SUSQUEHANNA
UNIVERSITY BULLETIN

2016–17 COURSE CATALOG

Susquehanna
UNIVERSITY

SUSQUEHANNA UNIVERSITY BULLETIN

GENERAL CATALOG FOR 2016-17

School of Arts and Sciences
Sigmund Weis School of Business

www.susqu.edu/catalog

The 159th Academic Year

514 University Ave.
Selinsgrove, PA 17870-1164

TABLE OF CONTENTS

Course Catalog	3
Academic Calendar	4
Elements of a Susquehanna Education	6
Cross-Cultural Programs	9
Schools	12
Majors Offered at Susquehanna	14
Academic Minors at Susquehanna	16
Accounting	19
Art	25
Arts Administration	32
Asian Studies	33
Biology	35
Chemistry	46
Communications	53
Computer Science	64
Data Science/Analytics	69
Diversity Studies	70
Earth and Environmental Sciences	71
Ecology	77
Economics	82
Education	88
English and Creative Writing	101
English	102
Creative Writing	104
Environmental Studies	113
Film Studies	117
Health Care Studies	119
History	121
Honors Program	128
International Studies	130
Jewish and Israel Studies	135
Leadership	137
Legal Studies	139
Management	140
Mathematics	154
Modern Languages	160
Museum Studies	171
Music	172
Neuroscience	189
Philosophy	192
Physics	197
Political Science	201
Psychology	208
Public Policy	215
Religious Studies	218
Sociology and Anthropology	225
Theatre	236
Women's Studies	243
Special Programs	246
Personal Development	253
Reserve Officers Training Corps (U.S. Army)	253
Academic Policies and Regulations	255
Directory	265
Board of Trustees	265
Administration and Faculty Emeriti	268
Faculty	270

COURSE CATALOG

Mission. Susquehanna University educates undergraduate students for productive, creative and reflective lives of achievement, leadership and service in a diverse and interconnected world.

Accreditation. Susquehanna University is accredited by the Middle States Commission on Higher Education, 3624 Market St., Philadelphia, PA 19104 (267-284-5000). The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA).

The Sigmund Weis School of Business is accredited by AACSB International, a specialized accrediting organization recognized by the CHEA. All teacher education programs (PreK-4, 7-12 and K-12) at the bachelor's level are approved by the Pennsylvania Department of Education. The Department of Music is accredited by the National Association of Schools of Music, and the Department of Chemistry is accredited by the American Chemical Society.

Susquehanna is also a member of the American Association of Colleges and Universities, American Council on Education, Council of Independent Colleges, Annapolis Group, National Association of Independent Colleges and Universities, and Lutheran Educational Conference of North America.

Nondiscrimination Statement. In administering its affairs, the university shall not discriminate against any person on the basis of race, color, religion, national or ethnic origin, ancestry, age, sex, sexual orientation, gender identity or expression, disability, veteran status, or any other legally protected status. Compliance inquiries may be directed to Lisa M. Scott, vice president for student engagement and success, Susquehanna University, Selinsgrove, PA 17870-1164, 570-372-4415; Jennifer Bucher, director of human resources, Susquehanna University, Selinsgrove, PA 17870-1164, 570-372-4157; or the director of the Department of Education, Washington, D.C.

Catalog Information. This catalog is not to be considered an offer to enter into a contract or a contractual agreement between the university and the student or between the professor and the student. While frequent changes are not probable, the administration reserves the right to make any changes it deems necessary and acknowledges that under certain circumstances special activities of the university or part of the university community might impinge upon the normal academic schedule. All students are responsible for adherence to the university's rules, regulations and procedures, whether published in this catalog, the *Student Handbook* or other official media.

Key to Abbreviations

CC = Central Curriculum

GPA = grade point average

S = Satisfactory

SH = semester hours

U = Unsatisfactory

ACADEMIC CALENDAR

Fall 2016

Aug. 25, Thursday
Welcome Week begins, Opening Convocation.

Aug. 29, Monday
Classes begin, 8 a.m.

Aug. 29-30, Monday-Tuesday
Check-in and registration confirmation.

Sept. 2, Friday
Drop/Add deadline for 14-week courses.

Sept. 6, Tuesday
Last day to declare an S/U option in a 7-week course. Last day to declare a course audit.

Sept. 7, Wednesday
Regular withdrawal deadline for first 7-week courses; last day to cancel S/U option for a first 7- week course.

Sept. 9, Friday
Last day to declare an S/U option in a 14-week course.

Sept. 16, Friday
Regular withdrawal deadline for 14-week courses; last day to cancel S/U option for a 14-week course; regular withdrawal deadline for first 7-week courses (new first-year students only).

Sept. 30, Friday
Late withdrawal deadline for first 7-week courses (see details below).

Oct. 7, Friday
Regular withdrawal deadline for 14-week courses (new first-year students only).

Oct. 14, Friday
Mid-term break begins, 4:05 p.m. End of first 7-week courses.

Oct. 19, Wednesday
Mid-term break ends, 8 a.m.; start of second 7-week courses.

Oct. 25, Tuesday
Drop/Add deadline for second 7-week courses.

Oct. 27, Thursday
Last day to declare S/U option for a second 7-week course; last day to declare course audit for second 7-week course.

Oct. 28, Friday
Regular withdrawal deadline for second 7-week courses; last day to cancel S/U option for a second 7-week course.

Oct. 31-Nov. 8, Monday-Tuesday
2017 Spring Semester registration.

Nov. 4, Friday
Late withdrawal deadline for 14-week courses (see details below).

Nov. 9, Wednesday
Regular withdrawal deadline for second 7-week courses (new first-year students only).

Nov. 22, Tuesday
Late withdrawal deadline for second 7-week courses (see details below)
Thanksgiving recess begins, 10 p.m.

Nov. 28, Monday
Classes resume, 8 a.m.

Dec. 9, Friday
Classes end, 4:05 p.m.

Dec. 10-11, Saturday-Sunday
Reading Days.

Dec. 12-15 Monday-Thursday
Final examinations.

*Late withdrawal policy: Students are allowed to take a late withdrawal from a total of 12 semester hours of coursework during their Susquehanna career. To take advantage of this late withdrawal option, students must complete and return to the Registrar's Office the Late Withdrawal Approval form (available at the Registrar's Office).

Spring 2017

Jan. 23, Monday
Classes begin, 8 a.m.

Jan. 23-24, Monday-Tuesday
Check-in and registration confirmation.

Jan. 27, Friday
Drop/Add deadline for 14-week courses.

Jan. 31, Tuesday
Last day to declare S/U option in a first 7-week course. Last day to declare a course audit.

Feb. 1, Wednesday
Regular withdrawal deadline for first 7-week courses; last day to cancel S/U option for a first 7-week course.

Feb. 3, Friday
Last day to declare an S/U option in a 14-week course.

Feb. 10, Friday
Regular withdrawal deadline for 14-week courses; last day to cancel S/U option for a 14-week course; regular withdrawal deadline for first 7-week courses (first-semester, first-year students only).

Feb. 24, Friday
Late withdrawal deadline for first 7-week courses (see details below).

March 3, Friday
Regular withdrawal deadline for 14-week courses (first-semester, first-year students only).

March 10, Friday
Mid-term break begins, 4:05 p.m.; end of first 7-week courses.

March 20, Monday
Mid-term break ends, 8 a.m.; start of second 7-week courses.

March 24, Friday
Drop/Add deadline for second 7-week courses.

March 28, Tuesday
Last day to declare S/U option for a second 7-week course; last day to declare course audit for second 7-week course.

March 29, Wednesday
Regular withdrawal deadline for second 7-week courses; last day to cancel S/U option for a second 7-week course.

March 31-April 10, Friday-Monday
2017 Fall Semester registration.

April 7, Friday
Late withdrawal deadline for 14-week courses (see details below). Regular withdrawal deadline for second 7-week courses (first-semester, first-year students only).

April 21, Friday
Late withdrawal deadline for second 7-week courses (see details below).

May 5, Friday
Classes end, 4:05 p.m.

May 6-7, Saturday-Sunday
Reading Days.

May 8-11, Monday-Thursday
Final examinations.

May 17, Wednesday
Commencement.

*Late withdrawal policy: Students are allowed to take a late withdrawal from a total of 12 semester hours of coursework during their Susquehanna career. To take advantage of this late withdrawal option, students must complete and return to the Registrar's Office the Late Withdrawal Approval form (available at the Registrar's Office).

ELEMENTS OF A SUSQUEHANNA EDUCATION

Elements

There are three major elements of coursework at Susquehanna:

- **The Central Curriculum forms the broad liberal arts base in preparation for specialized study in any field. Central Curriculum courses are spread over four years and total about 40 percent of the graduation requirements.**
- **Major programs build on the Central Curriculum foundation and usually total one-third of courses taken. Majors are designed to provide a broad introduction to the theory and practice of each field; students may choose departmental, interdisciplinary or self-designed majors. Each student must complete a capstone course as part of the major program, with a grade of C- or higher.**
- **Electives typically make up the remaining coursework. These may be used to pursue one or more minors or a second major, to work in an internship, or simply to develop individual interests that may expand career options.**

Central Curriculum

Susquehanna's Central Curriculum, which is required of all students, embodies the university's vision of our students as confident, liberally educated people who are committed to the ongoing processes of cross and multidisciplinary education, who are capable of thinking not only in terms of their major area, but from the perspectives of other disciplines as well, and who bring together all facets of their educational experience in order to frame a way of thinking about their vocations, their major area of study, and their lives as a means to achievement, leadership and service in the world.

The Central Curriculum is designed to develop in students an awareness of:

The richness of human thought and expression.

The ways humans have sought to explain the natural world.

The breadth of human interactions throughout the world, across time and into the present, and of the belief systems, values and practices through which those interactions are manifested.

