foundations (3 crs.)**

This course zeroes in on two elements of PR that have come to the forefront in the last few years: an emphasis on international PR and online PR tactics, particularly social media. The other two emphases of this course and will be ongoing concerns of PR professionals: ethics and research.

**COM 506 - Public Relations Strategies (3 crs.)**

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—graphic/media design—for public relations in a digital media environment.

**COM 510 - Professional Seminar (3 crs.)**

This course will explore the differences between code that works and good code. This will include: designing during development, characteristics of interfaces, naming conventions, defensive programming, selecting data types, organizing code, controlling loops, unusual control structures, table driven methods. Students will explore open source projects to practice evaluating the quality of code.

**COM 511 - Modes of Film Communication (3 crs.)**

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 (3 crs.)**

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 - Applied Mass Communication Research (3 crs.)**

COM 520 is a required course for Communication Studies students and is designed to introduce them to a variety of applied research techniques. In particular, the course will examine surveys, focus groups, and content analyses. The course provides students with the opportunity to engage in directed research projects, applying the methods and concepts discussed in class.

**COM 526 - Emerging Mass Media Technologies (3 crs.)**

Reviews and analyzes the role of developing and future telecommunications media technologies and their implication for today's media and society.

**COM 527 - Digital Storytelling (3 crs.)**

Communication organizations must meet their consumers in the digital world, so professionals with an understanding of writing to the digital content consumer are in high demand. This course is designed for the student seeking a career in a communications or related field. The course aims to prepare students to produce content for digital formats such as web and mobile platforms. Students will spend time researching and collecting information on a specific topic and produce a digital narrative that will entice consumers to explore the message. Emphasis will be given to well-written text, but the best producers understand the multi-faceted approach to digital content that would include visual content and consumer interaction.

**COM 528 - Digital Media Workshop (3 crs.)**

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 530 - Law and the Media (3 crs.)**

In-depth study of the law that affects media. Focuses on the reasoning behind regulation, the impact of the laws, and the need for changes in current regulatory schemes. Legal research skills and methods are stressed.

**COM 536 - World Broadcasting Systems (3 crs.)**

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 570 - Fundraising and Association Public Relations (3 crs.)**

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 (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 (3 crs.)**

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 in Mass Communications**

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 (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**COM 610 - Internship II (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**CRJ - Criminal Justice****CRJ 411 - Terrorism (3 crs.)**

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. Prerequisite: CRJ309 or CRJ310 with a minimum grade of C. Approved elective for Ethnic Studies Minors with Departmental permission. This class is available for graduate credit.

**CRJ 440 - Community Corrections (3 crs.)**

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. Prerequisites: CRJ100, CRJ211, CRJ221, CRJ241, and CRJ309 with a C or better. This course is available for graduate credit.

**CRJ 461 - Social Construction of Homicide (3 crs.)**

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. Prerequisites: CRJ309 or CRJ310 with a minimum grade of C. This class is available for graduate credit.

**CRJ 463 - Comparative Criminal Justice (3 crs.)**

Provides a basic appreciation for understanding the historical, philosophical, ideological, and practical issues relevant to worldwide criminal justice systems. Prerequisite: CRJ309 or CRJ310 with a minimum grade of C. This class is available for graduate credit.

**CRJ 464 - Popular Culture, Crime and Justice (3 crs.)**

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. Prerequisite: CRJ309 or CRJ310 with a minimum grade of C. Approved elective for Ethnic Studies minors with departmental permission. This class is available for graduate credit.

**CRJ 466 - Women and Criminal Justice (3 crs.)**

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. Prerequisite: CRJ309 and CRJ310 with minimum grades of C. Approved elective for Women and Gender Studies minors with departmental permission. This class is available for graduate credit.

**CRJ 490 - Selected Topics in Criminal Justice (3 crs.)**

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: Upper division status. This class is available for graduate credit.

**CRJ 491 - Selected Topics in Criminal Justice (3 crs.)**

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: Upper division status. This class is available for graduate credit.

**CRJ 501 - Foundations of Justice (3 crs.)**

Examines the nature, application, and impact of various theoretical approaches, practices and assumptions regarding the function and operation of the criminal justice system.

**CRJ 520 - Justice Administration and Management (3 crs.)**

Studies bureaucracy and complex organizations with emphasis on the concepts and practices of the administration and management of agencies in the criminal justice system.

**CRJ 550 - Graduate Seminar (3 crs.)**

This course is designed to provide in-depth analysis of particular areas of criminal justice. Emphasis will be on comprehensive class discussion and developing familiarity with formal research. The specific topic of the course may change from year to year.

**CRJ 560 - Theories of Crime and Delinquency (3 crs.)**

Examines etiology of criminal behavior including the process of becoming a criminal, patterns of criminal behavior, and social and individual consequences of crime and delinquency.

**CRJ 570 - Legal Trends and Issues (3 crs.)**

Explores in detail current trends and issues in law as they relate to the operation and management of the criminal and juvenile justice system.

**CRJ 575 - Mental Illness and the Administration of Justice (3 crs.)**

An exploration of the intersection of the mental health and criminal justice systems in the United States. The primary theme is



the deinstitutionalization movement, which has resulted in the shifting of individuals with mental illness from hospitals into correctional facilities. Important topics include civil and outpatient commitment, police as first responders, training for criminal justice personnel responding to crisis situations, and other diversion efforts to decrease criminalization and stigmatization such as Crisis Intervention Teams, Mental Health Courts, Assertive Community Treatment, and a variety of community-based interventions and reentry strategies. Engagement and innovative policy solutions are required from students.

**CRJ 580 - Juvenile Justice System (3 crs.)**

Examines the goals, organization, and operations of agencies and institutions that work with youthful offenders including current policies and proposals for their reform.

**CRJ 585 - Treatment and Rehabilitation (3 crs.)**

Examination and analysis of historical and contemporary correctional treatment and rehabilitation strategies, philosophies, ideologies, and developments relevant to correctional, organizational, and management policies and practices. Students critically focus on theoretical, practical, and policy issues relating to treatment and rehabilitation programs provided to adult and juvenile offender populations.

**CRJ 590 - Justice Policy Analysis (3 crs.)**

Analysis of the process by which policy decisions in criminal justice are derived and implemented and their consequence on the criminal justice system.

**CRJ 591 - Selected Topics in Criminal Justice (3 crs.)**

Opportunity for the department to offer courses in areas of major interests not covered by regular course offerings.

**CRJ 592 - Selected Topics in Criminal Justice (3 crs.)**

Opportunity for the department to offer courses in areas of major interests not covered by regular course offerings.

**CRJ 593 - Independent Study (3 crs.)**

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.

**CRJ 594 - Selected Topics in Criminal Justice (3 crs.)**

Opportunity for the department to offer courses in areas of major interests not covered by regular course offerings.

**CRJ 595 - Practicum I (3 crs.)**

An original work done as a group or individual effort in an agency setting which results in a scholarly paper revolving around an issue germane to the participating agency. Significant involvement with the agency is necessary. The department must approve the selection of the agency and the issue. Limited to "weekend" students.

**CRJ 596 - Selected Topics in Criminal Justice (3 crs.)**

Opportunity for the department to offer courses in areas of major interests not covered by regular course offerings.

**CRJ 597 - Practicum II (3 crs.)**

An original work done as a group or individual effort in an agency setting which results in a scholarly paper revolving around an issue germane to the participating agency. Significant involvement with the agency is necessary. The department must approve the selection of the agency and the issue. Limited to "weekend" students.

**CRJ 599 - Independent Study (3 crs.)**

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.

**CRJ 600 - Research Methods (3 crs.)**

Survey of empirical research methods and their application in the field of criminal justice; includes research design, theories of sampling, data collection strategies, and analysis of findings.

**CRJ 610 - Quantitative Analysis (3 crs.)**

Examines the relationship and application of statistical techniques to theory building and concept construction. Includes an overview of statistical methods with an emphasis on criminal justice. Prerequisite: CRJ600.

**CRJ 612 - Thesis I (3 crs.)**

**CRJ 613 - Thesis II (3 crs.)**

**CRJ 617 - Internship I (3 crs.)**

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.

**CRJ 618 - Internship II (3 crs.)**

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.

**CRJ 635 - Restorative Justice (3 crs.)**

Examines the elements of the Restorative Justice Model and its application for criminal justice policy and practice. The restorative justice model features classical criminology, victimology, and cognitive therapy. Instructs students on three elements of the BARJ Model that includes community protection, youth accountability, and competency development.

## **CSC - Computer Science**

**CSC 401 - Simulation Techniques (4 crs.)**

Study of the statistical and modeling techniques necessary to build credible models. Techniques for gathering real world data and analyzing for model building and verification. Techniques for gathering data from models including sensitivity analysis, steady state analysis, and variance reduction techniques. Credible what if analysis for comparing two models. Prerequisite: Completion of MAT313 with a C or better. This class is available for graduate credit.

**CSC 431 - Computer Networks (4 crs.)**

Studies protocol suites, emphasizing the TCP/IP 4-layer model. Topics included are network addresses, sub netting, 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. Prerequisites: Completion of CSC111 with a C or better and completion of CSC320 with a C or better. This class is available for graduate credit.

**CSC 434 - Web Programming (4 crs.)**

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: Completion of CSC371 with a C or better. This class is available for graduate credit.

**CSC 440 - Compiler Design (4 crs.)**

Introduction to design and implementation of compilers. General principles of compiler design are covered with emphasis on the following components: scanner, parser, semantic analyzer, code optimizer, and code generation. Symbol tables and error handling also covered. Includes implementation of a compiler for a simple language. Prerequisites: Completion of CSC 111 with a C or better and completion of CSC 220 with a C or better. This class is available for graduate credit.

**CSC 450 - Advanced Computer Graphics (4 crs.)**

Introduction to a high-level 3-D renderer, the animation process, and advanced computer graphics topics. Majority devoted to learning 3-D modeling and animation techniques using a 3-D renderer, including topics such as object modeling, lighting, and key framing. Additional topics may include shadow generation, object interaction, and the comparison of various graphics APIs. Projects will involve modeling with a 3-D renderer as well as a standard graphics package (e.g., OpenGL). Prerequisite: Completion of CSC350 with a C or better. This class is available for graduate credit.

**CSC 451 - Computer Graphics Algorithms (4 crs.)**

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. Prerequisites: Completion of CSC350 with a C or better and completion of MAT318 with a C or better. This class is available for graduate credit.

**CSC 462 - Artificial Intelligence (4 crs.)**

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: Completion of SWE200 with a C or better. This class is available for graduate credit.

**CSC 463 - Introduction to Robotics (4 crs.)**

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. Prerequisites: Completion of CSC111 with a C or better and completion of CSC220 with a C or better. This class is available for graduate credit.

**CSC 490 - Selected Topics in Computer Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 491 - Selected Topics in Computer Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 492 - Selected Topics in Computer Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 493 - Selected Topics In Computer Science (4 crs.)**

Presents topics that will vary according to need. Topics such as languages are appropriate. This class is available for graduate credit.

**CSC 494 - Selected Topics in Computer Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 495 - Selected Topics in Computer Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 498 - Senior Research Methods (2 crs.)**

Students will learn basic research strategies including conducting literature reviews, designing experiments, defining hypotheses, and writing proposals. Topics include finding and evaluating sources of information, defining topics, developing and supporting a hypotheses, and acceptable research and experimental practices. Prerequisite: Computer science major with junior status and a C or better in any combination of five computer science and computer engineering courses. Graduate students are not permitted to take this course. This class is not available for graduate credit.

**CSC 499 - Senior Research and Development (2 crs.)**

Students will independently, but under the direction of the instructor, execute the proposal developed in CSC498. Students will conduct the experiments outlined in their testing / implementation plan. Students will then analyze the results and determine if their hypothesis was supported or not. The goal is to gain experience with a formal development process and understand how the scientific method, mathematical reasoning, logic, and algorithmic thinking will generate concrete answers to problems. Prerequisite: Completion of CSC498 with a C or better. Graduate students are not permitted to take this course. This class is not available for graduate credit.

**CSC 501 - Algorithm Design and Analysis (3 crs.)**

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. Prerequisites: MAT 318, CSC 111.

**CSC 502 - Automata Theory (3 crs.)**

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, NO, and NP-Complete intractable problems.

**CSC 520 - Computer Architecture (3 crs.)**

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 (3 crs.)**

Studies functionality of an operating system and design of efficient operating system components. Definition of a kernel and higher-level functions of operating systems, CSC scheduling algorithms. Interprocess communication including semaphores with busy-wait and idle-wait. Deadlock, the dining philosophers problem and starvation. Resource allocation. The bankers Algorithm. Virtual memory architectures. Introduction to distributed operating systems. Prerequisite: CSC 520.

**CSC 523 - High Performance Computing (3 crs.)**

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 with extensive coverage of MPI. 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. Prerequisite: CSC 521.

**CSC 534 - Computer Security (3 crs.)**

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. Prerequisite: CSC 521.

**CSC 550 - Scientific Visualization (3 crs.)**

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. Prerequisites: MAT 318, CSC 110, and CSC 111.

**CSC 559 - Agile Software Methods (3 crs.)**

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 (3 crs.)**

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. Prerequisite: programming experience.

**CSC 562 - Agile Development Techniques II (3 crs.)**

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: CSC 561

**CSC 563 - Software Metrics and Process Management (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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. Prerequisite: CSC 570.