The Central Curriculum is intended to provide students with the ability to:

- Think creatively and critically in order to analyze issues and make effective decisions.
- Incorporate the methods of analysis from a range of academic disciplines in the natural and social sciences and humanities to understand and solve problems and explore conflict.
- Listen effectively and articulate an informed opinion and argument orally and in writing.
- Gather and evaluate information.
- Work effectively with a team to analyze and solve problems.
- Function with professional competency in a chosen discipline.
- Understand that problems often elicit complex, conflicting and ambiguous responses.

The Central Curriculum is designed to foster in students:

- Knowledge of the limits and contexts of their own experience and the ability to value the different experiences of others.
- The ability to examine their own strengths and weaknesses critically and realistically.
- Willingness to strive for responsible actions personally and interpersonally.

The Central Curriculum is intended to lead students to possess an integrated sense of personal ethical responsibility focused on their:

- Interaction with the natural environment.
- Continued growth and development as contributing members of a number of communities within human society.
- Recognition and understanding of the diversities of human experience.
- Commitment to an ongoing development of the life of the mind.

Central Curriculum Structure

Students must successfully complete all of the Central Curriculum requirements in the five sections listed below.

Section 1. Richness of Thought

4 semester hours in Analytical Thought

4 semester hours in Literary Expression

4 semester hours in Artistic Expression

Among the goals of the Richness of Thought area are teaching students to debate the definitions of literary text, canon(s) and the relationship between them; to abstract a problem into a symbolic or mathematical model or framework; and to articulate an understanding of the ways in which art can serve as a medium for recognizing and understanding the diversities of human experiences.

Section 2. Natural World

4 semester hours in Scientific Explanations

On completing the Natural World requirement, students should be able to describe the philosophical underpinnings of science as it is used to explain the natural world and to evaluate the validity of information presented as science.

Section 3. Human Interactions

4 semester hours in Social Interactions

4 semester hours in Historical Perspectives

4 semester hours in Ethics

0-8 semester hours (depending on placement) in a language other than English

4 semester hours in Ethics Intensive courses

The extensive objectives of this area of the Central Curriculum include leading students to demonstrate they can understand and evaluate how the methods of analysis from the social sciences are used to identify issues and explore conflict within a contemporary context; to describe the way past events and trends are relevant to the present; to articulate the implications of ethical questions for human life; and to compare and contrast another language and culture with their own.

Section 4. Intellectual Skills

2 semester hours in Perspectives

4 semester hours in Writing and Thinking

8 semester hours in Writing Intensive courses

4 semester hours in Oral Intensive courses

4 semester hours in Team Intensive courses

Through this area of the Central Curriculum, students should learn core intellectual skills, such as working together in a team to analyze and solve problems and developing, strengthening, and marshaling an argument, both orally and in writing.

Section 5. Connections

4 semester hours in Diversity

4 semester hours in Interdisciplinary

4 semester hours in Diversity Intensive courses

An off-campus Cross-Cultural experience that may or may not bear credit, depending on the specific experience selected by the student

2 semester hours total in a Cross-Cultural preparation course and a Cross-Cultural reflection course, the latter to be taken after the student returns from the Cross-Cultural experience

Their study in this area of the Central Curriculum should lead students to a fundamental understanding of multiple theories and principles of diversity; to demonstrate a complex understanding of culture; to show an appreciation of how different academic disciplines can supplement and reinforce one another; and to reflect on their personal growth, social responsibility and the value of active participation in human society.

Courses satisfying Central Curriculum requirements also may be counted toward majors and minors. The Diversity course may cross-count with any one non-Intensive course and up to two Intensive courses within the Central Curriculum, merging the requirements for both into a single course offering (e.g., ANTH-413 Race, Ethnicity and Minorities satisfies the Diversity requirement, the Social Interactions requirement, the Oral Intensive requirement and the Writing Intensive requirement). Similarly, the Interdisciplinary course may cross-count with any one non-Intensive and up to two Intensive courses within the Central Curriculum. In addition to satisfying other requirements, an appropriately designated course in the Central Curriculum also may be counted toward one or two Intensive requirements.

Capstone Courses

In addition to the Central Curriculum requirements, students must complete at least two semester hours in a capstone course, with a grade of C- or higher, as a part of the major program.

The capstone is designed to enrich students' academic experience by allowing them to demonstrate what has been learned through a concentrated course of study at Susquehanna. This course cannot be transferred from another institution.

CROSS-CULTURAL PROGRAMS

Policies and Procedures

Susquehanna University offers a wide range of programs around the world to suit student interests, fields of study and foreign language preparation. The Global Opportunities (GO) programs fit into several categories: GO Long, GO Short and GO Your Own Way. There are many GO Short programs led by Susquehanna faculty and staff. They generally last two to four weeks during winter or summer break. GO Long programs are approved semester programs that are administered entirely by Susquehanna University or in close cooperation with study-away partners. The vast majority of students choose an approved Susquehanna GO program. However, students may attend other recommended programs or design their own cross-cultural experience during a semester break, GO Your Own Way, according to the policies described below.

At a minimum, to be eligible, students must be in good academic standing and not be on disciplinary probation. Susquehanna students normally do not study away before they have completed three semesters on campus. Specific programs may have additional requirements. Semester and short-term programs administered by Susquehanna University require that students sign a statement of responsibility upon acceptance into the program. By signing, participants agree that their deposit is nonrefundable, and if they withdraw from the program, any Susquehanna financial aid applied to their account will be withdrawn, and they will still be billed for costs that have been incurred for them, such as airfare, program housing, etc. This may result in responsibility for the full cost of the program, regardless of the amount of aid they may have initially been awarded.

Students who receive need-based aid to fulfill the cross-cultural requirement on a short-term program will see a reduction in Susquehanna aid available for subsequent semester study away. Students who have received Susquehanna aid for a semester-length program will not be eligible for need-based aid to participate in subsequent short-term programs.

Susquehanna University accepts study-away credit for transfer only from programs covered in these policies.

The university reserves the right to change these policies without notice.

Cross-Cultural Requirements

The Susquehanna University cross-cultural requirement includes three course components: preparation, the cross-cultural experience off-campus and reflection on campus. Students accepted to a GO Short program are automatically registered in all three components: OFFP, OFFS and OFFR, all of which are required for participation. These course components are open only to students accepted to the corresponding GO Short program.

Students approved for a GO Long or GO Your Own Way program are automatically registered for the corresponding OFFP and OFFS or OFFC courses. GO Long and GO Your Own Way students must register for a cross-cultural reflection course (OFFR) in the semester following their return to campus.

International students who are issued a visa to attend Susquehanna may count their time on campus as their GO program. They must still register for a cross-cultural reflection course in order to complete the requirement.

Semester (GO Long) Programs

1. Susquehanna GO Long programs are found on the Susquehanna study away Web page. Students submit applications for all semester programs to the Office of Cross-Cultural Programs by the Susquehanna deadlines. Pre-approval from the appropriate Susquehanna department chair(s) must be secured for courses taken off-campus that will fulfill major or minor requirements at Susquehanna and pre-approval from the university's Curriculum Committee must be secured for courses taken off-campus that will fulfill Central Curriculum requirements. Students also must complete a required waiver and other forms before leaving campus.

2. Students will be charged Susquehanna University tuition, activity, health and study-away administrative fees during the semester in which they study off campus in an approved Susquehanna GO Long program. Students will be billed by Susquehanna University for the study-away program room fee (and board when applicable). Susquehanna tuition

covers only the basic tuition costs of study away programs. Some programs have additional fees, including some additional course fees, which are not covered by SU tuition and which will be billed directly to the student by the program. In addition, each student will, upon acceptance to a study-away program, be required to pay a deposit directly to the program. In order for the student to participate in study away, the university requires that all accounts be current.

3. Students in Susquehanna GO Long study-away programs who are U.S. citizens or permanent residents will be eligible for most forms of financial aid and scholarships, ordinarily limited to one semester of off-campus study. To access need-based financial aid for off-campus study, students must:

a. Complete the standard financial aid application, meeting university deadlines;

b. Provide documentation of all expenses they expect to incur in studying away from Susquehanna, including transportation, room, board and other academically required costs; and

c. Meet or exceed the required grade point average and satisfactory academic progress requirements for renewal of scholarship assistance and/or need-based financial aid.

4. Most forms of Susquehanna-sponsored scholarship assistance will continue to be available to students in approved Susquehanna GO Long programs. Exceptions include all tuition exchange awards. However, tuition exchange awards may be used for study in Susquehanna-administered study-away programs, including Washington Internship Semester, SWSB London and "SU in" programs (SU in London, SU in Africa: The Gambia, SU in China: Macau, etc.).

5. Occasionally students may find that for specific academic reasons they prefer to study off campus at a program not on the list of approved Susquehanna GO Long programs. Susquehanna provides a list of other recommended programs for consideration in these cases. Some students may choose to spend a second semester on a Susquehanna GO Long program. In either case, no Susquehanna aid is available; however, state and federal aid may continue to be available. Credit may only be transferred from these programs for courses pre-approved in advance by the appropriate department heads and/or the university Curriculum Committee as described above. Fees vary by program, and there is an additional administrative fee.

Short-Term (GO Short) Programs

1. Students planning short-term study away typically choose from the wide variety of Susquehanna GO Short programs (list available on the Susquehanna study away Web page and in the Special Programs section of the catalog) or may propose to attend a non-Susquehanna program (see SU GO Your Own Way).

2. Students are not permitted to participate in online courses during the duration of the travel portion of the GO Short program.

3. Need-based aid may be available for students attending a Susquehanna GO Short program to fulfill the Cross-Cultural requirement. To access need-based financial aid for off-campus study, students must:

a. Complete the standard financial aid application, meeting university deadlines;

b. Provide documentation of all expenses they expect to incur in studying away from Susquehanna, including transportation, room, board and other academically required costs; and

c. Meet or exceed the required grade point average and satisfactory academic progress requirements for renewal of scholarship assistance and/or need-based financial aid. NOTE: Most forms of Susquehanna-sponsored scholarship assistance (non-need-based aid) are not available to students on Susquehanna GO Short programs because these programs take place outside the traditional academic calendar.

4. Students will be charged specific program fees for participation in any Susquehanna GO Short program. These fees vary according to the location, duration and type of program. In addition, each student will, upon acceptance to a Susquehanna GO Short program, be required to pay a nonrefundable, nontransferable deposit. That deposit will be credited to the program fee billed by Susquehanna University. In order for the student to participate in study away, the university requires that all accounts be current.

5. Students must provide a copy of their passport information page or confirmation that they have submitted an application for a passport within two weeks of committing to participate in an overseas GO Short program, or they will be dropped from the program.

SU GO Your Own Way

1. Self-designed cross-cultural experiences during winter or summer break must be approved in advance by the Office of Cross-Cultural Programs in order to serve as a prerequisite for the SU Cross-Cultural Reflection requirement. Examples include internships, volunteer service, independent study in a cross-cultural setting and participation in a non-SU short-term study-away program. Appropriate Susquehanna department chair(s) pre-approval is required for courses taken on a non-SU study-away program that will fulfill major or minor requirements at Susquehanna. Pre-approval from the university's Curriculum Committee must be secured for courses taken off campus that will fulfill Central Curriculum requirements. Students also must complete required waiver and other forms before leaving campus. Guidelines for proposing a self-designed experience are available in the Office of Cross-Cultural Programs.

2. Limited need-based aid may be available to attend non-SU short-term programs. To access need-based financial aid for off-campus study, students must:

a. Complete the standard financial aid application, meeting university deadlines;

b. Provide documentation of all expenses they expect to incur in studying away from Susquehanna, including transportation, room, board and other academically required costs; and

c. Meet or exceed the required grade point average and satisfactory academic progress requirements for renewal of scholarship assistance and/or need-based financial aid. NOTE: Most forms of SU-sponsored scholarship assistance (non-need-based aid) are not available to students on SU GO Short programs because these programs take place outside the traditional academic calendar.

3. GO Your Own Way students are billed a study-away administrative fee. Students participating in non-SU short-term programs operated by programs found on the SU-approved GO Long list will be billed for GO Your Own Way fees by Susquehanna. Students on all other programs pay all deposits and fees directly to that program. Students completing self-designed cross-cultural experiences pay all expenses directly as needed.

SCHOOLS

School of Arts and Sciences

The School of Arts and Sciences offers the majority of academic majors, spanning traditional liberal arts areas to professional programs. With emphases on critical thinking, written and oral communication, and experiential learning paired with rigorous academic expectations, students will determine and accomplish their goals. Traditional outcomes for majors within the school include professional employment opportunities, admittance to top graduate schools and professional schools (law, medicine or related fields), and a variety of postgraduate opportunities. The programs of study in the school focus on collaborative learning and scholarship, application of theory, and professional discipline.

Sigmund Weis School of Business

The Degree Programs. The Sigmund Weis School of Business offers the Bachelor of Science degree with majors in accounting, economics, business administration, finance, global management, luxury brand marketing and management, or marketing. All majors in the Sigmund Weis School complete the university Central Curriculum courses, the business foundation courses and courses required for the major. Students who do not enter the university as majors in business may apply to transfer to the Sigmund Weis School from other majors within the university. For students transferring within the university, the requirements for consideration of admission to the Sigmund Weis School are good academic standing and approval of the appropriate department head.

The academic programs for the first two years are very similar for each of the majors. This allows students in the Sigmund Weis School to wait until their second year to decide on their majors, though many choose their majors earlier.

Prerequisite Requirements. A student must earn a grade of C- or better in all listed prerequisite courses.

Internship. An internship is an experiential opportunity that may be undertaken in a business, government or nonprofit organization. An internship can be completed either for academic credit or not for academic credit. Enrolling for internship credit includes coordination by a faculty member and by the host organization supervisor. For further information, please consult with the associate director of experiential education and employer relations in the Career Development Center. Internships typically provide exposure to career options, a valuable frame of reference for coursework and, most important, an experience base that is a significant competitive advantage for graduates in seeking employment. Increasingly, employers use internships as extended interviews and restrict career-entry offers largely to the internship pool. The Sigmund Weis School strongly encourages an internship or equivalent work experience for all students before the senior year. Students may identify their own internship opportunities or request assistance from the associate director of experiential education and employer relations in the Career Development Center. The school, through the Stein Fellowship Program, also offers international internship opportunities each summer; these cover all expenses and include a stipend.

The London Program. The Sigmund Weis School of Business offers a semester in London program exclusively for junior Weis School majors. Courses are taught by Sigmund Weis School faculty and by adjunct faculty from the London academic community. Students earn a full semester of Susquehanna University credit, and the course offerings are designed for the normal junior-level schedule. Students pay regular on-campus tuition and receive round-trip air transportation to London and numerous field trips in the United Kingdom and continental Europe. Students participating in the London Program are required to complete a preparatory course during the semester before attending the London Program and a reflection course during the semester following attendance in the London Program.

Elective Courses for Non-Business Students. Many students whose major fields of study are not in business choose to take business courses as electives. The Sigmund Weis School of Business welcomes these students and suggests the following courses: ECON-105 Elements of Economics, ACCT-200 Financial Accounting, ACCT-210 Legal Environment, MGMT-202 Business Statistics, ACCT-310 Advanced Business Law and MGMT-280 Marketing. Please note that all students must satisfy course prerequisites. Also, students who have not declared either a major or minor within the

Weis School may not take more than 20 semester hours of courses from the departments of management and accounting without permission from the dean of the Sigmund Weis School.

Interdisciplinary Programs

Susquehanna University offers several interdisciplinary programs that facilitate learning across Susquehanna's schools and departments. These may be minors or additional areas of study. These programs emerge from the collaboration of several departments. For example, the Asian studies program involves the departments of political science, modern languages, history, English and creative writing, business, communications, religion, philosophy, and international studies.

MAJORS OFFERED AT SUSQUEHANNA

School of Arts and Sciences

Bachelor of Arts
Anthropology
Art History
Chemistry
Communications, *emphases in* -
- Digital Multimedia (tracks in Broadcasting, Journalism and Sports Media)
- Strategic Communications (tracks in Advertising and Marketing Communications and Public Relations)
- Communications Arts (tracks in Speech Communication and Communications Studies)

Computer Science
Creative Writing
Economics, *emphases in* -
- Financial Economics
- General Economics
- Global Economy and Financial Markets

English – Literature
English – Publishing and Editing
French
German
Graphic Design
History
Italian
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Religious Studies
Sociology
Spanish
Studio Art, *emphases in* -
- Painting and Drawing
- Photography

Theatre, *emphases in* -
- Performance
- Production and Design
- Theatre Studies

Bachelor of Music
Composition
Music Education
Performance

Bachelor of Science
Biochemistry
Biology
Chemical Physics
Chemistry
Computer Science
Earth and Environmental Sciences
Elementary Education
Physics
Psychology

Interdisciplinary
Ecology
Environmental Studies
International Studies B.A., *focus areas in* -
- Asian Studies
- Comparative Cultural Studies
- Developing World Studies
- Diplomacy
- European Studies
- International Trade and Development
- Sustainable Development

Neuroscience
Public Policy *focus areas in* -
- Domestic Policy
- International Development
- Public Administration/Non-Profit Management

Sigmund Weis School of Business

Bachelor of Science
Accounting
Business Administration
Economics
Finance
Global Management
Luxury Brand Marketing and Management
Marketing

Information on Majors

Choosing a Major. Some students declare their major when they enter Susquehanna. Many others prefer to wait and investigate a number of fields before deciding. Susquehanna welcomes and encourages these undeclared students. Students may pursue an "Undeclared" option for their first two years. During this time, faculty advisers, department heads and the Career Development Center can help them to choose or design a major that satisfies their interests and goals.

To ensure they can complete degree requirements within the normal four-year period of study, students must declare a major by the end of the sophomore year. Those seeking to enter programs leading to teacher certification must have a grade point average of 3.00 or better and secure the approval of the department. Those seeking to major in music must audition successfully with the music faculty before admission. Those seeking to major in creative writing must submit a portfolio (eight to 10 pages) of work to the creative writing faculty. Those seeking to major in studio art or graphic design must submit a portfolio to the art faculty.

Departmental Majors typically consist of eight to 12 courses, or 32 to 48 semester hours. Requirements may include courses from related disciplines. Music education, elementary education, graphic design, computer science, mathematics, ecology, biology, neuroscience, accounting and majors offered through the Management Department require more than 48 semester hours; students choosing these majors should do so early and plan carefully to complete the requirements in four years. Students must complete at least half of their major coursework at Susquehanna. Unless it is explicitly stated otherwise in the section for that individual department, students must earn a grade of at least C- in a course to apply it to their major.

Dual Majors. Students pursue dual majors for a variety of reasons. Many have a strong interest in more than one field; others feel that a second major will better prepare them for their profession. Students seeking to declare a dual major must have the approval of both departments and plan their program with a faculty adviser from each. Because completing two majors is demanding, the university expects candidates to have a strong academic record. Most dual majors can be completed in four years, but additional time may be needed depending on the particular combination of majors proposed and the student's academic level when making this decision.

Students pursuing, within the same area ("area" to be designated by the four-letter introductory code, such as ENGL, WRIT, MATH, CSCI), two emphases, two majors, two minors, or a major and a minor may not apply the same course to two of these programs. If a student is earning an interdisciplinary minor, at least 16 semester hours of that minor must not be counted toward the student's major.