**CSC 592 - Advanced Topics in Computer Science (3 crs.)**

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 (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 595 - Selected Topics in Computer Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 596 - Selected Topics in Computer Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 597 - Selected Topics in Computer Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 598 - Selected Topics in Computer Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**CSC 599 - Independent Study (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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.

**ECH - Early Childhood****ECH 410 - Physical, Motor, and Sensory Development in Early Childhood (3 crs.)**

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: senior status. This class is available for graduate credit.

**ECH 415 - Professional Practicum in PK-4 (3 crs.)**

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 50 hours in a placement with students aged three to nine years. Prerequisites: ECH210, ECH220, ECH260, ECH320, and ECH370. This class is not available for graduate credit.

**ECH 440 - Building Family and Community Partnerships (3 crs.)**

Emphasis is on understanding contemporary families with young children. Family diversity and fostering reciprocal relationships are stressed. Field experiences include both observation of and participation in family/school/community interactions. This course is available for graduate credit.

**ECH 460 - Family School and Community Partnerships (3 crs.)**

Surveys current and continuing issues in early childhood education. Includes childcare, pre-primary programs and parent involvement, implementing a parent involvement project, and a individual study of a particular development area and/or processes. Prerequisite: ECH210, ECH220, ECH260 or ECH320. This class is available for graduate credit.

**ECH 462 - Practicum in Early Childhood Concentration with Administrative Field Experiences (3 crs.)**

This course will provide a practicum experience with a director of an early childhood program and give students an opportunity to see a wide variety of administrative tasks. The focus of the course will be on developmentally appropriate practice and meeting the ethical standards as described by the National Association for the Education of Young Children. Prerequisites: PreK-4 Concentration or Director's Credential. This class is available for graduate credit.

**ECH 470 - Language Development, Literacy, and Play in Early Childhood Education (3 crs.)**

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 or graduate status. This class is available for graduate credit.

**ECH 489 - Early Childhood Student Teaching (12 crs.)**

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. Must be taken concurrently with ECH480. This class is available for graduate credit.

**ECH 490 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 491 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 492 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 493 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 494 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 495 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 496 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 497 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 498 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 499 - Selected Topics in Early Childhood (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECH 510 - Diversity and Inclusion in Early Childhood Education ()**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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: Permission of instructor.

**ECH 564 - The Business of Child Care (3 crs.)**

This course is designed specifically for directors of childcare 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.

**ECH 565 - Health and Safety Practices in Early Childhood Educations: Program Development and Evaluation (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ECO - Economics****ECO 484 - Mathematical Economics (3 crs.)**

Covers the specification of economic models in mathematical terms. Applications of mathematical analysis to both macroeconomic and microeconomic concepts are presented. Prerequisites: ECO101 and ECO102; and MAT181 or MAT211. This class is available for graduate credit.

**ECO 485 - Econometrics (3 crs.)**

Covers statistical estimation and testing of economic models. Topics include specification of models, data problems, and

estimation problems encountered in the study of economics, such as serial correlation, heteroscedasticity, autoregression, lag models, and identification. Prerequisites: ECO101 and ECO102 or ECO501; and MGS226 or MGS531. This class is available for graduate credit.

**ECO 490 - Selected Topics in Economics (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

## **EDU - Education Foundation**

**EDU 410 - Environmental Education Practicum (3 crs.)**

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. This class is available for graduate credit.

**EDU 412 - Teaching Social Studies in Secondary Schools I (3 crs.)**

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. Course must be taken concurrently with EDU413. This class is available for graduate credit.

**EDU 413 - Teaching of Social Studies II (3 crs.)**

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. Course must be taken concurrently with EDU412. This class is available for graduate credit.

**EDU 420 - Microcomputers in the Classroom (3 crs.)**

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. This class is available for graduate credit.

**EDU 421 - Teaching of English in Secondary Schools (3 crs.)**

Review of language arts requirements of secondary schools with special reference to grade placement and adaptation of materials, appraisal of results and the development of programs of study. Directed observation in the laboratory school is frequently employed. This class is available for graduate credit.

**EDU 422 - Methods of Teaching English in Secondary Schools (3 crs.)**

Second half of methods block for secondary certification for English majors. Builds on EDU290 and completes preparation for student teaching. Will learn how to apply many of the concepts of EDU290 and will begin more specifically elements into practice. Prerequisite: EDU290. This class is available for graduate credit.

**EDU 426 - Methods of Teaching Foreign Languages (3 crs.)**

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: Permission of instructor. This class is available for graduate credit.

**EDU 428 - Methods of Teaching and Training in Business Education (3 crs.)**

Focuses on skills and knowledge needed by pre-service teachers as they learn to design instructional programs in the areas of business and computer education and training. Particular focus is on identification and selection of appropriate curriculum materials, methods of presenting information to diverse groups of students, and the educational technology that supports the instructional program. Classroom management techniques, curriculum considerations, and strategies for teaching business subjects are stressed. Topics of educational and psychological measurement and evaluation and their use by classroom teachers as well as the evaluation of student progress in a variety of educational settings is addressed. Case studies focusing on various aspects of teaching provide an opportunity for reflection on all aspects of classroom instruction. This course is available for graduate credit.

**EDU 434 - Teaching of Mathematics in the Secondary Schools I (3 crs.)**

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. This class is available for graduate credit.

**EDU 435 - Teaching of Mathematics in the Secondary Schools II (3 crs.)**

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: EDU434. This class is available for graduate credit.

**EDU 440 - Teaching of Science in Secondary Schools (3 crs.)**

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. Must be taken concurrently with EDU441. This class is available for graduate credit.

**EDU 441 - Curriculum and Evaluation in the Secondary Science Classroom (3 crs.)**

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.

Must be taken concurrently with EDU440. This class is available for graduate credit.

**EDU 490 - Selected Topics in Education Foundation (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**EDU 491 - Selected Topics in Education Foundation (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**EDU 492 - Selected Topics in Education Foundation (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**EDU 493 - Selected Topics in Education Foundation (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**EDU 494 - Selected Topics in Education Foundation (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**EDU 495 - Student Teaching and Professional Practicum (9 - 15 crs.)**

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. This class is available for graduate credit.

**EDU 496 - Selected Topics in Education Foundation (1 credit)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**EDU 497 - Selected Topics in Education Foundation (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**EDU 498 - Selected Topics in Education Foundation (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**EDU 499 - Selected Topics in Education Foundation (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**EDU 522 - Advanced Methods for the Teaching of World Languages (3 crs.)**

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 (3 crs.)**

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 - Special Education

**EEC 423 - Effective Instructional Strategies for Children with Exceptionalities (3 crs.)**

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: EEC273 or EEC411 or permission of the instructor. This class is available for graduate credit.

**EEC 445 - Proactive Approaches for Classroom and Behavior Management (3 crs.)**

Provides instruction and experience in individual and group aspects of classroom management. Provides instruction on proactive versus reactive interventions, defining and prioritizing behaviors, collecting and interpreting observational data, and methods for increasing desirable behaviors and decreasing undesirable behaviors. Discusses generalization and maintenance of behaviors, and self-management. Writing effective behavior management plans emphasized while focusing on ethical, legal, and proactive practices. Prerequisite: EEC273 or permission of the instructor. This class is available for graduate credit.

**EEC 447 - Special Education Processes in a Standards Aligned System (3 crs.)**

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: EEC 273 or permission of instructor. This class is available for graduate credit.

**EEC 475 - Inclusive Education: A Practical Approach for Educators (3 crs.)**

Designed to prepare both general and special education teachers to effectively teach students with disabilities in general education settings. Practical guidelines, strategies, methods, adaptations, and materials, including definition, standards, classroom organization/management, and collaborative consultation emphasized to meet the academic, social, and affective needs of students with disabilities in inclusive settings. Prerequisite: EEC

411 or permission of instructor. This class is available for graduate credit.

**EEC 483 - Assessing Children with Exceptionalities for Curricular Decision-Making (3 crs.)**

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: EEC273 or EEC411 or permission of instructor. This class is available for graduate credit.

**EEC 526 - Topics in Spec Ed for School Counselors and other School Professionals: Working w/ Stud with Except (3 crs.)**

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 (3 crs.)**

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 Reports (ER) and Individualized Education Programs (IEPs), the principles of Least Restrictive Environment, Due Process, Parent Involvement. PREREQUISITE: EEC 273 or permission of the instructor.

**EEC 543 - Selected Studies in Special Education (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 (3 crs.)**

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: EEC 273, Introduction to Exceptionalities: Understanding Diverse Learners or permission of instructor.

**EEC 546 - Transition to Adult Life for Students with Disabilities (3 crs.)**

Information about the pre-vocational and vocational training of adolescents and young adults who have mental retardation, 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.

**EEC 548 - Direct Instruction (3 crs.)**

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: EEC 411 or permission of instructor.

**EEC 550 - Instruction for Students with High Incidence Disabilities (3 crs.)**

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: EEC 273 or EEC 411 or permission of instructor.

**EEC 551 - Subject Area Content Access for Students with Learning Disabilities in a Standards Aligned System (3 crs.)**

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: EEC 273, Introduction to Exceptionalities: Understanding Diverse Learners or permission of instructor.

**EEC 561 - Instruction for Students with Low Incidence Disabilities (3 crs.)**

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: EEC 273, Introduction to Exceptionalities: Understanding Diverse Learners or permission of instructor.

**EEC 565 - Instruction for Students with Autism Spectrum Disorders (3 crs.)**

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 (3 crs.)**

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:** EEC 273, Introduction to Exceptionalities, or permission of instructor.

**EEC 590 - Practicum I in Special Education (3 crs.)**

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. Prerequisites: EEC 525, EEC 551, EEC 561, and EEC 571.

**EEC 591 - Practicum II in Special Education (3 crs.)**

Supervised intensive field experience designed to provide the candidate for certification in special education with field experiences in assessment techniques, special class operation, participating in child study teams, and curriculum development. Prerequisite: permission of instructor.

**EEC 594 - Selected Topics in Special Education (1-3 crs.)**

Opportunity for the department to offer courses in areas of major interests not covered by regular course offerings.

**EEC 599 - Independent Study (3 crs.)**

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 (3 crs.)**

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. Prerequisites: Special Education Majors or Permission of the Instructor.

**EEC 609 - Internship (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**EEC 610 - Internship II (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

## ELP - Educational Leader Policy

**ELP 490 - Selected Topics in Educational Leadership and Policy (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ELP 491 - Selected Topics in Educational Leadership and Policy (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ELP 492 - Selected Topics in Educational Leadership and Policy (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ELP 493 - Selected Topics in Educational Leadership and Policy (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ELP 494 - Selected Topics in Educational Leadership and Policy (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ELP 500 - General School Administration (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 and Policy (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 (1-3)**

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 (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**ELP 610 - Internship I (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**ELP 619 - Leadership for Pupil Services (3 crs.)**

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 (3 crs.)**

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 621 - Practicum I Strategic Leadership in District Governance (3 crs.)**

Provides an initial exploration and exposure to leadership roles at the district setting and should be taken as part of a candidate's Tier 1 cluster of courses at beginning 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 basic leadership activities as assigned by mentor and conducting a case study on leadership concepts. Candidate will participate in three leadership seminars that focus on leadership foundations and best practices as articulated by current leaders in the field and a basic action research activity. Candidate will also begin to explore the role of the superintendent as an agent of change and/or reform. Projects and activities from Practicum I may carry over into Practicum II.

**ELP 621R - Residency: Strategic Leadership in District Governance (4 crs.)**

Restricted to students enrolled in the Leadership Residency Program and provides an initial exploration and exposure to leadership roles at the district setting which 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 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 622 - The Superintendent as a School and Community Leader (3 crs.)**

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 623 - Negotiations and Personnel Strategic Decision Making (3 crs.)**

Designed to prepare school leaders for leadership in the area of human resources in public schools. Includes a comprehensive review of the personnel function from the perspective of district central office administration and the theories and best practices in staff recruitment, selection, assignment, orientation, evaluation, professional development, reduction in force and other relevant current issues. Explores negotiations concepts, strategies and regulations, and other legal considerations within the commonwealth of Pennsylvania. Core field experiences form the basis of the exploration and development of critical skills necessary to be successful in the areas covered within the course to include the integration of institutional standards as they apply to all topics.

**ELP 623R - Residency: Negotiations and Personnel Strategic Decision Making (4 crs.)**

Restricted to 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 624 - Ethical and Legal Decision-making at the District Level (3 crs.)**

Designed for preparing for executive leadership positions in public education. Students expected to have background in public school law and some experiences in leading public schools at either the

building and/or district levels. Focuses on a review of key areas of school law with advanced study in the legal areas that are currently challenging school leaders. State laws affecting public education will be studied in detail along with issues dealing with student rights, the role of the school board, laws specific to the roles of school leaders, parent and community issues, emerging special education challenges and laws dealing with business and finance.

**ELP 624R - Residency: Ethical and Legal Decision-making at the District Level (4 crs.)**

Restricted to 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 625 - The Impact of Facilities and Plant Management Decisions on School Effectiveness (3 crs.)**

Designed for students in the Superintendent's Letter of Eligibility Program and for practicing educational administrators who want to update skills in educational facilities and plant management. Related educational program to facilities planning and development; provides an opportunity for students to interact with professionals from a variety of disciplines related to planning and development of educational facilities, relates local planning to Pennsylvania Department of Education requirements and regulations; and provides field-based work in contemporary facility planning, development, and maintenance.