Self-Designed Majors must contain 48 to 60 semester hours from at least two different departments, with at least 28 semester hours from one core department. The student receives a primary adviser from this core department and a secondary adviser from one of the other departments from which a number of courses are taken for the major. Only grades of C- or higher may be used to satisfy the requirements for a self-designed major, and the student must have at least a 2.00 GPA in the major. Other degree requirements, such as the university Central Curriculum, remain in effect for students pursuing self-designed majors and should be included in the plan of study. The plan must be approved by the sponsoring departments and the dean of the school, with the proposal being signed by the primary adviser, secondary adviser and the department head of the sponsoring department.

Accelerated Degree Options. Most majors, with the exception of accounting, elementary education and music, adapt to Susquehanna's accelerated degree option, which allows highly motivated students to complete degree requirements in three or three and one-half years of study. For further details, contact the Office of Admissions.

ACADEMIC MINORS AT SUSQUEHANNA

The major-minor combination often allows students to combine a field of study chosen for its appeal to their special interests with a field chosen for its practicality. Such combinations often broaden possible career outcomes. A minor can also represent a particular skill that may give students a competitive edge in the job market, such as proficiency in a foreign language. Susquehanna offers more than 50 minors. Most consist of four to six courses, or 16 to 24 semester hours, of concentrated study in a specific field beyond the Central Curriculum requirement. Students who complete a minor will have it noted on their transcripts. If a student chooses an interdisciplinary minor, at least 16 semester hours of that minor must not be credited toward the student's major. Unless explicitly noted otherwise, a student must earn a grade of at least C- in a course in order to have it satisfy the requirements for a minor.

School of Arts and Sciences
Advertising
Anthropology
Applied Language Studies
Art History
Biochemistry
Biology
Broadcasting
Chemistry
Computer Science
Creative Writing
Earth and Environmental Sciences
Economics
English
French
German
History
International Relations
Italian
Journalism
Mathematics
Music Performance
Music Technology
Music Theory/Literature
Philosophy
Photography
Physics
Political Science
Professional and Civic Writing
Psychology
Public Relations
Publishing and Editing
Religious Studies
Sociology
Spanish
Speech Communication
Studio Art
Theatre

Interdisciplinary
Actuarial Science
Africana Studies
Applied Language Studies
Arts Administration
Asian Studies
Data Science/Analytics
Diversity Studies
Ecology
Environmental Studies
Film Studies
Health Care Studies
International Studies, *focus areas in* -
- Asian Studies
- Comparative Cultural Studies
- Developing World Studies
- Diplomacy
- European Studies
- International Trade and Development
- Sustainable Development

Jewish and Israel Studies
Leadership
Legal Studies
Military Science
Museum Studies
Public Policy
Strategic Studies
Women's Studies

Sigmund Weis School of Business
Accounting
Business Administration
Economics
Entrepreneurship and Innovation
Finance
Marketing
Professional Accounting

Preprofessional Programs

Pre-engineering. Students planning a successful career in engineering often choose physics as their major at Susquehanna and carefully select courses to prepare them for graduate school or employment in an engineering specialty: bioengineering, chemical, civil, computer, electrical and mechanical.

Prelaw. Susquehanna students have an excellent acceptance and achievement record at a wide variety of law schools across the country. To prepare for law school, the Law School Admission Council (LSAC) and the American Bar Association (ABA) do not recommend any one course of undergraduate study. Students from any major are accepted by and succeed in law school. The LSAC and ABA do recommend that students successfully complete a curriculum that will help them to develop their skills in oral and written communication, as well as their analytical reasoning ability. The prelaw program works with interested students to obtain internships in the law to provide them with experience that will help them to determine if the law is the right field of graduate study for them. A student's undergraduate GPA and LSAT score are important criteria in the law school admission process. To assist students preparing for postgraduate study in the law, Susquehanna University has an innovative program that reimburses students for half the cost of taking an LSAT-preparation course to assist them in putting together the best possible law school application. Susquehanna University has a general articulation agreement with Capital University Law School that guarantees admittance to Susquehanna graduates who meet certain requirements. For information on this and other aspects of the prelaw program, contact the prelaw adviser, Associate Professor of Political Science Michele DeMary.

Prehealth Professions Including Premedicine, Predental, Preveterinary and Others. Susquehanna graduates successfully pursue advanced degrees in medicine, dentistry, veterinary medicine, optometry, chiropractic medicine, podiatry, physician assistant, doctor of physical therapy and doctor of pharmacy programs. In addition, Susquehanna graduates pursue advanced training in allied health fields, including occupational therapy and accelerated nursing programs. The Health Professions Advising Committee, chaired by Associate Professor of Health Care Studies and Biology Jan Reichard-Brown, coordinates the preparation of students for professional schools in these areas. Students receive career-specific advising, as well as assistance with arranging internship opportunities, professional test preparation, application preparation and school selection.

Demonstration of a strong level of competence in the natural sciences remains a uniform requirement for successful admission to medical school, dental school and other health professions programs. Most students pursue science majors such as biology, chemistry, biochemistry and psychology. However, students can pursue any major, provided they complete the science prerequisites, which commonly include at least two semesters of biology and one year each of general chemistry, organic chemistry, physics and, occasionally, one year of biochemistry or higher level math. Students should be cognizant that some health professional programs may require additional coursework, such as human anatomy and human physiology. Students need to consult the catalog descriptions pertaining to major or intended major to determine the recommended sequence of courses and how the required prehealth professions courses may fit into their program. Students are strongly encouraged to work with their academic adviser from within their department and to consult with the health professions adviser as they plan schedules and progress through their major. Candidates for professional schools must maintain high grade point averages and score well on profession-specific standardized tests. Susquehanna students most often take the MCAT, DAT, OAT and PCAT, usually in the spring of the junior year or early in the following summer. A test preparation course is highly recommended for students taking the MCAT and DAT, since these computer-based standardized examinations encompass content areas from the sciences, social science, mathematics and English language skills. In response to the intense nature of these exams and the level of preparation that is required, Susquehanna University developed an innovative program to reimburse students for half the cost of taking an MCAT or DAT preparation course as part of their preparation for the application process. Students wishing to take advantage of this program should complete all prerequisite courses by the end of the academic year in which they are preparing for and taking the MCAT or DAT.

The third component of a successful application to a program in the health professions entails experience in the field and community service. Susquehanna students are encouraged to experience internships and volunteer opportunities during the academic year, as well as during vacations and breaks. Most students design their own experience by working jointly with the health professions adviser and the Career Development Center, or they take advantage of service-learning and travel options focusing on medicine offered through the university or other programs that have been screened by the health professions adviser. Sophomore and junior years are the ideal times for these internship experiences.

Pre-ministry and Church Occupations. Susquehanna has a special interest in preparing students for service in the church. This service can include the ordained ministry, parish work, diaconal ministry, social ministry and ministry in music. These career goals typically require graduate study.

Preparation for graduate theological study, ministry and church occupations includes academic instruction, spiritual maturation and experiential learning. Although students may major in any field, they are encouraged to emphasize the

broadening aspects of the liberal arts. In addition, pre-ministerial students are advised to study a language likely to be spoken by those whom they may be called to serve (e.g., Spanish for those with an interest in ministry areas with significant Latino/Hispanic populations).

Susquehanna's historic relationship with the Lutheran Church (ELCA) attracts many students to its service, but graduates have also entered service in many other denominations. The university chaplain can give advice on the many options available in this area.

Cooperative Programs

Susquehanna has established cooperative programs with several universities to expand opportunities for Susquehanna students. These programs allow interested students to pursue a special combination of liberal arts and professional studies. Cooperative candidates typically study in Susquehanna's liberal arts programs for two to three years. They then transfer to a more specialized university to earn a professional degree.

Allied Health Joint Programs with Thomas Jefferson University. Students earn a Bachelor of Science degree in nursing, bioscience technologies (biotechnology, cytotechnology or medical technology) or radiologic sciences by completing two years at Susquehanna followed by two years at Thomas Jefferson University in Philadelphia. Students may also earn a Bachelor of Science/Master of Science degree in occupational therapy with two years of studies at Susquehanna followed by three years at Thomas Jefferson University. For information, contact Associate Professor of Biology Thomas Peeler.

Dentistry. Students complete three years of predental preparation at Susquehanna University and, if accepted, continue their education at Temple University School of Dentistry for four more years. At the end of the fourth year, students earn their bachelor's degree from Susquehanna University, and at the end of the seventh year, a dental degree from Temple University.

Engineering Joint Program with Columbia University. Students spend three years at Susquehanna, taking a meticulously structured program of Susquehanna distributional requirements, courses for a major program in physics, mathematics or computer science, and pre-engineering foundation courses prescribed by Columbia University. Students must earn a minimum grade of B on the first attempt in each prerequisite course specified by Columbia in order to have guaranteed approval for entrance to Columbia for the 3/2 program. Other students may apply, but admission is not guaranteed, and those students will be considered as part of Columbia's competitive review process. An overall and pre-engineering GPA of 3.30 or higher, as calculated by Columbia, is required. Additionally, the minimum grade for each pre-engineering science or math course must be a B (3.0) or better on the first attempt. Approved candidates enroll at Columbia for two years, earning both a bachelor's degree in mathematics, physics or computer science from Susquehanna and an engineering degree from Columbia. For more information, contact Associate Professor of Physics Samya Zain.

Degree programs with Columbia are: Physics 3-2 Pre-Engineering with Columbia University (Bachelor of Science), Mathematics 3-2 Pre-Engineering with Columbia University (Bachelor of Arts), and Computer Science 3-2 Pre-Engineering with Columbia University (Bachelor of Science).

ROTC. The Army's Reserve Officer Training Corps program prepares college graduates for entry-level positions within the United States Army. Many graduates serve for extended periods on active duty with the regular Army; others pursue civilian careers while serving part time in the Army Reserve or the National Guard. ROTC students are eligible for an academic stipend and scholarship assistance. Susquehanna participates in the ROTC program based at Bucknell University. Further information is available by contacting the Department of Military Science at Bucknell University at 570-577-1013.

ACCOUNTING

Faculty

Barbara Woods McElroy, Ph.D., Professor of Accounting, department head

Richard O. Davis, M.Tax/J.D., Professor of Accounting

Jerrell W. Habegger, Ph.D., Associate Professor of Accounting

John A. Pendley, Ph.D., Associate Professor of Accounting

Michael E. Ozlanski, Ph.D., Assistant Professor Accounting

Barbara F. Martin, M.B.A., Lecturer in Accounting

Accounting Studies

Learning Goals:

- Understand and apply U.S. generally accepted accounting principles (GAAP).
- Recognize areas where U.S. GAAP and international financial reporting standards (IFRS) differ.
- Apply principles of budgeting and variance analysis to evaluate operational success.
- Analyze and evaluate business decisions using recognized methods.
- Understand and apply federal income tax principles and concepts.
- Understand specific technologies used to process accounting data and evaluate them from an auditing perspective.
- Understand the concept of internal control and evaluate internal control procedures over typical business processes.

150-Hour Option. The public accounting profession requires that in order to be eligible to become a member of the American Institute of CPAs, candidates must have completed at least 150 semester hours of college-level education. In addition, nearly all jurisdictions have incorporated this educational requirement into their professional licensing regulations. With careful planning, Susquehanna accounting majors are able to accumulate 150 semester hours by taking 18 hours per semester and doing for-credit summer internships. Students are advised to discuss their options with their academic advisers, since state requirements have minor differences.

The Major in Accounting. A major in accounting requires successful completion of the Business Foundation and of the accounting courses listed below. No grade below a C- will be accepted toward graduation for foundation courses; upon earning a grade below C- in a foundation course, the student must retake the course the next semester in which it is offered. The course descriptions listed later in the catalog identify prerequisites, and these suggest a certain degree of order in completing the foundation. In addition to the foundation, first-semester Weis School students enroll in MGMT-102 Global Business Perspectives (four semester hours), which provides an introduction to liberal studies and college life, as well as an overview of business functional areas, career opportunities and the Sigmund Weis School curriculum. This course satisfies the Perspectives requirement of the Central Curriculum.

Business Foundation Courses for Accounting Majors

Year 1

4	ECON-201 Principles of Macroeconomics
4	ECON-202 Principles of Microeconomics
2	PRDV-100 Using Computers

4	Choose from: MGMT-202 Business Statistics, MATH-108 Introduction to Statistics, MATH-109 Statistics for Social Sciences, MATH-180 Statistical Methods or PSYC-123 Statistics for the Behavioral Sciences

Year 2

4	INFS-174 Database Systems Analysis and Design
4	ACCT-200 Financial Accounting
4	ACCT-210 Legal Environment
4	MGMT-203 Quantitative Methods for Business and Economic Decisions
4	MGMT-280 Marketing
2	MGMT-105 Introduction to Professional Development

Year 3

4	ACCT-330 Cost Management
4	MGMT-340 Corporate Financial Management
4	MGMT-360 Management and Organizational Behavior

Year 4

4	INFS-472 Management Support Systems
4	MGMT-400 Business Policy and Strategy
4	PHIL-223 Business Ethics
2	ACCT-220 Introduction to Taxation
2	ACCT-300 Financial Statement Analysis
4	ACCT-301 Intermediate Accounting I
4	ACCT-302 Intermediate Accounting II
2	ACCT-305 Federal Taxation
4	ACCT-309 Accounting Information Systems
4	ACCT-420 Auditing
4	ACCT-430 Managerial Accounting Policy

To satisfy the major course requirements, courses must be completed with a grade of C- or better.

For the purposes of calculating the required 2.00 minimum GPA in the accounting major, the Accounting Department uses the following courses: ACCT-220 Introduction to Taxation, ACCT-301 Intermediate Accounting I, ACCT-302 Intermediate Accounting II, ACCT-305 Federal Taxation, ACCT-309 Accounting Information Systems, ACCT-330 Cost Management, ACCT-420 Auditing, ACCT-430 Managerial Accounting Policy and PHIL-223 Business Ethics. An accounting student must take at least 50 percent of these courses at Susquehanna.

Minor in Accounting. The minor in accounting has two purposes. It introduces liberal arts majors to career opportunities in the accounting profession, and it provides systematic study of accounting as a social science. The minor is not open to students pursuing a Bachelor of Science in business degree.

The minor in accounting requires completion of 26 semester hours, including ACCT-200 Financial Accounting, ACCT-210 Legal Environment, ACCT-300 Financial Statement Analysis, ACCT-301 Intermediate Accounting I, ACCT-330 Cost Management, either ECON-105 Elements of Economics or ECON-202 Principles of Microeconomics, and four additional semester hours of accounting courses. The department recommends that students pursuing a minor also complete a statistics course. No more than one grade lower than C- will be accepted in fulfillment of the minor requirements.

Minor in Professional Accounting. The minor in professional accounting is designed for those students who are pursuing a major within the Sigmund Weis School of Business and who would like to achieve a greater level of knowledge of professional accounting. The minor requires completion of 20 semester hours, including ACCT-220 Introduction to Taxation, ACCT-301 Intermediate Accounting I, ACCT-302 Intermediate Accounting II, ACCT-305 Federal Taxation, ACCT-420 Auditing and ACCT-430 Managerial Accounting Policy. The program is not available to students outside the Sigmund Weis School of Business.

Accounting Courses

ACCT-200 Financial Accounting

Introduction to accounting for internal and external reporting. Emphasizes corporate financial accounting and reporting. Covers theoretical and practical issues related to the accounting and reporting of assets, liabilities, owners' equity, revenues, expenses, gains and losses. Emphasis is placed on the importance of financial accounting information for investment and credit decisions. PRDV-100 Using Computers is highly recommended but not required. Prerequisites: Either accounting major, finance major, business administration–finance emphasis major or sophomore standing. 4 SH.

ACCT-210 Legal Environment

The legal environment as it relates to business. Considers essential elements of consumer protection law, employment law, environmental regulation, court procedures, torts, introduction to contracts, agency law and selected laws regarding corporations. Prerequisite: Sophomore standing or permission of the instructor. 4 SH. CC: Ethics Intensive, Interdisciplinary.

ACCT-220 Introduction to Taxation

The objective of this course is to provide students with an initial background in federal income tax. The course builds an appreciation of federal income tax laws, as opposed to accounting principles and theory. It is designed to develop a fundamental knowledge of basic federal income tax principles and concepts. The course is also designed to qualify the student as a TCE (tax counseling for the elderly) volunteer. This program is offered in the spring and is not a course requirement. The TCE program is specifically targeted to the elderly and is offered at the Selinsgrove Senior Center. The topics discussed in this course include the following: gross income inclusions and exclusions, adjusted gross income, deductions, exemptions, filing status, sales and exchanges of property, the earned income credit, the credit for the elderly, education credits, and capital gains and losses. Pennsylvania taxes are also covered. Prerequisite: ACCT-200. 2 SH.

ACCT-300 Financial Statement Analysis

Study of the information contained in balance sheets, income statements, statements of cash flow and footnotes in the annual reports of corporations. Includes analysis of the relationships and predictability of such information. The course includes case studies, computerized analyses and library research. Prerequisite: ACCT-200. 4 SH.

ACCT-301 Intermediate Accounting I

Covers the theoretical and conceptual framework of financial accounting and the content and usefulness of financial statements. Also provides in-depth coverage of the accounting and reporting issues related to operating activities of business enterprises. Special projects include case studies and position papers requiring research into pronouncements of the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB). Prerequisites: ACCT-200 and sophomore standing. 4 SH.

ACCT-302 Intermediate Accounting II

Continuation of ACCT-301, emphasizing accounting and reporting issues for investing and financing activities of a business enterprise. Additional coverage of latest developments in financial accounting. Special projects include cases and position papers requiring research into pronouncements of the FASB and IASB. Prerequisite: ACCT-301 or permission of the instructor. 4 SH.

ACCT-305 Federal Taxation

This course is a continuation of ACCT-220 Introduction to Taxation. It emphasizes tax research through the use of RIAs Checkpoint and LexisNexis. The students also learn how to prepare tax returns using a computerized tax return preparation program such as TurboTax. Technical tax topics are covered in more depth. Learning is accomplished through the use of case studies, such as Prentice-Hall's Life of Riley. There is a heavy emphasis on learning to recognize and research tax issues. The course places a considerable emphasis upon the development of the student's ability to recognize, interpret and weigh the various and often conflicting sources of the tax law. These sources include the Internal Revenue code, congressional committee reports, Treasury Department regulations, IRS pronouncements, federal court precedents, and commentaries of tax practitioners and academicians. The student is exposed to the various sources of the tax laws: how to find them, how to correctly cite them, how to read and interpret them, and how to weigh conflicting authorities in formulating recommendations. The course also develops and refines students' analytical and legal reasoning skills and their diagnostic instincts and abilities. Prerequisite: ACCT-220. 2 SH.

ACCT-309 Accounting Information Systems

In this course students are introduced to information systems concepts and practices in relation to roles of user, designer and reviewer (auditor). Common to these three roles is the importance of systems documentation and internal control. Students review and analyze typical business processes, evaluate internal controls commonly implemented by business firms, and are exposed to a wide variety of tools, trends and techniques. These include flowcharts and communications tools, database management systems, enterprise resource planning (ERP), e-business and traditional legacy processing. Prerequisites: INFS-174 and ACCT-200. 4 SH.

ACCT-310 Advanced Business Law

A study of contracts, employment law, antitrust law and commercial transactions. Includes negotiable instruments, sales, creditors' rights, personal property and bailments. Prerequisite: ACCT-210. 2 SH.

ACCT-330 Cost Management

Study and comparison of traditional and emerging costing systems. Traditional costing emphasizes accounting procedures for inventory valuation, budgeting and investment decisions with emphases on unit-based cost behavior; job, process and standard costing; variance analysis; break-even analysis; and time-value decision models. Emerging costing emphasizes the understanding of cost behavior as a strategic tool of general management. The course also covers concepts such as activity-based costing and the theory of constraints. Prerequisites: ACCT-200 with a grade of at least C- and either junior standing or sophomore standing for accounting major or finance major. 4 SH.