**ELP 625R - Residency: The Impact of Facilities and Plant Management Decisions on School Effectiveness (4 crs.)**

Restricted to 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 626 - Optimizing Financial Resources to Support District Level Achievement (3 crs.)**

Project-driven course focuses on the changing perception of finance in the American public schools (K-12). Assists in creating a platform of beliefs about school finance, budgeting, and the role of the superintendent by helping them understand key issues from both a historical perspective and current thinking on what it should become. Emphasis on approaches to developing, evaluating, and articulating financial planning strategies to staff, the public, and the

school board that inform decisions about student achievement. Also discusses the relationship between school boards and superintendents specific to budget development and strategies for enhancing that relationship.

**ELP 626R - Residency: Optimizing Financial Resources to Support District Level Achievement (4 crs.)**

Restricted to 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 627 - Practicum II Strategic Instructional Leadership (3 crs.)**

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 that 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 (4 crs.)**

Restricted to 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 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 634 - Legal and Ethical Issues in Online Instruction (3 crs.)**

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 (4 crs.)**

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 (4 crs.)**

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 (4 crs.)**

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 (4 crs.)**

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 (4 crs.)**

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 (4 crs.)**

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 820 - Action/Applied Research in an Organizational Environment (3 crs.)**

Designed to provide school and district 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 necessitate 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. The research under investigation will focus on traditionally underserved and marginalized populations, including but not limited to those living in poverty, students learning English as another language, and students with disabilities.

**ELP 822 - Communication Theory for School District Administrators (3 crs.)**

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 (3 crs.)**

Designed to provide future school and district administrators with the requisite skill sets and conceptual knowledge needed for effective 21<sup>st</sup> 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 (3 crs.)**

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 830 - Qualitative/Quantitative Research (3 crs.)**

This course is designed to support postgraduate students in defining an appropriate mode of 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 research. It will give students a general understanding of postgraduate and professional research, its methodologies, its challenges and its organization. Students will be introduced to a range of research tools that will equip them to plan and organize research to address undeserved and marginalized populations, including but not limited to those affected by poverty, as well as the use of emergent digital learning technologies; and be able to communicate their findings with academic, school district and community audiences.

**ELP 831 - Educational Statistics (3 crs.)**

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 (3 crs.)**

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 (1 cr.)**

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 (1 cr.)**

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.

**ENG - English****ENG 518 - Seminar in Multicultural Literature (3 crs.)**

Provides in-service teachers and certification students with advanced study of American literature in a multicultural context. At least two historically under-represented social groups will be represented by the authors studied. Course may focus on a genre

(e.g. minority American poetry), a historical period (e.g. minority American literature in the postbellum, Native American and Chicano poetry of the Vietnam era), and/or a thematic concern. Helps teachers understand current critical and theoretical approaches to the cultural diversity of American literature. Specific topic will vary according to instructor.

**ENG 525 - Seminar in Teaching English/Language Arts (3 crs.)**

Provides in-service teachers and certification students with current research and methodology for teaching the English/language arts. Course gives students the opportunity to explore topics such as the student-centered literature class, theories of the reader-response criticism as they apply to the classroom, incarnations of the writing process, reading/writing workshop, trends in assessment, technology in the English classroom, and other subjects as appropriate.

## ENT - Entrepreneurship

**ENT 431 - Corporate Entrepreneurship (3 crs.)**

Examines the need for entrepreneurship in a corporate setting. Companies must be faster, more flexible, more aggressive and more innovative in order to maintain their competitive edge. In other words, they must be more entrepreneurial. Topics will include the need for speed, adaptability, and innovation in order to maintain a competitive edge. This course will cover many entrepreneurial issues and controversies, and students will be challenged to develop and defend their positions regarding these matters. This is an application-oriented course. Students will apply concepts, tools, and frameworks in a series of real world cases and contexts. Prerequisites: ACC 201, FIN 311, and MGT 305. This class is not available for graduate credit.

**ENT 432 - Entrepreneurship (3 crs.)**

Focuses on the concepts, skills, and know-how, information, attitudes and alternatives relevant for start-up and early-stage entrepreneurs and entrepreneurial managers. A difficult and complex course with two fundamental objectives: To teach the use of entrepreneurial perspective in order to make better decisions and increase the odds of success; and teach effective entrepreneurial and general management practice from the perspectives of the founder and the vital stakeholders who can make a substantial difference in the ultimate success or failure of the entrepreneurial process. Central focus is the critical role of opportunity creation and recognition, as the principal success factor in new enterprise formation and building. Especially relevant for aspiring entrepreneurs bent on launching and growing a business. Prerequisites: ENT 337 and ENT 433. This class is not available for graduate credit.

**ENT 433 - Small Business Management (3 crs.)**

Studies the concerns and trends unique to small businesses. Emphasis on the profitable operation of an ongoing small business. Designed for students who are primarily interested in owning and managing the small business enterprise. Case analysis and analysis of actual small business operations will be used. Consideration will be given regarding how to market and produce new and existing products and how to determine pricing and demand elasticities. Basic objective to enhance the students' probability of successfully running and growing a small business by mixing a variety of instructional exercises including the textbook, Internet exercises, a simulation, and a promotional newsletter or brochure.

Prerequisites: ACC 201, FIN 311, MGT 305, MKT 305. This class is not available for graduate credit.

## ESC - Exercise Science

**ESC 400 - Methods of Coaching (3 crs.)**

Provides course work and practical field experience in a supervised sport setting. Must have completed 12 credits toward the coaching minor requirement. Restricted to coaching minors. Prerequisite: ESC340. This class is available for graduate credit.

**ESC 420 - Cardiac Rehab and Special Populations (4 crs.)**

Provides a technical expertise in cardiac rehabilitation and basic ECG interpretation. Population specific issues related to children, females, the elderly, diabetes and cancer, as well as other chronic diseases, and how they relate to exercise will be explored. Three hours lecture and one hour lab per week. Restricted to exercise science majors. Prerequisites: ESC250 and ESC321. This class is available for graduate credit.

**ESC 421 - Exercise Physiology II (4 crs.)**

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: ESC321. This class is available for graduate credit.

**ESC 422 - Exercise Testing and Prescription (3 crs.)**

Designed to aid in gaining the knowledge and practical application of testing, programming, and techniques associated with fitness training based on cardiorespiratory, flexibility, and resistance training guidelines from the American College of Sports Medicine (ACSM) and the National Strength and Conditioning Association (NSCA). Restricted to exercise science majors. Prerequisites: ESC250 and ESC421 (Pre/Co). This class is available for graduate credit.

**ESC 490 - Selected Topics in Exercise Science (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ESC 491 - Selected Topics in Exercise Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ESC 492 - Selected Topics in Exercise Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**ESC 493 - Selected Topics in Exercise Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

## ESS - Earth Science

**ESS 404 - Applied Meteorology and Climatology (3 crs.)**

Intensive study of interaction between various atmospheric parameters and the natural or human-modified surfaces of the earth centered on the applied nature of the atmosphere including discussion of urban, human, agricultural, architectural, and

commercial aspects of society. Computer simulations and mapping are utilized to enhance understanding. Each student carries out a field study on a particular problem of atmospheric interest. Prerequisite: ESS111 or ESS355. This class is available for graduate credit.

#### **ESS 410 - Sedimentary Geology and Paleoenvironments (3 crs.)**

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. Prerequisites: Introduction to Geology (ESS 110), or Physical Geology (ESS 210). Historical Geology (ESS 212) recommended. This class is available for graduate credit.

#### **ESS 413 - Mineral and Rock Resources (3 crs.)**

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: ESS110 or ESS210. This class is available for graduate credit.

#### **ESS 442 - Environmental Geology (3 crs.)**

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: ESS110 or ESS210. This class is available for graduate credit.

#### **ESS 451 - Coastal Environmental Oceanography (3 crs.)**

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. Prerequisites: Oceanography or permission of instructor. This class is available for graduate credit.

#### **ESS 475 - Problems in the Marine Science Environment (3 crs.)**

This class is available for graduate credit.

#### **ESS 490 - Selected Topics in Earth Science (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

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Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

#### **ESS 594 - Selected Topics in Earth Science (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 (1-3)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

#### **ESS 599 - Independent Study (3 crs.)**

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.

## **FIN - Finance**

#### **FIN 405 - Real Estate Appraisal and Investment Analysis (3 crs.)**

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: FIN311 or permission of department chair. This class is available for graduate credit.

#### **FIN 425 - Global Financial Management (3 crs.)**

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: FIN311 and SCM200 or



permission of department chair. This class is available for graduate credit.

**FIN 512 - Investment Analysis (3 crs.)**

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. Prerequisite: MBA 502 and MBA 529.

**FIN 520 - Financial Risk Management (3 crs.)**

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. Prerequisites: MBA 502 and MBA 529.

**FIN 525 - Multinational Business Finance (3 crs.)**

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. Prerequisite: MBA 502 and MBA 529.

**FIN 533 - Applied Financial Analysis (3 crs.)**

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. Prerequisite: MBA 502 and MBA 529.

## FRN - French

**FRN 490 - Selected Topics in French (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**FRN 491 - Selected Topics in French (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**FRN 492 - Selected Topics in French (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**FRN 493 - Selected Topics in French (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**FRN 510 - French Theater (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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.

## GEO - Geography

### GEO 402 - Medical Geography (3 crs.)

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. This class is available for graduate credit.

### GEO 404 - Groundwater and Hydrogeology (3 crs.)

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: ESS110 or ESS210. This class is available for graduate credit.

### GEO 405 - Environmental Conservation and Management in PA (3 crs.)

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. This class is available for graduate credit.

### GEO 415 - Regional Geographic Studies (3 crs.)

Opportunity to study the physical and human landscapes within a particular region of the world not covered by regular courses. Departmental faculty bring their regional expertise into the classroom and provide students with a focused examination of the region with respect to current political, social, economic, physical, and environmental issues. Faculty highlight their own work in the region and place their research within the broader regional context. This class is available for graduate credit.

### GEO 420 - GIS III: Advanced Geographic Information Systems (3 crs.)

Examines advanced topics in GIS analysis such as spatial data uncertainty, error propagation, spatial data display, transformations of geographic phenomena, and visualization. Skills focus on advanced spatial analysis, terrain modeling, georectification of data, and network analysis. Students design and implement an independent GIS project during the course. Prerequisites: GEO202, GEO363. This class is available for graduate credit.

### GEO 421 - Environmental Law (3 crs.)

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 425 - Image Processing (3 crs.)

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. This class is available for graduate credit.

### GEO 440 - Field Techniques (3 crs.)

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. This class is available for graduate credit.

### GEO 441 - Quantitative Methods (3 crs.)

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. This class is available for graduate credit.

### GEO 444 - Environmental Land-Use Planning (3 crs.)

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. This class is available for graduate credit.

### GEO 446 - Water Resources Management (3 crs.)

Roles of water resources management policies and institutions are examined within 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: GEO226. This class is available for graduate credit.

### GEO 450 - Geography-Geology Field Studies (1-3 crs.)

One week to ten-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. This class is available for graduate credit.

### GEO 452 - Geography-Geology Field Studies (1 credit)

One week to ten-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: ESS212, GEO103 or permission of the instructor. This class is available for graduate credit.

**GEO 463 - Applied Geophysical Imaging (3 crs.)**

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. This course is available for graduate credit.

**GEO 490 - Selected Topics in Geography (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

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**GEO 494 - Selected Topics in Geography (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**GEO 503 - Fundamentals of Geoenvironmental Research (3 crs.)**

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 517 - Applied Geographic Information Systems (3 crs.)**

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 (3 crs.)**

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 528 - Sustainable Systems and the Spatial Economy ( )**

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 (3 crs.)**

Advanced methods in computer-assisted mapping and map analysis (geographic information systems or GIS). Emphasis placed upon techniques of establishing, managing spatial (geographic) databases, 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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 536 - Problems of the Atmospheric Environment (3 crs.)**

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 542 - Land-Use Regulations (3 crs.)**

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 546 - Geoenvironmental Research I (3 crs.)**

Research course to be worked out with member of the geography-earth science department.

**GEO 548 - Geoenvironmental Research II (3 crs.)**

Research course to be worked out with member of the geography-earth science department.

**GEO 592 - Selected Topics in Geography (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 593 - Selected Topics in Geography (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 594 - Selected Topics in Geography (1-3)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**GEO 599 - Independent Study (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

**GEO 613 - Thesis II (3 crs.)**

**GRN - Gerontology**

**GRN 490 - Selected Topics in Gerontology (3 crs.)**

Opportunity to offer courses in areas of program minor not covered by the regular courses. This class is available for graduate credit.

**GRN 491 - Advanced Selected Topics in Gerontology (1-3 crs.)**

Opportunity to offer advanced courses in areas of program minor not covered by the regular courses. This class is available for graduate credit.

**GRN 492 - Selected Topics in Gerontology (3 crs.)**

Opportunity to offer courses in areas of program minor not covered by the regular courses. This class is available for graduate credit.