ACCT-340 Governmental and Nonprofit Accounting

Introduction to the theory and practice of accounting for nonprofit organizations, such as government operations, hospitals, colleges and arts facilities. Includes budgeting as well as bookkeeping and reporting practices. (Offered in alternate years.) Prerequisite: ACCT-200. 2 SH.

ACCT-405 Federal Taxes II

Continuation of ACCT-305, emphasizing taxation of corporations and partnerships, estate and gift taxation, and tax practice and procedure. Includes tax research project. Prerequisite: ACCT-305 or instructor's permission. 2 SH.

ACCT-410 Consolidations

Theory and practice of accounting for business combinations. Topics include cost, equity and consolidation methods, and the consolidation of parent-subsidiary operations, including minority interests. Prerequisites: ACCT-302 or ACCT-301 and permission of the instructor. 2 SH.

ACCT-420 Auditing

An introduction to the theoretical and conceptual foundations of auditing. Topics include risk analysis, sampling and testing, internal control structures, evidence, financial statement audits, systems audits, and reporting. The course also

covers practice, duties, ethics and responsibilities of certified public accountants. Prerequisites: ACCT-309 and ACCT-302 or ACCT-309 and ACCT-301 with the permission of the instructor. 4 SH.

ACCT-430 Managerial Accounting Policy

Extended study of traditional managerial accounting concepts involving cost systems, budgeting, performance and variance analysis, behavior accounting, break-even and capital budgeting models, and direct cash flow statements. Introduction to more recently developed cost management topics, including the theory of constraints, activity-based costing/management, target costing, backflushing, learning curves, stochastic models and extension of capital budgeting models. Prerequisites: ACCT-330 and junior standing. 4 SH.

ACCT-496 Topics in Accounting

Topics of current importance and interest in accounting. Emphasizes readings from the current literature. Prerequisites: ACCT-200 and at least two additional semester hours of accounting. 2 SH.

ACCT-501 Independent Study

Individualized academic work for qualified students under faculty direction. Usually studies special topics not covered in regularly offered courses. Prerequisites: Junior or senior standing and approval of instructor and department. 2-4 SH.

ACCT-502 Senior Research

An extensive accounting-related research project under faculty supervision. Prerequisites: Senior standing, formal proposal statement before registration, acceptance by faculty supervisor and department head's permission. 2-4 SH.

ACCT-503 Accounting Internship

On-the-job supervised experience at a public accounting firm, corporation, governmental agency or nonprofit organization. Prerequisites: Internship coordinator's permission and acceptance by organization. 2-4 SH.

AFRICANA STUDIES

Faculty

Coleen Zoller, Ph.D., Associate Professor of Philosophy, coordinator

Learning Goals:

- Demonstrate the ability to analyze the cultural, historical, political, and social aspects of the African Diaspora.
- Possess the critical vocabulary and concepts with which to describe and interpret the lived experience of people of the African Diaspora.
- Demonstrate an understanding of the interdisciplinary character of the field.

This is an interdisciplinary minor. The Africana Studies minor completes, with a grade of C- or better, at least 20 semester hours in the following courses. Students consult with a minor adviser to select courses and are expected to take a balance of upper- and lower-level courses. At least three of these courses must be at the 200 level or higher.

ANTH-310 National, Transnational and Diasporic Communities

ANTH-413 Race, Ethnicity and Minorities

ENGL-245 Studies in Comparative Literatures of the Americas (Multicultural/Non-Western)

HIST-115 African American United States History

HIST-171 African Civilization

HIST-172 Early Modern Africa

HIST-314 African-American History

MUSC-102 A Study of Jazz

PHIL-130 Philosophy and Hip-Hop

PHIL-150 Everyday Ethics: Philosophical Issues in the Private Realm

PHIL-212 Feminist Philosophy

PHIL-255 Philosophy and the City: Plato's Republic and HBO's The Wire

POLI-314 Diversity in American Politics

PSYC-350 Psychology, Culture, and Ethnicity

SOCI-210 Caribbean Culture and Society

SOCI-316 Social Justice

THEA-254 African-American Theatre History

Students are also encouraged to fulfill their Global Opportunities requirement by spending time immersed in cultures of the African continent and diaspora, for example GO Short or Long programs in South Africa, the Caribbean, or New Orleans.

ART

Faculty

Mark Franklin Fertig, M.F.A., Associate Professor of Art, department head

Ann Piper, M.F.A., Associate Professor of Art

Ashley Lynn Busby, Ph.D., Assistant Professor of Art

Learning Goals:

- Possess skills essential for entry into the professional world or graduate school.
- Are objective evaluators of their work and that of others and are able to place their work within a logical historical contemporary context.
- Are aware of the cultural importance of their work and are able to write and speak about it using appropriate language.
- Comprehend art history from the cave era through today.

Departmental Honors. The department awards honors status for graduation for students receiving a 3.70 or higher GPA in the studio art, graphic design or art history major.

Off-Campus Study. Junior and senior studio art and art history majors are encouraged to spend a semester studying away from campus as part of the university's GO program. Susquehanna studio art and art history majors have access to art centers all over Europe, particularly in London, Florence, the south of France and Paris. A liberal arts program at Regent's College in London is one of the special programs available to art majors. Others may choose extended off-campus study in New York or Washington, D.C. This experience enriches the artistic spirit and opens up avenues for future careers. Students with foreign language interests can combine language and art studies abroad.

Art History, Studio Art and Graphic Design Internships. The department encourages its majors to complete internships, which provide a valuable introduction to the professional art world. Studio art and art history majors typically complete internships at museums and galleries, while graphic design majors are expected to pursue internships at design firms, publishing houses and advertising agencies. All students may receive major credit for approved internships.

Art History Studies

Requirements for the Major in Art History. The Bachelor of Arts in art history requires 48 semester hours in art history and studio art with grades of C- or better.

12 *Art History Requirements*

- 4 ARTH-101 Introduction to Art History I: Prehistoric to Late Middle Ages
- 4 ARTH-102 Introduction to Art History II: Renaissance to Modern
- 4 ARTH-403 Senior Thesis

28 *Art History Electives*

- 28 Choose elective art history courses selected with faculty adviser guidance (may include internship or independent study credit).

8 *Studio Art Electives*

- 8 Choose two studio art courses (ARTS-111 Foundations of Art I and a photography course are recommended).

Reading knowledge of a second language is helpful for undertaking research in non-English scholarship.

Art Studies

Requirements for the Major in Studio Art. The Bachelor of Arts in studio art requires 46 semester hours of art department courses with grades of C- or better.

20 *General Requirements*

- 4 ARTH-101 Introduction to Art History I: Prehistoric to Late Middle Ages
- 4 ARTH-102 Introduction to Art History II: Renaissance to Modern
- 4 ARTS-111 Foundations of Art I
- 4 ARTH-300 Topics in Art or ARTH-315 History of Photography
- 4 ARTS-402 Senior Portfolio

6 *Art Electives*

- 6 Choose 6 semester hours from art department courses. Additional independent study and internship credits are applicable.

Painting and Drawing Concentration: 20 hours

- 4 ARTS-112 Foundations of Art II
- 4 ARTS-113 Drawing
- 4 ARTS-221 Painting
- 4 ARTS-314 Topics in Studio Art
- 4 ARTS-400 Independent Study (combination of 2- or 4-semester-hour sections)

Photography Concentration: 20 hours

- 4 ARTS-241 Black and White Photography
- 4 ARTS-243 Digital Photography
- 4 ARTS-244 Advanced Photography
- 4 ARTS-341 Topics in Photography
- 4 ARTS-400 Independent Study (combination of 2- or 4-semester-hour sections)

Graphic Design Studies

Requirements for the Major in Graphic Design. The major in graphic design requires 60 semester hours of Art Department courses with grades of C- or better.

24 *Department of Art Requirements*

- 4 ARTH-101 Introduction to Art History I: Prehistoric to Late Middle Ages
- or ARTH-102 Introduction to Art History II: Renaissance to Modern
- 4 ARTS-111 Foundations of Art I
- 4 ARTS-112 Foundations of Art II
- 4 ARTS-113 Drawing
- 4 ARTS-241 Black and White Photography
- or ARTS-243 Digital Photography
- 4 ARTH-412 Contemporary Art

24 *Graphic Design Requirements*

- 4 ARTG-251 Computer Applications in Graphic Design
- 4 ARTG-252 Visual Communication
- 4 ARTG-253 Typography
- 4 ARTG-354 Interactive Graphic Design I
- 4 ARTG-451 Graphic Design Studio
- 4 ARTG-453 Advanced Typography

12 *Graphic Design Elements, chosen from the following:*

- 4 ARTS-241 Black and White Photography
- 4 ARTS-243 Digital Photography
- 4 ARTS-244 Advanced Photography
- 4 ARTG-352 Package Design
- 4 ARTG-360 Topics in Graphic Design
- 1-4 ARTS-400 Independent Study
- 1-4 ARTS-404 Internship
- 2 ARTG-454 Interactive Graphic Design II

Minor in Art History. The minor in art history requires 20 semester hours of art history courses with a grade of C- or above. Required courses include ARTH-101, ARTH-102 and three additional art history courses.

Minor in Studio Art. The studio art minor requires 20 semester hours in art department courses with grades of C- or above. Required courses are ARTH-101 Introduction to Art History I or ARTH-102 Introduction to Art History II; ARTS-111 Foundations of Art I; ARTS-113 Drawing; and eight additional semester hours of art department electives.

Minor in Photography. The minor in photography requires five courses, totaling 20 semester hours, with a grade of C- or above. Required courses are ARTS-241 Black and White Photography; ARTS-243 Digital Photography; ARTS-244 Advanced Photography; one elective course chosen from ARTS-113 Drawing, ARTG-251 Computer Applications in Graphic Design and ARTS-341 Topics in Photography; and one art history course chosen from ARTH-315 History of Photography, ARTH-310 Modernism and the Avante-garde, ARTH-412 Contemporary Art and ARTH-313 Women in Art.

Art Courses

Art History Courses

ARTH-101 Introduction to Art History I: Prehistoric to Late Middle Ages

A survey of painting, sculpture and architecture from cave painting to A.D. 1400. Emphasizes standards of artistic achievement and basic principles of form and style viewed in social context. 4 SH. CC: Artistic Expression.

ARTH-102 Introduction to Art History II: Renaissance to Modern

A survey of painting, sculpture and architecture from A.D. 1400 to World War II. Emphasizes standards of artistic achievement and basic principles of form and style viewed in social context. 4 SH. CC: Artistic Expression.

ARTH-205 Greek and Roman Art

A survey of art and architecture of ancient Greece (Archaic, Classical and Hellenistic) and Roman cultures. 4 SH. CC: Artistic Expression, Team Intensive.

ARTH-211 Survey of Non-Western Art

A study of the diversity of non-Western or ethnographic traditions. Possible topics include the art of Islam, India, China, Japan, Africa, South America, Meso-America and Native America. Emphasizes the relationship between non-Western art and general historical developments. 4 SH. CC: Artistic Expression, Diversity.

ARTH-300 Topics in Art

An intermediate-level survey of selected topics in the history of art. Topics may be drawn from such areas as American folk art, modern art or Medieval and Renaissance art. 4 SH.

ARTH-306 Renaissance Art History

A study of painting, sculpture and architecture in Florence, Rome and Venice from the late-13th to the 16th centuries. 4 SH. CC: Artistic Expression, Writing Intensive.

ARTH-307 Baroque Art History

A study of the impact of society and of the Renaissance on painting, sculpture and architecture in 17th- and 18th-century Europe. 4 SH.

ARTH-309 19th-Century Art History

Art and the role of the artist from the time of the French Revolution to the end of impressionism, 1780s to 1880s. Emphasizes stylistic development of neoclassicism, the romantic movement, realism and impressionism in the context of social and cultural revolutions. 4 SH. CC: Artistic Expression, Writing Intensive.

ARTH-310 Modernism and the Avante-garde

Analyzes movements and manifestos that define the art of the avant-garde from post-impressionism in the 1880s to World War II in the 1940s. Explores the various "isms" in the context of social issues that effected change in artistic principles. Recommended for all art majors. 4 SH. CC: Artistic Expression, Writing Intensive.

ARTH-313 Women in Art

A study of the historic perception and the social history of the role of women in art: as artist, as subject of art and as patron (audience) of art. Emphasizes exploration and debate over issues affecting present-day perceptions about the woman artist of the past and the future. Same as WMST:313. Prerequisite: Sophomore standing. 4 SH. CC: Artistic Expression, Diversity Intensive, Interdisciplinary, Writing Intensive.

ARTH-315 History of Photography

A study of photography from its invention to the present day. Emphasizes the technical evolution of the medium and its various processes as well as the medium's use in both documentary/scientific and fine arts contexts. 4 SH. CC: Team Intensive.

ARTH-401 Independent Study

A tutorial course focusing on serious scholarship in art history. Includes writing an article designed for publication. Instructor will assist in topic selection and guide student efforts. Students may do research at major museums, galleries and significant libraries. 4 SH.

ARTH-403 Senior Thesis

Required capstone course for art history majors in their senior year. Students will work with art history faculty to develop a long paper. This may either be based on new research or be an expansion of a paper from a previous art history course. Prerequisite: Senior standing. 4 SH. Capstone.

ARTH-412 Contemporary Art

Critical issues in art from 1950 to the present, defined by radical changes in values for the art market, art criticism and public taste. Lively presentations by students will support or contest recent art criticism, involving them in both analysis and debate. 4 SH. CC: Ethics Intensive, Oral Intensive.

Graphic Design Courses

ARTG-251 Computer Applications in Graphic Design

This introductory course focuses on the use of the computer and specific software applications as they relate to the study of graphic design. Students gain in-depth experience with pertinent graphic design software applications, as well as the basics of hardware usage, color printing and scanning. Emphasis is placed on hands-on experience and presentation of digital output. This is an excellent course for nonmajors interested in graphic design and a prerequisite for all other graphic design courses. 4 SH.

ARTG-252 Visual Communication

This course introduces students to the profession of graphic design and explores the design problem. Students will learn to conceptualize, analyze, solve problems and successfully render solutions. Emphasis is placed on idea generation, creative thinking and traditional design processes. Students complete projects that demonstrate grasp of the coursework, using both traditional and digital means. Prerequisites: ARTS-111 and ARTG-251 or instructor's permission. 4 SH.

ARTG-253 Typography

This course introduces students to the study of letterforms for their aesthetic and communicative value, as well as their importance as a medium for graphic designers. Emphasis is placed on technical aspects of typographic structure, including the anatomy of a letter and the history of typographic design. Students are expected to generate creative typographic solutions, using both traditional and digital means. Prerequisite: ARTG-252 or instructor's permission. 4 SH.

ARTG-352 Package Design

Intermediate course in which students study the creation of three-dimensional designs for commercial packaging. Emphasis is placed on problem solving, aesthetics, and the form and function of a product's packaging. Students generate design solutions that encompass a variety of packaging styles from bottles to boxes and blister packs. Prerequisite: ARTG-252. 4 SH.

ARTG-354 Interactive Graphic Design I

This course offers an introduction to design for the World Wide Web. Students focus on the creative and technical aspects of developing Web content, as well as design concepts and structures that are unique to the Internet. Students explore relevant software applications and gain practical creative and programming experience. Prerequisite: ARTG-251 or instructor's permission. 4 SH.

ARTG-360 Topics in Graphic Design

This course will vary in content with each offering as areas of particular relevance not covered by the regular graphic design curriculum are explored. Each course title under this offering will bear a specific subtitle indicating the content to be presented. May be repeated with permission of the graphic design coordinator when course content changes. Prerequisite: ARTG-252. 4 SH.

ARTG-451 Graphic Design Studio

This capstone course for graphic design majors finalizes the portfolio through the completion of a variety of advanced projects. Students will concentrate on refining skills and preparing to enter the professional world or a graduate program. In addition to project work, students will publicly exhibit their designs; write an artist statement; and produce an exhibition catalog, accompanying announcements and a formal resume. Prerequisite: ARTG-453. 4 SH. Capstone. CC: Team Intensive.

ARTG-453 Advanced Typography

This course offers continued study of the value and impact of letterforms in graphic design. Emphasis is placed on the generation of creative solutions that demonstrate knowledge of contemporary typography and design values. Students enrolled in the course will be expected to generate creative typographic solutions using both traditional and digital means. Prerequisites: ARTG-252 and ARTG-253. 4 SH.

ARTG-454 Interactive Graphic Design II

This graphic design course builds on the introductory skills acquired in ARTG-354 Interactive Graphic Design I and stresses the further development of Web design principles in terms of visual aesthetics, user-interface design, usability, and accessibility. Students will increase their fluency with associated software platforms and programming languages, and develop a sophisticated understanding of and ability to articulate issues critical in the realm of interactive design. Prerequisite: ARTG-354. 4 SH.

ARTG-460 Advanced Topics in Graphic Design

This course will vary in content with each offering as areas of particular relevance not covered by the regular graphic design curriculum are explored. Each course title under this offering will bear a specific subtitle indicating the content to be presented. May be repeated with permission of the instructor when course content changes. Prerequisites: ARTG-252 and ARTG-253. 2 SH.

Studio Art Courses

ARTS-111 Foundations of Art I

Introduces the principles, theories and aesthetics of two-dimensional artwork. Emphasizes the exploration of a variety of artistic media, development of creative concepts, and understanding of form and composition. Required as a beginning course for all art and graphic design majors. 4 SH.

ARTS-112 Foundations of Art II

Introduces the principles, theories and aesthetics of three-dimensional artwork. Emphasizes conceptual expression, as well as understanding of the physical world of form, space and texture as related to art objects. Prerequisite: ARTS-111. 4 SH.

ARTS-113 Drawing

Introduces the principles, theories and aesthetics of drawing. Focuses on visual perception and delineation incorporating traditional and nontraditional drawing media. Also addresses life drawing and conceptual expression. 4 SH.

ARTS-221 Painting

Introduces the principles, theories and aesthetics of painting. Focuses on understanding color, composition, light, illusion, abstraction and other visual expressions using oil and/or acrylic paint. Prerequisite: ARTS-111. 4 SH.

ARTS-231 Printmaking

Introduces the principles, theories and aesthetics of printmaking. Focuses on aesthetic intentions and techniques of producing multiple prints through various processes such as woodcut, linocut, monotype, collagraph and etching. Prerequisite: ARTS-111. 4 SH.

ARTS-241 Black and White Photography

Introduces the principles, theories and aesthetics of black and white photography. Focuses on the fundamentals of observation, composition, camera use and darkroom work, including film processing and printing. Requires a 35mm camera (SLR) with manual override. 4 SH.

ARTS-243 Digital Photography

Introduces the principles, theories and aesthetics of digital photography. Focuses on the fundamentals of observation, composition and camera use, as well as digital image manipulation and printing using computer software. Requires a minimum 5-megapixel digital camera. 4 SH.

ARTS-244 Advanced Photography

Advanced course that expands upon the principles, theories and aesthetics of photography and photographic processes introduced in ARTS-241 or ARTS-243. Requires a 35mm camera (SLR) with manual override or a 5-megapixel digital camera. Prerequisite: ARTS-241 or ARTS-243. 4 SH.