**GRN 601 - Gerontology Internship I (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**GRN 602 - Gerontology Internship II (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**HCA - Health Care Administration**

**HCA 400 - Introduction to Health Care Systems (3 crs.)**

Introduces the major components of the health care system in the United States, including governmental, for profit, and not-for-profit organizations. Discusses the influence of social, political, and economic forces on the delivery of health care. Examines current problems facing the health care industry and evaluates alternative programs from other nations. This class is available for graduate credit.

**HCA 451 - Legal Aspects of Health Care (3 crs.)**

Examines the federal and state regulation of health care providers, focusing primarily on hospitals, nursing homes, physicians, and insurers. Reviews general principles of liability and confidentiality for health care providers. Assesses issues associated with the introduction of medical evidence and testimony. Evaluates the role of the legal system in cases involving all aspects of the human life cycle, ranging from conception to the end of life. Prerequisite: HCA400. This class is available for graduate credit.

**HCA 452 - Health Care Financial Management (3 crs.)**

Examines the most used tools and techniques of health care financial management including health care accounting and financial statements; managing cash, billings, and collections; making major capital investments; determining cost and using cost information in decision-making; budgeting and performance measurement; and pricing. Prerequisite: HCA400. This class is available for graduate credit.

**HCA 453 - Human Resources Management for Health Care Professionals (3 crs.)**

Examines the development and functions of human resources management in the context of public, private, and not-for-profit health care settings including hospitals, rehabilitation facilities, and continuing care retirement communities among others. Evaluates the roles of management and the functional specialist in the development and implementation of personnel policy and administration. Emphasizes the impact of American culture and

public policy upon the human resources and industrial relations functions. Prerequisite: HCA400. This class is available for graduate credit.

**HCA 454 - Health Care Strategic Management (3 crs.)**

Explores the determinants of organizational survival and success. Assesses the need to achieve a fit between the internal and external environment. Analyzes cases to examine environmental and competitive issues. Prerequisite: HCA400. This class is available for graduate credit.

**HCA 485 - Independent Research in Health Care Administration (1 - 6 crs.)**

Students do in-depth research in an area of health care that interests them. The project will demonstrate the student's ability to do independent research, culminating in a well-written report. Contact the research coordinator of the department for further information. Prerequisite: Departmental approval. This class is available for graduate credit.

**HCA 490 - Selected Topics in Health Care Administration (3 crs.)**

Provides the opportunity for the department to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**HCA 491 - Selected Topics in Health Care Administration (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**HCA 498 - Internship in Health Care Administration (1-3 crs.)**

Students broaden their knowledge of health care administration by participating in an internship. Contact the internship coordinator of the department for further information. Prerequisite: Departmental approval. This class is available for graduate credit.

**HCA 499 - Internship in Health Care Administration (1-3 crs.)**

Students broaden their knowledge of health care administration by participating in an internship. Contact the internship coordinator of the department for further information. Prerequisite: Departmental approval. This class is available for graduate credit.

## HCS - Human Communication Studies

**HCS 400 - Senior Seminar (3 crs.)**

Required capstone course for all HCS majors that emphasizes a summative experience in the advanced studies of the field of human communication. Students engage in extensive seminar discussion about the study of communication, particularly as it relates to careers and advanced study. Students are expected to produce, from their own scholarly investigation in the form of a senior thesis, results that are potentially presentable at professional conferences and in scholarly publications. Prerequisites: HCS majors with HSC360 and HCS370 with a C or better, senior status. This class is available for graduate credit.

**HCS 410 - Feminist Perspectives on Communication Theory and Research Methods (3 crs.)**

A writing-intensive seminar course in which students engage in a critical examination of traditional approaches in communication theory and research methods to reveal their underlying, often unstated assumptions about human nature and human communication. Feminist perspectives on different communication contexts, models, theories, and research methods are employed to

explore the limitations and biases of traditional theories and modes of inquiry. In examining group, interpersonal, organizational, public, and intercultural communication contexts androcentric and Eurocentric biases are deconstructed and alternative approaches to the study of communication are discussed and applied in order to overcome the theory/method, subject/object dualism characteristic of conventional communication research. This class is available for graduate credit.

**HCS 491 - Selected Topics in Human Communication Studies (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**HCS 492 - Selected Topics in Human Communication Studies (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**HCS 493 - Selected Topics in Human Communication Studies (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**HCS 494 - Selected Topics in Human Communication Studies (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

## HIS - History

**HIS 402 - Revolutionary America (3 crs.)**

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. Prerequisites: HIS105 and HIS106 and HIS201 or HIS202 or instructor's permission. This class is available for graduate credit.

**HIS 407 - Women in Comparative Perspective (3 crs.)**

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. Prerequisites: HIS105 and HIS106 and sophomore standing or instructor's permission. This class is available for graduate credit.

**HIS 413 - Pennsylvania History (3 crs.)**

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. Prerequisites: HIS105 and HIS106 and HIS201 or

HIS202 and sophomore standing or instructor's permission. This class is available for graduate credit.

**HIS 423 - Issues in 20th-Century Europe (3 crs.)**

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. Prerequisites: HIS105 and HIS106 and sophomore standing or instructor's permission. This class is available for graduate credit.

**HIS 428 - Issues in the Gilded Age and Progressive Era (3 crs.)**

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. Prerequisites: HIS105 and HIS106 and HIS201 or HIS202 and sophomore standing or instructor's permission. This class is available for graduate credit.

**HIS 430 - U.S. Cultural History (3 crs.)**

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. Prerequisites: HIS105 and HIS106 and HIS201 or HIS202 and sophomore standing or instructor's permission. This class is available for graduate credit.

**HIS 433 - Oral History (3 crs.)**

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. Prerequisites: HIS105 and HIS106 and HIS201 or HIS202 and sophomore standing or instructor's permission. This class is available for graduate credit.

**HIS 454 - China and the Outside World (3 crs.)**

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. Prerequisites: HIS105 and HIS106 and sophomore standing or instructor's permission. This class is available for graduate credit.

**HIS 460 - Archives and Public History (3 crs.)**

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.

**HIS 482 - Selected Topics in History (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This course is available for graduate credit.

**HIS 483 - Selected Topics in History (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This course is available for graduate credit.

**HIS 484 - Selected Topics in History (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This course is available for graduate credit.

**HIS 490 - Selected Topics in History (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**HIS 492 - Selected Topics in History (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**HIS 493 - Selected Topics in History (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**HIS 496 - Selected Topics in History (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**HIS 501 - Introduction to Applied History (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

Focuses upon the reading and interpretation of various writings of the Early Middle Ages as well as secondary accounts dealing with the age that 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 543 - Environmental History (3 crs.)**

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 (3 crs.)**

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 592 - Selected Topics in History (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**HIS 593 - Selected Topics in History (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**HIS 594 - Selected Topics in History (1-3)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**HIS 595 - Independent Study (3 crs.)**

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 (3 crs.)**

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 (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. Prerequisites: permission of the department and instructor.

**HIS 600 - Historical Research Methods (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**HIS 610 - Internship II (3 crs.)**

Opportunity for students to gain practical experience in their chosen career area.

**HIS 612 - Thesis I (3 crs.)**

**HIS 613 - Thesis II (3 crs.)**

## ISS - Information System Studies

**ISS 515 - Information Systems Project Management (3 crs.)**

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. Casework will be a major part of this course.

**ISS 520 - Programs, Data, and File Structures (3 crs.)**

Advanced programming, data organization, and accessing design techniques.

**ISS 530 - Modeling and Decision Systems (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

The data environment, basic technical concepts and system resources for data, database concepts, use and management of databases.

**ISS 560 - Introduction to E-Business (3 crs.)**

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-finances, B-to-B systems, e-legal issues, website design, technology needs, and database-driven websites.

**ISS 570 - Information Analysis (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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.

## LIT-Literacy Studies

**LST 500 - Literacy Studies in 21st Century (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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.

## **MAT - Mathematics**

**MAT 400 - History of Mathematics (3 crs.)**

Focuses on the development of mathematical ideas relevant to K-12 mathematics. Some examples include episodes in the development of number systems, algebra, geometry, trigonometry, number theory, and analytic geometry. Some time spent on multicultural issues, sometimes referred to as 'ethnomathematics.' Prerequisite: MAT320 or at least junior standing. This class is available for graduate credit.

**MAT 410 - Numerical Analysis (3 crs.)**

Primarily methods of numerical approximation to the value of functions, polynomials, and systems of equations. Topics include accuracy of approximate calculations, interpolation and interpolating polynomials, solution of algebraic and transcendental equations. Numerical solution of simultaneous linear and nonlinear equations, principle of least squares, difference equations, and quadrature formulas are studied. Prerequisite: MAT212 and either CSC180 or CSC110. This class is available for graduate credit.

**MAT 413 - Statistics II (3 crs.)**

Study of statistical methods and their application to various data sets. The entire statistical process of data collection, fitting data to a model, analysis of the model, verification of the model, and inference will be covered. Topics include hypothesis testing, two-population means, bivariate relationships, regression, ANOVA, experimental designs, two-way tables, time series, survival analysis and multivariate analysis. Examples taken from a variety of disciplines. Concepts reinforced through class projects. Prerequisite: MAT 313. This class is available for graduate credit.

**MAT 421 - Number Theory and Cryptography (3 crs.)**

Introduction to a selection of topics from the related fields of Number Theory and Cryptography. Topics may include congruence arithmetic, primitive roots, quadratic residues, perfect numbers, Pythagorean triples, sums of squares, Fermat's Last Theorem, and primality testing, various substitution ciphers including affine, Vigenere, and Hill ciphers and the RSA public key encryption system with several variations. Algorithms for each encryption scheme discussed will be introduced and implemented. Prerequisite: MAT 320. This class is available for graduate credit.

**MAT 422 - Partial Differential Equations (3 crs.)**

Introduction to Partial Differential Equations, a fundamental branch of applied mathematics. Three classical equations from mathematical physics are discussed: the wave equation, the heat equation and Laplace's equation. Techniques which include separation of variables, Fourier series and fundamental solutions are introduced to address these equations. An introduction to numerical methods is also included. Prerequisites: MAT213 and MAT322. This class is available for graduate credit.

**MAT 425 - Advanced Algebraic Structures (3 crs.)**

Detailed study of one or more of the higher level algebraic structures such as groups, rings, fields, or abstract vector spaces. Emphasis on structure theorems such as the fundamental theorem of group homomorphisms and uses the sophistication developed in MAT 320. Prerequisite: MAT 318 and MAT 320. This class is available for graduate credit.

**MAT 430 - Complex Analysis (3 crs.)**

Introductory course in the theory of functions of a complex variable. Topics include complex numbers, analytic functions, contour integration, Cauchy's Theorem, and infinite series. Methods of a logical proof are developed and used throughout. Prerequisite: MAT213 and MAT320. This class is available for graduate credit.

**MAT 441 - Real Analysis I (3 crs.)**

Designed to give a fundamental understanding of the concepts used in elementary calculus. Methods of a logical proof are developed and used throughout. Topics include real numbers, sequences, limits, continuity, derivatives and the Riemann integral. Prerequisites: MAT212 and MAT320. This class is available for graduate credit.

**MAT 450 - Combinatorics (3 crs.)**

Concerned with computing within discrete mathematical structures and combinatorial problem solving. Topics include sets and graphs; counting and enumeration techniques including recurrence relations and generating functions; and graph theory algorithms. Prerequisite: MAT320. This class is available for graduate credit.

**MAT 456 - Deterministic Methods of Operations Research (3 crs.)**

After a brief historical introduction, presents a detailed study of mathematics related to linear programming. The theory includes the simplex method, duality theory, sensitivity analysis, and matrix games. Some applications will be given. Prerequisites: MAT212 and MAT318. This class is available for graduate credit.

**MAT 476 - Probability (3 crs.)**

In-depth development of probability and distribution theory. Topics include counting techniques, Bayes' Theorem, random variables, moment-generating functions, univariate and multivariate probability distributions, and the Central Limit Theorem. Prerequisites: MAT213, and MAT318. This class is available for graduate credit.

**MAT 486 - Mathematical Statistics (3 crs.)**

Continuation of MAT476. Topics include transformations of random variables, order statistics, convergence in distribution, point and interval estimation, likelihood ratio tests, hypothesis testing, linear models, analysis of enumerative data, and analysis of variance. Prerequisite: MAT476. This class is available for graduate credit.

**MAT 490 - Selected Topics in Mathematics (3 crs.)**

Opportunity to offer experimental courses at the senior level in areas of mathematics not covered by regular courses. Topics such as foundations of mathematics, number theory, graph theory, cryptography, and advanced applications of mathematics are appropriate at this level. This class is available for graduate credit.

**MAT 491 - Topics in Applied Mathematics (3 crs.)**

Opportunity to offer experimental courses at the senior level of mathematics not covered regularly in the applied mathematics curriculum. Topics such as Mathematical Biology, Linear Programming, Computational Mathematics and Computational Modeling are appropriate at this level. Prerequisites: MAT 212 and MAT 318. This class is available for graduate credit.

**MAT 492 - Selected Topics in Mathematics (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**MAT 499 - Independent Study in Mathematics (3 crs.)**

Independent study affords students the opportunity to engage in independent study related to their major field, a supporting area, or specialized interest. This class is available for graduate credit.

**MAT 516 - Mathematical Modeling (3 crs.)**

Involves the process of developing mathematical models as a means for solving real problems. Course will encompass several different modeling situations that use a variety of mathematical topics. The mathematical fundamentals of these topics will be discussed, but with continued reference to their use in finding the solutions to problems. Connections to NCTM Standards, current curriculum projects and the use of various technologies will be made throughout the course.

**MAT 527 - Number Theory Discovery (3 crs.)**

Number theory, one of the oldest branches of mathematics, is very much an alive subject, with discoveries made every day. Course is intended to focus on topics that relate specifically to the natural numbers. These will be treated as motivational problems to be used in an activity-oriented approach to teaching mathematics at the middle and high school levels. Pace will be non-frantic and designed to promote understanding of the topics covered. Topics include prime number facts and conjectures, divisibility theory for integers, magic squares, Pascal's triangle, Fibonacci numbers, modular arithmetic, and mathematical art.

**MAT 528 - Algebra for Teachers of Mathematics (3 crs.)**

Classically algebra has its origins in the solution of equations. The term algebra comes from the Arabic word meaning reductions or restoration and had to do with the idea that in equations whatever was done to one side had to likewise be done to the other in order to maintain or restore equivalence. Modern algebra developed from several classical problems such as: efforts to systematically understand the solutions of polynomials of higher degree; problems of geometry such as construction of regular polygons, trisection of angles, etc., and problems in number theory, e.g. Fermat's Last Theorem. In this sense, algebra is applied mathematics. Thus the abstraction of algebra is not for its own sake but because it results in insight and mathematical power. We will study the integers, rationals, reals, polynomials and complex numbers from the point of view of being examples of some of the fundamental objects of algebra—rings and fields.

**MAT 534 - Geometrical Concepts (3 crs.)**

Focuses primarily on the foundations and applications of Euclidean and non-Euclidean geometries. Incorporates collaborative learning and the investigation of ideas through group projects and the use of technology. Topics include finite geometries, geometric transformations, triangle and circle properties not previously encountered, and spherical geometry. Course will provide deeper understanding of geometry that is needed to teach geometry and to illustrate connections between it and other branches of mathematics.

**MAT 543 - Concepts of Calculus (3 crs.)**

Many schools teach some form of calculus for 11th or 12th grade students. Current reform efforts in calculus have shifted the emphasis toward conceptual understanding of key ideas. Conceptual questions take many forms, including interpreting graphical data, using numerical estimation, proving properties of functions and operations, and understanding the foundations of the basic calculus tools. Course will follow a standard textbook for single variable calculus along with material correlated with the AP Calculus exam, and will emphasize the theory behind the main ideas to prepare teachers for creation, discussion, and assessment of conceptual calculus problems.

**MAT 572 - Probability for Middle and High School Teachers (3 crs.)**

Explores introductory topics such as computing probabilities for simple, compound events, mutually exclusive and conditional events. Further topics include the study of random variables, expected value, discrete distributions including binomial and Poisson, continuous distributions including normal, uniform, and exponential, simulations, and sampling distributions of sample statistics. TI-83 graphing calculators and the statistical package Fathom will be used throughout the course.

**MAT 573 - Statistics for Middle and High School Teachers (3 crs.)**

Involves the study of statistical methods. Both graphical and numerical representations of data, including histograms, box plots, scatterplots, and measures of center and spread will be introduced. Process of data collection and experimental design will be explored. Course will conclude with topics involving inference, including confidence intervals and hypothesis tests for means and proportions. Real data sets from a variety of disciplines will be utilized. The TI-83 graphing calculator and the statistical package Fathom will be used throughout the course. Prerequisite: MAT 572.

**MAT 582 - Selected Topics in Algebra (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**MAT 588 - Selected Topics in Analysis (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**MAT 590 - Selected Topics in Applied Mathematics (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**MAT 594 - Selected Topics in Mathematics (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**MAT 599 - Independent Study in Mathematics (3 crs.)**

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.

**MAT 609 - Internship I in Mathematics (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**MAT 610 - Internship II in Mathematics (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**MAT 612 - Thesis I in Mathematics (3 crs.)****MAT 613 - Thesis II in Mathematics (3 crs.)****MBA - Master Business Administration****MBA 502 - Managerial Accounting (3 crs.)**

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 521 - Financial Risk Management (3 crs.)**

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. Prerequisites: MBA 502 (p. 130) and MBA 529.

**MBA 523 - Investment Analysis (3 crs.)**

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. Prerequisites: MBA 502 and MBA 529.

**MBA 525 - Multinational Business Finance (3 crs.)**

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. Prerequisites: MBA 502 and MBA 529.

**MBA 527 - Applied Financial Analysis (3 crs.)**

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. Prerequisites: MBA 502 and MBA 529.

**MBA 529 - Corporate Financial Management ()**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 561 - Human Resources and Development (3 crs.)**

Examines essential cutting-edge organizational strategies and practices that enable leaders/managers to implement effective employment team environments by attracting, deploying, and retaining proficient employees within the context of appropriate federal/state legal employment regulations. Topics may include legal regulation of the employment relationship, workflow, staffing, employee separations, performance appraisals, training and career development, compensation, employee rights, employee and labor relations, and global HR issues.

**MBA 565 - Contemporary Decision Making ()**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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. No prerequisites.

**MBA 577 - Supply Chain Management (3 crs.)**

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 Information Technology (3.0)**

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 582 - Health Care Financial Management (3.0)**

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 583 - Health Care Law (3.0)**

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 (3.0)**

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 (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**MBA 591 - Selected Topics (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**MBA 597 - Selected Topics (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**MBA 593 - Strategic Management (3 crs.)**

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 ()**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**MBA 595 - Selected Topics (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**MBA 596 - Business Practicum (3 crs.)**

The business practicum provides students an opportunity to apply academic principles in a professional work environment, and in turn to apply experiences from the work environment back to the classroom. Students enrolled in the business practicum will take a thoughtful approach to documenting experiences at work and placing them into an appropriate theoretical context. They will also complete a work related research project, which allows them to deeply examine a work-related issue using academic theories and insights.

**MBA 599 - Independent Studies (3 crs.)**

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.

## MGT - Management

**MGT 450 - Negotiation (3 crs.)**

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. Prerequisites: MKT305, FIN311, MGT305, and senior status. This class is available for graduate credit.

## MUS - Music Theater Arts

### MUS 490 - Selected Topics in Music (1-3 crs.)

Provides the opportunity for the department to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

## ONLE - Online Learning Environment

### ONLE 550 - Introduction to Teaching in an Online Environment (3 crs.)

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 (Macro View) (3 crs.)

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 (3 crs.)

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 (3 crs.)

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 (3 crs.)

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.

## PHL - Philosophy

### PHL 490 - Selected Topics in Philosophy (1-3 crs.)

Provides the opportunity for the department to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Instructor's option. This class is available for graduate credit.

## PLS - Political Science

### PLS 431 - Pennsylvania Local Government (3 crs.)

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: 9 hours in political science or permission of instructor. This class is available for graduate credit.

### PLS 490 - Selected Topics in Political Science (3 crs.)

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

### PLS 491 - Selected Topics in Political Science (3 crs.)

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

### PLS 492 - Selected Topics in Political Science (3 crs.)

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

### PLS 501 - Organizational Theory and Behavior (3 crs.)

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 (3 crs.)

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 (3 crs.)

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 (3 crs.)**

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 (3 crs.)**

Studies state governments in the American federal system and analyzes state government institutions and processes with special reference to Pennsylvania.

**PLS 512 - Intergovernmental Relations (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 553 - Public Policy Implementation (3 crs.)**

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 (3 crs.)**

Study of the law concerning the powers and procedures of administrative agencies. These governmental bodies that 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 (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PLS 592 - Selected Topics in Political Science (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PLS 601 - Research Methods (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

An independent supervised research project. Pre-requisite: Students must earn a B or better in PLS 601.

**PLS 624 - Field Research II (3 crs.)**

An independent supervised research project. Pre-requisite: Students must earn a B or better in PLS 601.

## PSY - Psychology

**PSY 410 - Psychology and Women (3 crs.)**

Focus on views of women in early psychology, then turns to an in-depth analysis of the psychological aspects of issues affecting women. Topics include: current and historical psychological theories about women and sex differences; achievement motivation; women and mental illness; psychological aspects of menstruation; female sexuality; women's romantic relationships and friendships; reactions to victimization (rape, domestic violence; obsessive relationships and stalking, sexual abuse); psychological consequences of women's physical appearance; body image and eating disorders; prejudice and discrimination against women; consequences of inclusive vs. noninclusive language; improving communication and cooperation between men and women. Prerequisite: At least junior standing. This class is not available for graduate credit.

**PSY 420 - Health Psychology (3 crs.)**

Study of psychological processes that help and hinder the maintenance of health. Health is viewed in a framework of positive aspects beyond just the absence of pathology. Holistic and allopathic systems are compared and seen as complimentary. The organism is considered as a process of coordinated hierarchical self-regulating structures. Maintenance of proper psychophysical balance is seen as a means for management of stress and the immune system. Opportunity to practice some wellness skills. Prerequisite: Junior or senior status. This class is not available for graduate credit.

**PSY 432 - The Psychology of Computers and the Internet (3 crs.)**

Examines the psychological implications of computers and their related Internet technologies on social interactions and behaviors. Topics include the influence of technology on self-concept and identities, norm development in CMC and virtual communities, cyber-support, Internet addiction, the influence of gender and status in on-line social interactions and the digital divide. Format a combination of discussion, using classic and current articles from the field, as well as hands on interaction using the department computer lab. Prerequisite: Junior or senior status. This class is not available for graduate credit.

**PSY 435 - Psychopharmacology (3 crs.)**

Examines the absorption, distribution, metabolism, and elimination of psychoactive drugs. The mechanism of drug action, addiction, tolerance, and physical dependence for drugs of abuse and therapeutic drugs is studied. Prerequisites: PSY101 and PSY320 or permission of instructor. This class is not available for graduate credit.

**PSY 440 - History and Systems of Psychology (3 crs.)**

Explores the philosophical background, historical development, contemporary systems, and possible directions of psychology. This course may be used to satisfy the Capstone Requirement in Psychology. Prerequisite: At least junior standing. This class is not available for graduate credit.

**PSY 445 - Psychology of Thinking (3 crs.)**

Deals with the higher mental processes including problem solving, judgment, decision-making, reasoning, language, and intelligence. The aim is to inform the student of theories and research in these areas as well as to improve their thinking skills. Prerequisites: PSY101 and PSY325. This class is not available for graduate credit.

**PSY 447 - Multicultural Health Psychology (3 crs.)**

Investigates health and illness in traditionally under-represented groups. Psychological models of behavior and social interaction discussed to explain how health and illness impact different populations. Possible areas of coverage will be the role of health psychology in understanding epidemics worldwide. Other topics include the impact of ethnicity, gender, and age on health in the United States and in a global context. Includes readings, opportunities to problem solve, and to apply knowledge gained in the course to real-world examples. Goal is to increase appreciation of a world-view of health. Prerequisites: At least junior standing. This class is not available for graduate credit.

**PSY 450 - Crisis Intervention (3 crs.)**

Conceptual and practical frameworks for providing crisis intervention presented. Topics include the theory and philosophy of crisis intervention, problem solving, service delivery, community relations, burnout prevention, and evaluation of intervention efforts. Applications discussed include working with groups, crime

victims, suicidal individuals, and bereaved persons. Prerequisite: PSY384. This class is not available for graduate credit.

**PSY 470 - Legal Psychology (3 crs.)**

Informs student about relationship between psychology and law by introducing contemporary psychological knowledge as it applies to the legal system. Topics include psychology of evidence, social psychology of the jury, the psychologist as an expert witness, psychology of jury selection, and research methods used by legal psychologists. Prerequisite: Junior or senior status. This class is not available for graduate credit.

**PSY 475 - Industrial and Organizational Psychology (3 crs.)**

Surveys theoretical and empirical research relevant to the behaviors and experiences of individuals in relation to the human constructs called organizations and the economic activities called work. Prerequisite: PSY205 or permission of instructor and junior or senior status. This class is not available for graduate credit.

**PSY 485 - Tests and Measurements (3 crs.)**

Focuses on the statistical and psychological theory of tests and measurements. Prerequisite: MAT117 or PSY205 and junior or senior status. This class is not available for graduate credit.

**PSY 490 - Selected Topics in Psychology (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Junior or senior status. This class is not available for graduate credit.

**PSY 491 - Selected Topics in Psychology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Junior or senior status. This class is not available for graduate credit.

**PSY 492 - Selected Topics in Psychology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Junior or senior status. This class is not available for graduate credit.

**PSY 493 - Selected Topics in Psychology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. Prerequisite: Junior or senior status. This class is not available for graduate credit.

**PSY 500 - Advanced Research Design and Statistics I (3 crs.)**

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. Prerequisite: Students are required to take and pass a competency exam prior to entry into the course. Contact the professor or departmental secretary for test procedures.

**PSY 501 - Advanced Research Design and Statistics II (3 crs.)**

Second component of the research design and statistics sequence is concerned with the scientific method in the investigation of behavior. Advanced 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 multivariate statistics. Prerequisite: PSY 500.



**PSY 512 - Theories of Learning (3 crs.)**

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 515 - Theories of Personality (3 crs.)**

Explores theories, issues, and research in personality, and encourages the psychology graduate student to develop his or her own pragmatic orientation.

**PSY 516 - Motivation (3 crs.)**

Examines and compares different theories of motivation. Basic motives such as hunger, thirst, sex, and aggression in humans and animals examined. In addition, more complex motives discussed in light of decision theory.

**PSY 518 - Introduction to Behavior Analysis (3 crs.)**

Study of applied techniques of modifying behavior and cognition. Includes stimulus control processes, reinforcement theory, modeling, extinction, desensitization, counter-conditioning, cognitive restructuring, stress inoculation training. Prerequisite: PSY 500.

**PSY 527 - Studies in the Psychology of Adolescence (3 crs.)**

Systematic study of physical, behavioral and psychological development of the individual from puberty to emerging adulthood.

**PSY 529 - Psychology of Successful Aging (3 crs.)**

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. Prerequisite: PSY 519.

**PSY 530 - Studies in the Psychology of the Exceptional Child (3 crs.)**

Concerned with findings of significant studies on the exceptional child. Emphasis given to the contributions of research dealing with characteristics of the exceptional child, identification, ways of meeting special needs and implications for child and those who work with the child.

**PSY 531 - Advanced Cognitive Psychology (3 crs.)**

In-depth analysis of new issues within the field of cognitive psychology is focus. Sample content includes models of memory, processes of cognition, implicit versus explicit memory, and problem solving.

**PSY 533 - Advanced Social Psychology (3 crs.)**

Study of how people make sense of others and of themselves; how ordinary people think about people and how they think they think about people.

**PSY 534 - Survey of Research in Abnormal Behavior (3 crs.)**

Review research and theoretical contributions to the understanding of abnormal behavior, with primary emphasis on discussion of recent research findings regarding the etiology of various mental disorders.

**PSY 535 - Behavioral Assessment (3 crs.)**

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. PREREQUISITES: PSY 518, Introduction to Behavior Analysis

**PSY 536 - Behavioral Research and Ethics (3 crs.)**

A study of two related topics necessary for the development of competency in developing and implementing behavioral interventions. The first is single-case research design, which is the primary research design utilized for applied research in behavior analysis as well as implementation of interventions to treat behavioral deficits and excesses in the practice of applied behavior analysis. The second topic is the code of ethics developed by the field for research in and the practice of applied behavior analysis. PREREQUISITE: PSY 518, Introduction to Behavior Analysis.

**PSY 540 - History of Psychology (3 crs.)**

Reviews history of psychology from its roots in philosophy through its transformation into a science. Included is a critical examination of major issues, assumptions, and schools of thought.

**PSY 543 - Behavioral Treatment and Systems Support (3 crs.)**

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. PREREQUISITES: PSY 518, Introduction to Behavior Analysis

**PSY 545 - Psychological Development of the Child: Theories and Research (3 crs.)**

This course explores developmental topics from infancy through middle childhood (12 years). This course has the purpose of providing the graduate student with a basis in the methods of research used in developmental psychology and will include a careful analysis of developmental theories, with an emphasis on research findings as reported in the current literature.

**PSY 565 - Human Factors (3 crs.)**

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 570 - Seminar in Cognitive Science (3 crs.)**

Cognitive Science is a multi- and inter-disciplinary field that draws primarily from the perspectives of cognitive psychology, artificial intelligence, linguistics, and philosophy that converge on a set of core questions addressing the nature of the human mind. Seminar involving reading primary sources of the various perspectives as well as the overarching cognitive science literature, discussion of methods and findings, and understanding, and developing applications to real-world problems using computational or information processing approaches.

**PSY 590 - Introduction to Group Dynamics (3 crs.)**

Examines the theory and experiences of group interaction. Observation and participation in face-to-face groups of varying structures and functions are provided. Theories of group development and observational systems and techniques applicable in educational, business, and institutional settings are examined. Selected topics include goal analysis, functional group structures, leadership influence, conforming norm pressures, deviant behaviors, and communication network patterns.

**PSY 594 - Selected Topics in Psychology (3 crs.)**

Opportunity to study concepts and research in areas of psychology not covered by the regular course of study in a seminar setting. Areas covered are those in which instructors have special expertise and in which there is a special student request.

**PSY 595 - Selected Topics in Psychology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PSY 596 - Selected Topics in Psychology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**PSY 597 - Independent Study (3 crs.)**

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 (3 crs.)**

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 612 - Thesis I (3 crs.)**

Designed to provide master's degree candidates with opportunity to conduct a major research project. A research proposal, literature review, and a pilot study required. First in a two-course sequence. Prerequisite: PSY 500.

**PSY 613 - Thesis II (3 crs.)**

Second of a two-semester sequence of graduate courses designed to provide master's degree candidates an opportunity to conduct a major research project. Students implement the research proposal designed in Thesis I, collect data, complete a statistical analysis, write a research report, and make an oral presentation. Students experience the procedure and format of conducting a research project that might be prepared for publication in a psychological journal. Prerequisite: PSY 612.

**PSY 621 - Field Experience I (3 crs.)**

Field experience in a governmental, industrial, or institutional setting providing supervised professional experiences. Students must accumulate a minimum of 150 clocked hours at a site during one academic semester. Prerequisites: PSY 500, PSY 501.

**PSY 622 - Field Experience II (3 crs.)**

Field experience in a governmental, industrial, or institutional setting providing supervised professional experiences. Students must accumulate a minimum of 150 clocked hours at a site during one academic semester. The field experience may take place in the same setting as PSY 621, although it must involve a different project. Prerequisites: PSY 500, PSY 501, PSY 621.

**RDG - Reading****RDG 413 - Teaching Reading to English Language Learners (3 crs.)**

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. This class is available for graduate credit.

**RDG 422 - Studies in Children's Literature (3 crs.)**

Designed to incorporate children's literature as a method for examining the relationships between authors' writing processes, curriculum, and pedagogy in the elementary classroom. Emphasizes current literacy research related to writers' craft in order to demonstrate a wide range of purposes and styles of writing and how various genres can be used to develop literacy skills. This class is available for graduate credit.

**RDG 443 - Reading Measures and Interventions in PK-4 (4 crs.)**

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. Prerequisites: RDG 323 and RDG 363. This course is available for graduate credit.

**RDG 490 - Selected Topics in Reading (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**RDG 491 - Selected Topics in Reading (1 credit)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**RDG 492 - Selected Topics in Reading (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**RDG 493 - Selected Topics in Reading (1 credit)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**RDG 511 - Comprehensive Literacy Model for School Improvement (3 crs.)**

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 (3 crs.)**

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. Pre-requisite: RDG511.

**RDG 513 - Supervision and Organization of Reading Programs (3 crs.)**

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. Pre-requisite: RDG511.

**RDG 514 - Processes and Strategies in Reading Comprehension (3 crs.)**

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: RDG511.

**RDG 515 - Research in Language and Literacy Acquisition (3 crs.)**

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. Prerequisites: RDG511, RDG512, RDG513, and RDG514.

**RDG 516 - Literacy Coaches as Agents of Change (3 crs.)**

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. Prerequisites: RDG511, RDG512, RDG513, and RDG514.

**RDG 517 - Curriculum Design and Evaluation of Literacy Programs (3 crs.)**

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. Prerequisites: RDG511, RDG512, RDG513 and RDG514.

**RDG 520 - Tutoring Secondary Students (3 crs.)**

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 (3 crs.)**

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 527 - Inquiry Approaches to Literacy (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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. Prerequisites: RDG 528 and RDG 529 or permission of instructor.

**RDG 533 - Advanced Diagnosis and Assessment in Reading (3 crs.)**

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: RDG 532.

**RDG 534 - Laboratory Practicum in Reading (3 crs.)**

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: RDG 532.

**RDG 535 - Seminar in Literacy, Language, and Reading (3 crs.)**

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. Prerequisites: RDG 532, RDG 534, and two other graduate-level courses in reading.

**RDG 537 - Brain Based Strategies for Literacy Learners Experiencing Difficulties (3 crs.)**

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 (3 crs.)**

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: Master's degree.

**RDG 555 - Practicum in Assessment (3 crs.)**

Prepares Reading Recovery teachers to learn to observe and record the reading and writing strengths of individual children. Field site visits are included. Prerequisite: master's degree.

**RDG 593 - Selected Topics in Reading (1 cr.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**RDG 594 - Selected Topics in Reading (1-3)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**RDG 595 - Selected Topics in Reading (2 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**RDG 596 - Selected Topics in Reading (2 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**RDG 597 - Selected Topics in Reading (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**RDG 598 - Selected Topics in Reading (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**RDG 599 - Independent Study (2 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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: permission of instructor.

**RDG 608 - Reading Recovery Training for Teachers II (3 crs.)**

Refines and expands the Reading Recovery teacher's level of awareness and understanding of how to effectively implement the Reading Recovery Program. Prerequisite: permission of instructor.

**RDG 609 - Internship (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**RDG 610 - Internship II (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**RDG 612 - Thesis I (3 crs.)**

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 (3 crs.)**

Continuation of RDG 612.

## STEM - STEM Education

**SCED 550 - Safety and Welfare in Science Education (3 crs.)**

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: SCED 510, SCED 520, SCED 530, and SCED 540.

## SCM - Supply Chain Management

### SCM 410 - Distribution Systems in Supply Chains (3 crs.)

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. Prerequisites: SCM 330 or permission of instructor. This class is available for graduate credit.

### SCM 420 - Global Logistics Systems (3 crs.)

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. Prerequisites: SCM 330 or permission of instructor. This class is available for graduate credit.

### SCM 481 - Decision Models for Supply Chain Management (3 crs.)

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: SCM330. This class is available for graduate credit.

### SCM 490 - Selected Topics in Supply Chain Management (1-3 crs.)

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

### SCM 510 - Introduction to Logistics and Transportation Management (3 crs.)

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 (3 crs.)

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 (3 crs.)

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 (3 crs.)

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 (3 crs.)

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.

## SOC - Sociology

### SOC 410 - Family and Society (3 crs.)

Focuses on the family as a social institution, a social process, and as an interacting system. Includes emphasis on historical development and interrelationship between the family and society. Major theoretical perspectives are applied to the study of the family. Cross cultural and utopian (U.S.) family movements included. Prerequisite: SOC101 or SOC257. This class is available for graduate credit.

### SOC 435 - Gender, Organizations and Leadership (3 crs.)

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: SOC 101 or graduate student status. This class is available for graduate credit.

**SOC 440 - Global Leadership for Global Society (3 crs.)**

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. Prerequisites: SOC101 or INT200 for undergraduates. This course is available for graduate credit.

**SOC 445 - Sexuality and Sexual Orientation: A Social Approach (3 crs.)**

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. Prerequisites: SOC 101 Introduction to Sociology or permission of the instructor. This class is available for graduate credit.

**SOC 486 - Qualitative Social Research (3 crs.)**

Students will learn techniques of qualitative interviewing and participant observation. Involves basics of ethnographic research, writing field notes, coding and analyzing qualitative data, and writing an ethnographic report. Each student selects individual research question and conducts a field research project of own choice that will reflect own academic interests. Skills learned will be transferable to many disciplines and occupations. Prerequisite SOC101. This class is available for graduate credit.

**SOC 490 - Selected Topics in Sociology (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**SOC 491 - Selected Topics in Sociology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**SOC 493 - Selected Topics in Sociology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**SOC 530 - Sociology of Higher Education (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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. Prerequisites: SOC 550, SOC 560, PLS501, and PLS601.

**SOC 594 - Selected Topics in Sociology (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**SOC 599 - Independent Study in Sociology (3 crs.)**

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 (3 crs.)**

Designed to give graduate students relevant leadership experience in the concentration area. All ODLE 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 SOC 609 and SOC 570 concurrently.

**SOC 610 - Internship in Sociology II (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**SPN - Spanish****SPN 490 - Selected Topics in Spanish (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**SPN 491 - Selected Topics in Spanish (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**SPN 492 - Selected Topics in Spanish (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**SPN 493 - Selected Topics in Spanish (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**SPN 494 - Selected Topics in Spanish (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**SPN 495 - Selected Topics in Spanish (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**SPN 510 - Hispanic Theater (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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.

**STEM-Science-Technology-Engineering-and-Math****STEM 510 - Foundations of STEM Education in the United States (3 crs.)**

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 and Contemporary Issues in STEM Education (3 crs.)**

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: STEM 510.

**STEM 530 - Instructional Strategies and Technology in the STEM Education (3 crs.)**

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 (3 crs.)**

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 - STEM Foundations of Teaching Business and Technology (3 crs.)**

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 (3 crs.)**

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 (3 crs.)**

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. Prerequisites: STEM 510, STEM 520, STEM 530, STEM 540, STEM 540, STEM 560 and SCED 550.

## **SWE - Software Engineering**

### **SWE 400 - Large Scale Architectures (4 crs.)**

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. Prerequisites: SWE200 with a grade of C or better and CSC371 with a grade of C or better. This class is available for graduate credit.

## **SWK - Social Work**

### **SWK 491 - Selected Topics in Social Work (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

### **SWK 492 - Selected Topics in Social Work (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

### **SWK 501 - Principles and Philosophies of Social Work (3 crs.)**

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 MSW program while helping to prepare students for their subsequent field placements. Fifteen volunteer hours are required. 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: None.

### **SWK 505 - Understanding Social Work Practice with Diverse Populations (3 crs.)**

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. 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: None.

### **SWK 510 - Human Behavior in the Social Environment I (3 crs.)**

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. 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: SWK 501 Principles and Philosophies of Social Work.

### **SWK 511 - Human Behavior in the Social Environment II (3 crs.)**

Emphasizes 1) the interaction of social and economic forces with young, middle-aged, and older adults and social systems; 2) traditional and alternative theories about systems as they interact with people, promoting and impeding health, welfare, and well-being, in context of human culture and diversity; and 3) knowledge about opportunity structures and how they promote and deter human development and need-meeting. Students evaluate theory and apply it to practice situations. 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: SWK 510 Human Behavior in the Social Environment I.

### **SWK 515 - Social Welfare Policy (3 crs.)**

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. 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: SWK 501 Principles and Philosophies of Social Work.

### **SWK 520 - Micro/Mezzo Social Work Practice (3 crs.)**

Offers opportunities for applying and studying advanced generalist practice with individuals, families and groups. Course content is



presented in a face-to-face format with web-based supplements. Students will learn and apply intervention skills to their specific area of interest, which enable development of individuals, families, and groups in environment processes for improving social functioning. Prerequisite: SWK 501 Principles and Philosophies of Social Work; co-requisite: SWK 530 Field Practicum I.

**SWK 521 - Macro Social Work Practice (3 crs.)**

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. 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. Examine the role of a macro social worker as program developer, program administrator and organization developer. Prerequisite: SWK 520 Micro/Mezzo Social Work Practice; co-requisite: SWK 531 Practicum.

**SWK 525 - Research Methods (3 crs.)**

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.

**SWK 530 - Field Practicum I (3 crs.)**

Provides students with practical experience (200 hours each semester) 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. Co-requisites: SWK 520 Micro/Mezzo Social Work Practice

**SWK 531 - Field Practicum II (3 crs.)**

Provides students with practical experience (200 hours each semester) 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. Prerequisite: SWK 530; co-requisites: SWK 521 Macro Social Work Practice.

**SWK 591 - Selected Topics in Social Work (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**SWK 592 - Selected Topics in Social Work (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**SWK 593 - Selected Topics in Social Work (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**SWK 601 - Integrative Seminar (3 crs.)**

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. A major focus in the course is an in-depth look at the history of social welfare services

and the relationship to current social work knowledge, skills, and values. A volunteer experience is required that serves as the basis for the course project. The course will be primarily taught via distance learning with some meetings with the instructor. Offered in summer. Prerequisite: Advanced standing admission status.

**SWK 602 - Behavioral Health Care Settings (3 crs.)**

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. Focuses on four content areas: 1) what the social worker's role is in adult and child behavioral health care settings; 2) historic and current policy that affect behavioral health care services; 3) current research in behavioral health care related issues and 4) international models of care. The special field is studied through the examination of curricular areas: human behavior, practice, policy, and services, research and special populations. Designed to help prepare students for advanced generalist social work practice with client systems and social resource systems relating to mental or behavioral health. Social workers are frequently involved in the delivery of services to people and families troubled by mental disorder in settings designed to deal specifically with those problems, as well as in other practice areas such as corrections, schools, child welfare, and gerontology. Prerequisite: SWK 531 or SWK 601 may be taken concurrently.

**SWK 603 - Gender Issues (3 crs.)**

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: SWK 531 or SWK 601 may be taken concurrently.

**SWK 604 - Health Care Settings (3 crs.)**

Extends and elaborates the advanced generalist approach to social work practice to a special field of practice. Introduces the social worker's role in health care and the policy issues that impact on practice. Focuses on four content areas: 1) what the social worker's role is in various health care settings; 2) historic and current policy that affect health care services; 3) current research in various health care related issues, e.g. living wills and AIDS and 4) international models of care. The special field is studied through the examination of curricular areas: human behavior, practice, policy, and services, research and special populations. Prerequisite: SWK 531 or SWK 601 may be taken concurrently.

**SWK 605 - Child Welfare Settings (3 crs.)**

In-depth study of the concepts, policies, practices, and research in the field of child welfare and family and children services. Provides 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. Focuses on the spectrum of services designed to support, supplement, or substitute for the care traditionally given by biological parents, and explores the major issues confronting the practitioner today with implications for the future. Views family events within their ecological context and strives to create sensitivity to various family forms and orientations. In concert with the generalist perspective and program goals and objectives, students will have learning experiences designed to develop and integrate their knowledge, values, and skills essential for the attainment of advanced level competency in child welfare

and family and children service. Prerequisite: SWK 531 or SWK 601 may be taken concurrently.

**SWK 606 - School Settings (3 crs.)**

Designed to provide an in-depth understanding of the field of social work practice within school settings. Covers policy, research, practice, and human behavior content within the field of schools through the exploration of broad content and the use of a variety of educational approaches. Examines the roles and functions of social workers within educational institutions, and provides students with opportunities for exploration of the application of social work values and ethics within a host setting. Issues of economic and social justice as well as diversity are also examined in the content of the educational systems of the United States. Prerequisite: SWK 531 or SWK 601 may be taken concurrently.

**SWK 607 - Emergency Mental Health and Trauma (3 crs.)**

In-depth study of the concepts, policies, practices, and research in crisis intervention during disasters. Provides 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: SWK 531 or SWK 601 may be taken concurrently.

**SWK 608 - Program Management (3 crs.)**

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. Prerequisite: SWK 531 or SWK 601 may be taken concurrently.

**SWK 609 - Introduction to Art Therapy (3 crs.)**

Advanced elective course explores the principles and the techniques of art therapy and considers the usefulness of art therapy in providing alternatives and supplements to the customary verbal methods of intervention. Ways of working with clients at various stages of the life cycle, childhood through old age, 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: SWK 531 or SWK 601 may be taken concurrently.

**SWK 610 - Advanced Micro Practice and Assessment (3 crs.)**

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. The course will be offered in a blended distance-learning format. Prerequisite: SWK 531 or co-requisite/prerequisite SWK 601 with a C or better.

**SWK 611 - Children and Youth at Risk (3 crs.)**

This course is an in-depth study of the concepts, policies, practices and research in the field of child services including school social work and child welfare. In addition, this course will provide a detailed exploration and understanding of a range of at-risk children and youth populations and their families. This comprehensive understanding will assist practitioners to effectively conduct an assessment, 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: SWK 531 or SWK 601 may be taken concurrently.

**SWK 612 - Social Work and the Law (3 crs.)**

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. Prerequisite: SWK 531 or SWK 601 may be taken concurrently.

**SWK 613 - Mediation in Social Work Practice (3 crs.)**

Mediation as an alternate form of dispute resolution is continuing to rise and is being used in human services, corporate, labor, consumer, and family issues widely across the United States. Students in the mediation class will focus on practical and theoretical aspects of mediation and its place in the larger framework of alternate dispute resolution for social work clients. Skills in helping parties find common ground, creating a climate for reaching agreement, aspects of confidentiality, and both directive and non-directive mediation techniques will be explored. Prerequisite: SWK 531 or SWK 601 may be taken concurrently.

**SWK 614 - Social Work Survey Development and Measurement (3 crs.)**

This advanced course prepares students with the skills to be critical users of a variety of types of research measurement instruments, as well as gain experience in the intricacies of scale development, including psychometrics. Students will examine and determine scale reliability and validity as it relates to the development of social work research surveys. Prerequisite or co-requisite SWK 531 or SWK 601

**SWK 615 - Advanced Social Welfare Policy (3 crs.)**

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 or co-requisite SWK 531 or SWK 601

**SWK 616 - Leadership Dynamics in Social Work Practice (3 crs.)**

This 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. amongst 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 or co-requisite SWK 531 or SWK 601

**SWK 617 - Social work Practice in the Field of Addictions (3 crs.)**

This course focuses on the topic of addictions, preparing students to recognize and intervene when clients and their families demonstrate addictions problems in a wide range of social service agencies and host settings. The course will examine the evolving models of alcohol and chemical dependency to the present day understanding of the disease model. Using a case studies approach, students will develop assessment and intervention skills. The course will address professional issues including credentialing, confidentiality, and ethics. Prerequisite or co-requisite SWK 531 or SWK 601

**SWK 618 - Human Rights in Social Work (3 crs.)**

This three credit advanced 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 or co-requisite SWK 531 or SWK 601

**SWK 619 - Global Perspectives in Social Work (3 crs.)**

Students will be exposed to global issues and understand how the institution of social welfare has developed in different regions of the world. As a way of understanding how different regions and countries have responded to human need, the course explores the specific areas of women in developing countries, street children and child labor, HIV in the developing world, and the plight of refugees. The role of international organizations, such as the World Bank, the International Monetary Fund, the United Nations, and nongovernmental organizations (NGOs) in shaping international welfare policy and services will be examined. Prerequisite or co-requisite SWK 531 or SWK 601

**SWK 620 - Advanced Practice with Groups and Families (3 crs.)**

This course builds on the practice concepts learned during the foundation year, particularly in the SWK/SOWK 520: Micro/Mezzo Social Work Practice course. This course focuses on social work with groups and with families from a systems and ecological perspective. Emphasis is on strengths- and evidence-based family and group assessment and intervention strategies with diverse, complex families and groups. Prerequisite: SWK 531 or SWK 601 with a grade of C or better; Co-requisite SWK 630

**SWK 621 - Advanced Macro Social Work Practice (3 crs.)**

Assists the student 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. This course will meet two-thirds in the classroom and one-third online. Prerequisite: SWK 531 or SWK 601 may be taken concurrently. Corequisite: SWK 631.

**SWK 625 - Advanced Research Methods (3 crs.)**

Focuses on social work practice research paradigms, models, and methods. Particular attention is given to the conduct of evaluation and assessments projects. Students will conduct independent evaluative research within their field placement settings. This course also gives the student a more in depth exploration of gender and ethnic minority research issues and computer-assisted, descriptive and exploratory data analysis. Prerequisite or co-requisite SWK 531 or SWK 601

**SWK 630 - Advanced Field Practicum I (5)**

Students complete 270 hours of supervised agency/organization practice experience during the first semester of the second year. Students will be in the field three days per week. The same course requirements and hourly expectation will be in place for Advance Field Practicum II in the second semester of the second year. Prerequisite: SWK 531 or SWK 601 may be taken concurrently. Corequisite: SWK 630.

**SWK 631 - Advanced Field Practicum II (4 crs.)**

Students complete 230 hours of supervised agency/organization practice experience during the second semester of the second year. Students will be in the field three days per week. The course requirements are the same as SWK 630 for Advance Field Practicum II in the second semester of the second year. Prerequisite or co-requisite SWK 531 or SWK 601

**SWK 640 - Selected Topics in Social Work (3 crs.)**

Provides the opportunity for a range of topics to explore issues and concerns for the social work profession. Designed for advanced graduate students. Prerequisite: SWK 531 or SWK 601 may be taken concurrently.

**SWK 641 - Selected Topics in Social Work (3 crs.)**

Provides the opportunity for a range of topics to explore issues and concerns for the social work profession. Designed for advanced graduate students. Prerequisite: SWK 531 or SWK 601 may be taken concurrently.

**SWK 642 - Selected Topics in Social Work (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**TCH - Teacher Education****TCH 423 - Integrating Literature in Middle Grades (3 crs.)**

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. This class is available for graduate credit.

**TCH 445 - Strategies for Effective Classroom Management (3 crs.)**

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. This class is available for graduate credit.

**TCH 490 - Selected Topics in Teacher Education (1-3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 491 - Selected Topics in Teacher Education (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 492 - Selected Topics in Teacher Education (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 493 - Selected Topics in Teacher Education (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 494 - Selected Topics in Teacher Education (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 495 - Selected Topics in Teacher Education (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 496 - Selected Topics in Teacher Education (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 497 - Selected Topics in Teacher Education (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 498 - Selected Topics in Teacher Education (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 499 - Selected Topics in Teacher Education (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

**TCH 501 - Effective Teaching: Theory and Practice (3 crs.)**

Emphasis on assisting teachers to understand and utilize the research and data-based principles of effective teaching. Included are planning and management techniques that enable effective teachers to make efficient use of class time while preventing discipline problems. Theories and practical applications of various discipline models, creative teaching techniques, and self-assessment devices presented.

**TCH 502 - Strategies for Critical Thinking and Problem-Solving (3 crs.)**

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 - Instructional Technology for Today's Educator (3 crs.)**

Students develop skills in using current technologies to support instruction in a variety of settings. Multimedia software, web page development, and distance learning design and implementation are required. Students examine various aspects of interactive and non-interactive technologies and make instructional applications. Evaluating appropriate hardware and software configurations for

delivering instruction is included. Students will use technology to research and develop real life classroom curricular solutions.

**TCH 511 - Elementary School Curriculum and Assessment (3 crs.)**

Surveys existing elementary school programs and research to determine and evaluate curricular models and assessment issues. Investigates such areas as purposes of education, curricular content, scope and sequence, classroom climate, standards, and program evaluation.

**TCH 524 - Middle School Curriculum and Assessment (3 crs.)**

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 (3 crs.)**

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: Undergraduate course in teaching of mathematics or permission of the instructor.

**TCH 546 - Teaching Science in the Elementary School (3 crs.)**

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: Undergraduate course in elementary science methods or permission of the instructor.

**TCH 560 - Making Social Studies Dynamic (3 crs.)**

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: An undergraduate course in teaching of social studies or permission of the instructor.

**TCH 575 - Advanced Child Development (3 crs.)**

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 - Integrating Classroom Instruction and Leadership (3 crs.)**

Educators today serve a variety of roles within the classroom and school setting. These roles focus on instructional planning and decision-making, assessment and evaluation of student performance, as well as professional leadership among peers and colleagues. This course will take the foundational knowledge learned in an initial methods course and expand the learners understanding so that they can utilize their knowledge, skill, and competency to master evidence based methods for engaging middle school students in the learning process. By utilizing the three pronged approach of instructional decision making informed assessment decisions, and serving as a teacher leader, the student will have a well-rounded understanding of the roles that they will serve upon entering their own classroom.

**TCH 594 - Selected Topics in Teacher Education (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 (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses.

**TCH 596 - Selected Topics in Teacher Education (3 crs.)**

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 (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 teachers and university professors.

**TCH 599 - Independent Study (3 crs.)**

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 (3 crs.)**

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. TCH 600 must be completed within the first 15 crs. leading to a master's degree.

**TCH 609 - Action Research (3 crs.)**

Designed for graduate students to engage in supervised professional activities in selected early childhood, elementary, middle school, or secondary education placements.

**TCH 610 - Internship II (3 crs.)**

Provides opportunity to gain practical experience in chosen career area.

**TCH 612 - Thesis I (3 crs.)****TCH 613 - Thesis II (3 crs.)**

## TESL - Teaching English as Second Language

**TESL 500 - Foundations of English Language Learner Instruction (3 crs.)**

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 (3 crs.)**

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. Prerequisites: TESL 500 with a B or better.

**TESL 520 - Literacy and Linguistically Diverse Cultures and Communities (3 crs.)**

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. Prerequisites: TESL 500 and TESL 510 with a B or better.

**TESL 530 - Instructional Methods and Assessment of English Language Learners (4 crs.)**

This course is designed to develop instructional methods and assessment methods for teachers of linguistically diverse students. Prerequisites: TESL 500, TESL 510, and TESL 520 with a B or better.

**TESL 540 - Practicum: Teaching English Language Learners (3 crs.)**

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. Prerequisites: TESL 500, TESL 510, TESL 520 and TESL 530 with a B or better.

## THE - Theater Arts

**THE 490 - Selected Topics in Theatre (3 crs.)**

Opportunity to offer courses in areas of departmental interest not covered by regular course offerings. Prerequisite: Permission of instructor. This class is available for graduate credit.

**THE 491 - Selected Topics in Theater Arts (3 crs.)**

Opportunity to offer courses in areas of departmental major interest not covered by the regular courses. This class is available for graduate credit.

# Directory

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As of July 2016

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 Robin M. Maun, Executive Assistant to the President  
 Scott D. Brown, B.S., Administrative Assistant/Special Events Coordinator  
 Joy L. Arnold, Secretary to the President

### External and University Relations

(Vacant), Executive Vice President, External Affairs and University Relations  
 Leslie Folmer Clinton, Ed.D., Associate Vice President for External Affairs, Alumni Relations and Marketing, and Director, H. Ric Luhrs Performing Arts Center  
 Melinda K. Bender, Administrative Assistant, Conference Services  
 Mark D. Bodenhorn, B.A., Director of Marketing and Administrative Services, H. Ric Luhrs Performing Arts Center  
 Robin A. Dolbin, B.S., Ticket Services and Sales Manager, H. Ric Luhrs Performing Arts Center  
 Randal P. Hammond, B.S.B.A., Director, Conference Services  
 Jill R. Heberlig, Clerk Typist, H. Ric Luhrs Performing Arts Center  
 Pamela V. Kammerer, B.S.B.A., Director of Conference Center and Marketing  
 Robert M. Shirk, Director of Technical Services, H. Ric Luhrs Performing Arts Center  
 Daniel J. Stine, Assistant Director of Technical Services, H. Ric Luhrs Performing Arts Center  
 Debra A. Taylor, B.S., Front House Manager, H. Ric Luhrs Performing Arts Center  
 (Vacant), Director, University Communications/Marketing  
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 Brooke Hall, Assistant Director of Retail Operations  
 Jerry Howerin, Campus Dining Executive Chef

Robert Hock, Director of Kriner Dining Hall  
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R. Christopher Fite, B.A., Men's Basketball

Jaren G. Gembe, Assistant Men's Basketball

Kristin K. Trn, B.S., Women's Basketball

Jennifer L. Grassel, M.S., Assistant Women's Basketball

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 (Vacant), Clerk
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 Reginald G. Lindsey, Semi-Skilled Laborer  
 Roy E. Wisner, Painter Foreman, Painting/Moving Shop  
 Paul W. Besecker, Painter  
 Richard L. Horst, Semi-Skilled Laborer  
 Chester J. Jumper, Equipment Operator  
 Curtis L. Miller, Equipment Operator  
 Thomas A. Weaver, Painter
- (Vacant), Assistant Director, Energy Management  
 John R. Tritt, Controls Management Technician  
 Garry E. Wall, Controls Management Technician  
 Ricky L. Hosfelt, Preventative Maintenance Supervisor  
 Shawn L. Rosenberry, Maintenance Repair  
 Randy R. Russell, Maintenance Repair
- Jeryl S. George, Grounds Manager  
 John O. Gossert, Groundskeeper Supervisor  
 Jeanne M. Yohe, Groundskeeper Supervisor  
 Gerald L. Swanger, Semi-Skilled Laborer  
 Terry L. Dunlap, Equipment Operator  
 Joel L. Hosfelt, Equipment Operator  
 Bryan K. Kyner, Equipment Operator  
 Darrell E. McKenrick, Equipment Operator  
 Gregg W. Naylor, Equipment Operator  
 Lonnie E. Shaffer, Equipment Operator
- Kevin L. Oakes, Maintenance Foreman, Electrical/Electronics  
 Richard L. Bittinger, Electrician  
 Art E. Crull, HV Electrician  
 Dustin L. Koser, Electrician  
 Jeffrey R. Henry, Electronics Technician  
 Chad W. Stevenson, Semi-Skilled Laborer
- Paul E. Gutshall Jr., Maintenance Foreman, Mechanical Systems  
 Kayedon M. O'Neal, Refrigeration Mechanic  
 Roy F. Ryder, Plumber  
 Scott E. Stoops, Refrigeration Mechanic  
 Dominic Barbagallo, Maintenance Repair
- Building Services*
- Matthew D. Varner, Maintenance Foreman, E and G Zone  
 Ralph D. Alleman, Maintenance Repair  
 Scott T. Moyer, Maintenance Repair  
 Curtis P. Oakes, Maintenance Repair  
 Ronald J. Shindlecker, Maintenance Repair  
 Justin R. Strickler, Maintenance Repair  
 Timothy L. Wingert, Maintenance Repair
- Rex A. Henry, Maintenance Foreman, Auxiliaries Zone  
 Duite E. Ricker, Maintenance Repair  
 Robert D. Shoop, Maintenance Repair  
 Douglas E. Stepler, Maintenance Repair  
 Stephen J. Walters, Maintenance Repair  
 Larry P. Rotz, Maintenance Repair

(Vacant), Custodial Work Supervisor, Day Night  
 Cindy A. Geyer, Custodial Work Supervisor, Second Night  
 Adam J. Runshaw, Custodial Work Supervisor, Night Shift  
 Paul N. Aaron, Custodial Worker  
 Christina M. Barrick, Custodial Worker  
 Troy L. Bigler, Custodial Worker  
 William L. Bittinger, Custodial Worker  
 Jeffrey L. Callan, Custodial Worker  
 Karen L. Carey, Custodial Worker  
 Steven D. Carroll Jr., Custodial Worker  
 Gregory M. Coldsmith, BA, Custodial Worker  
 Donald L. Diehl, Custodial Worker  
 James, L. Epley, Custodial Worker  
 Andrew J. Fasnacht, Custodial Worker  
 Tonia L. Fasnacht, Custodial Worker  
 Tonya M. Green, Custodial Worker  
 Brian C. Hancock, Custodial Worker  
 Paula D. Hancock, Custodial Worker  
 Susan C. Harris, Custodial Worker  
 Barbara E. Hofe, Custodial Worker  
 Chad J. Keck, Custodial Worker  
 Donn A. Keck, Custodial Worker  
 Ray E. Keefer, Custodial Worker  
 Rocky L. Kelly, Custodial Worker  
 Gail A. Kunkleman, Custodial Worker  
 Kelly J. Kunkleman, Custodial Worker  
 Readith K. Lindsey, Custodial Worker  
 Brenda Lockhart, Custodial Worker  
 Donna L. Loy, Custodial Worker  
 Terrijo McLucas, Custodial Worker  
 Evelyn A. Melius, Custodial Worker  
 Karen M. Miley, Custodial Worker  
 Colleen D. Miller, Custodial Worker  
 Donna J. Miller, Custodial Worker  
 Ronald Miller, Custodial Worker  
 Thomas M. Myers, Custodial Worker  
 Tiffany R. Nay, Custodial Worker  
 Diane Osbaugh, Custodial Worker  
 Thomas M. Provins, Custodial Worker  
 Ginger M. Reed, Custodial Worker  
 Donna Riley, Custodial Worker  
 Vivian L. Riley, Custodial Worker  
 Christopher L. Smith, Custodial Worker  
 Penny L. Smith, Custodial Worker  
 Gary D. Spencer, Custodial Worker  
 John J. Spencer, Custodial Worker  
 Michelle R. Spencer, Custodial Worker  
 JoAnn E. Sprecher, Custodial Worker  
 Dale S. Stambaugh, Custodial Worker  
 Debra D. Stine, Custodial Worker  
 Lori A. Stine, Custodial Worker  
 Steven A. Trayer, Custodial Worker  
 Dottie L. Werner, Custodial Worker

Joanne Willis, Custodial Worker  
 Lloyd J. Willis, Custodial Worker  
 Kathy E. Witmer, Custodial Worker

**Shippensburg University Foundation**

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 Anne M. Detter, M.B.A., Director of Marketing and Campaign Management  
 Patti F. Savoulidis, B.A., Associate Director for Marketing for Campaign Management, Stewardship, and Event Planning  
 Edna Fenton, Special Assistant to the President and CEO  
 Kit S. Walizer, B.A., Director of Development  
 (Vacant), Annual Fund Director  
 (Vacant), Phonathon Coordinator  
 Sandra R. Jones, B.A., Development Secretary  
 Lani Longarzo, M.B.A., Director, Major Gifts  
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 Kevin S. Bender, B.A., Director, Research  
 Scott D. Lux, B.A., Major Gifts Officer  
 Cindy Yeiser, B.S.B.A., Major Gifts Officer  
 Carol H. Rose, Major Gifts Secretary  
 Chrystal K. Miracle, M.B.A., CPA, Director, Finance and Administration and CFO  
 Matthew F. Cubbage, B.S., Network Administrator  
 Rhonda K. Horst, M.B.A., CPA, Controller  
 Diane L. Wenger, B.S.B.A., Coordinator, Gift Recording/Records and Office Manager  
 Michelle E. Boring, Coordinator, Student Housing  
 Samuel E. Wiser, Sr., Maintenance Supervisor  
 Virginia I. Shew, Assistant Maintenance Supervisor  
 Stephanie L. McCullough, M.Ed., Bartos Child and Family Center Program Director  
 Erin L. Rotz, M.Ed., Lead Preschool Teacher  
 Lisa M. Taylor, B.S.Ed., Assistant Preschool Teacher

## Department Offices

<b>Department</b>	<b>Location</b>	<b>Extension</b>
Accounting and Management Information Systems	Grove Hall 328	1436
Art and Design	Huber Art Center 210	1530
Biology	Franklin Science Center 142	1401
Chemistry	Franklin Science Center 327	1629
Communication/Journalism	Rowland Hall 108	1521
Computer Science and Engineering	Mathematics and Computing Technologies Center 156	1178
Counseling and College Student Personnel	Shippen Hall 123	1668
Criminal Justice	Shippen Hall 321	1558
Economics	Dauphin Humanities Center 127	1437
Educational Leadership and Special Education	Shippen Hall 127	1591
English	Dauphin Humanities Center 128	1495
Finance, Supply Chain Management	Grove Hall 228	1434
Geography/Earth Science	Shearer Hall 104	1685
Exercise Science	Henderson 109	1721
History/Philosophy	Dauphin Humanities Center 122	1621
Human Communication Studies	Dauphin Humanities Center 112	1732
Management/Marketing	Grove Hall 224	1439
Mathematics	Mathematics and Computing Technology Center 250	1431
Military Science	Wright Hall 206	1782
Modern Languages	Rowland Hall 109	1635
Music/Theatre Arts	Performing Arts Center 220	1638
Physics	Franklin Science Center 123	1570
Political Science	Grove Hall 424	1718
Psychology	Franklin Science Center 114	1657
Social Work/Gerontology	Shippen Hall 335	1717
Sociology/Anthropology	Grove Hall 428	1735
Teacher Education	Shippen Hall 214	1688

Office hours are 8:00 a.m.- noon; 1:00-4:30 p.m. From off campus, dial 717-477-plus extension.

# Faculty and Administration



As of July 2016

## University Administration

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B.A., Universidad Central de Barcelona; M.A., School for International Training; Ph.D., Rutgers University

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B.A., St. Lawrence University; M.A., University of  
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