ARTS-314 Topics in Studio Art

This course will vary in content with each offering as areas of particular relevance in studio art are explored. Each course title under this offering will bear a specific subtitle indicating the content to be presented. May be repeated with permission of the department head when course content changes. Prerequisite: ARTS-111. 4 SH.

ARTS-341 Topics in Photography

This course will vary in content with each offering as areas of particular relevance in photography are explored. The course will require either a 35mm SLR camera with manual override or a 5-megapixel minimum digital camera, depending on the nature of the course topic. Each course title under this offering will bear a specific subtitle indicating the content to be presented. May be repeated with permission of the department head when course content changes. Prerequisite: ARTS-241 or ARTS-243. 4 SH.

ARTS-400 Independent Study

Independent work in advanced studio art or graphic design projects with faculty supervision and guidance. (May be repeated.) Prerequisites: Junior or senior standing and department head's permission. 1-4 SH.

ARTS-402 Senior Portfolio

Required capstone course for studio art majors, to be taken during the senior year. Students will complete a cohesive body of artwork and exhibit to the public. Students will work with a faculty member to select and professionally present their art, write an artist statement, and produce an exhibition catalog and announcement. Prerequisite: Senior standing. 4 SH. Capstone. CC: Team Intensive.

ARTS-404 Internship

Internships offer a valuable experience for all art department majors and are traditionally taken during the summer between the junior and senior years or during the academic year. Art history majors may work with a museum, gallery or other art institution; studio art majors may intern at professional studios, galleries or museums; and graphic design majors normally take internships with design firms or advertising agencies. Some interns work for the university's Lore Degenstein Gallery. Prerequisite: Department head's permission.

ARTS ADMINISTRATION

Faculty

David S. Steinau, D.M.A., Associate Professor or Music, Coordinator

Erik K. Viker, M.F.A., Associate Professor of Theatre, Coordinator

Learning Goals:

- Students will learn how fundamental business principles are applied to the philosophy and practice of arts operations.
- Students will gain an understanding of the professional ethics and personnel management issues associated with working in the fine arts.

The interdisciplinary minor in Arts Administration is designed for students with a strong interest in pursuing arts operations careers or enhancing their academic study of arts-related disciplines from a business perspective. Through this minor, students will learn how foundational business principles are applied to the philosophy and practice of arts operations, and gain an understanding of the professional ethics and personnel management issues associated with working in the fine arts.

The Minor in Arts Administration is appropriate for those considering careers in performing arts administration, arts education, museum operations, drama literary management, artistic direction and music administration.

4 MGMT-290 Non Profit Management

4 ACCT-200 Financial Accounting

4 MUSC-275 Introduction to Arts Leadership

And 12 semester hours chosen from the following:

THEA-152 Understanding Theatre, MUSC-101 Introduction to Music or MUSC-250 Classical and Romantic Music

THEA-246 Scenic Design or THEA-340 Stage Management and Theatre Operations

ACCT-340 Governmental and Nonprofit Accounting

MGMT-360 Management and Organizational Behavior or MGMT-280 Marketing

COMM-211 Public Relations or ENGL-299 Professional and Civic Writing

THEA 501 Production Lab or MUSC-504 Internship (repeatable once)

ASIAN STUDIES

Faculty

Swarna Basu, Ph.D., Associate Dean of the School of Arts and Sciences, director

Learning Goals:

- To initiate an in-depth study of Asia, including its cultures, literatures, history, religion, philosophy, businesses, media practices, arts and languages.
- To compare various Asian cultures with each other in order to achieve a greater understanding of the continuities/discontinuities between them.
- To arrive at some understanding of the continuities/discontinuities between Asian communities in Asia and their diasporic communities, particularly in the U.S.

The Asian studies minor requires 20 semester hours, with grades of C- or better, including four elective courses (with at least three to be chosen from courses exclusively on Asia) and a required final course. Study abroad is highly recommended but not required.

Required Final Course. Students pursuing a minor are required to take an upper-level four-semester-hour final course that offers an exploration of broad comparative issues that relate to Asia as a whole. Courses such as RELI-208, RELI-315, RELI-305, HIST-390, ENGL-205, ENGL-365 or other courses approved by the program coordinator will satisfy this requirement.

Electives. Students take a total of 16 elective semester hours. Not more than eight semester hours may be taken at the 100 level, and at least four semester hours must be taken at the 300 level. No more than four semester hours of language may be counted toward an elective.

At least 12 semester hours must be taken from the following courses exclusively on Asia:

- CHNS-101 Beginning Chinese I
- CHNS-102 Beginning Chinese II
- CHNS-201 Intermediate Chinese: Language and Culture
- Beginning Japanese I-II taken at Bucknell University
- HIST-151 Traditional East Asia
- HIST-152 Modern East Asia
- ENGL-205 Literature Studies, with Indian Literature and Film as the topic
- ENGL-365 Studies in Literature and Gender, with Asian Women's Literature as the topic
- HIST-258 Modern China
- HIST-390 Topics in History with Sino-U.S. Relations as the topic
- HIST-390 Topics in History with Globalizing China: Diasporas as the topic
- RELI-117 Introduction to Asian Religions
- RELI-208 Buddhism
- RELI-318 Confucian Ethics

Four semester hours may be taken in the following comparative courses:

- ENGL-205 Literature Studies, with Asian-American Literature as the topic
- HIST-390 Topics in History with Asian-American History as the topic
- RELI-105 World Religions
- RELI-305 Topics in Religion, with Asian Religions as the topic
- RELI-315 Being Awesome at Life

Minors are strongly encouraged to fulfill the university's Central Curriculum language requirement with an Asian language and to continue the language study beyond the first year. Features of Chinese and Japanese culture are closely associated with the uniqueness of the language. (For example, the evolution of Chinese characters is directly connected to the evolution of Chinese culture.) This is a primary reason that we propose accepting four semester hours of language toward an elective. Chinese is currently offered at Susquehanna at both the 100 and 200 levels. In addition, students may take Japanese at Bucknell University. Students who wish to take another Asian language not offered at Susquehanna may satisfy this requirement by taking language classes through off-campus programs or summer language study programs that have been approved for Susquehanna credit.

BIOLOGY

Faculty

Tammy C. Tobin, Ph.D., Professor of Biology, department head

Jack Russell Holt, Ph.D., Professor of Biology

Margaret T. Peeler, Ph.D., Professor of Biology

Matt Persons, Ph.D., Professor of Biology

David S. Richard, Ph.D., Professor of Biology

Carlos Alberto Iudica, Ph.D., Associate Professor of Biology

Alissa A. Packer, Ph.D., Associate Professor of Biology

Thomas C. Peeler, Ph.D., Associate Professor of Biology

Jan Reichard-Brown, Ph.D., Associate Professor of Biology

Erin Rhinehart, Ph.D., Associate Professor of Biology

David Matlaga, Ph.D., Assistant Professor of Biology

Pavithra Vivekanand, Ph.D., Assistant Professor of Biology

Sara Cassella, Ph.D., Post-Doctoral Teaching Fellow

Learning Goals:

- Biology majors will learn to identify and describe the basic principles and theories of the biological sciences.
- Using the basic principles and theories of the biological sciences, students will learn to construct and critique logical arguments in biology.
- Students will learn to use biological skills and techniques to acquire and evaluate scientific evidence.

Biology Studies

Requirements for the Major in Biology. The Bachelor of Science degree in biology requires 60 semester hours in biology, chemistry and physics with grades of C- or better in biology. The Bachelor of Science degree includes an introductory sequence, biology distribution requirements (in cell and molecular biology, organismal biology, and ecology and evolution), and other requirements with an emphasis in research (Group A) or added academic instruction (Group B). In addition, all students must complete an experiential learning requirement.

16 *Introductory Sequence*

4	BIOL-101 Ecology and Evolution
4	BIOL-102 Cell Biology and Genetics
4	BIOL-205 Organismal Biology
4	BIOL-220 Biostatistics
or	MATH-108 Introduction to Statistics
or	MATH-180 Statistical Methods

16 *Biology Distribution Requirements*

3 Cell and Molecular Biology

Choose from one of the following:

BIOL-300 Developmental Biology

BIOL-306 Cell Biology

BIOL-316 Molecular Biology

BIOL-400 Immunology

3 Organismal Biology

Choose from one of the following:

BIOL-302 Comparative Vertebrate Anatomy

BIOL-310 Animal Physiology

BIOL-312 Microbiology

BIOL-320 Exercise and Extreme Physiology

BIOL-328 Natural History of Early Vertebrates

BIOL-404 Plant Physiology

BIOL-440 Behavioral Neuroendocrinology

BIOL-455 Functional Neuroanatomy

3 Ecology

Choose from one of the following:

BIOL-324 Animal Behavior

BIOL-326 Invertebrate Zoology

BIOL-332 Population Biology

BIOL-408 Aquatic Ecology

BIOL-460 Winter Ecology of Vertebrates

ECOL-201 Community and Ecosystems Ecology

3 Three laboratory courses

4 BIOL-550 Explorations in Biology

or BIOL-560 Interdisciplinary Explorations in Biology (at least two different courses)

Biology courses at the 300 level or above may be used to satisfy biology elective credit requirements.

Other Requirements: Based upon their qualifications and career goals, students may apply to be accepted in a collaborative research program (Group A), or they may elect to complete Group B.

Group A: 60 semester hours total

4 BIOL-510 Student Research I

4 BIOL-511 Student Research II

Group B: 60 semester hours total

4 BIOL-350 Investigative Problems in Biology

4 Biology elective courses at the 200 level

20 *Corollary Courses*

4 General Chemistry I – choose from: CHEM-101, CHEM-103 or CHEM-111

4 General Chemistry II - choose from: CHEM-102, CHEM-104 OR CHEM-112

4 CHEM-221 Organic Chemistry I

8 Choose 8 additional semester hours from the following courses:

CHEM-222 Organic Chemistry II

PHYS-204 Introductory Physics I

PHYS-205 Introductory Physics II

CHEM-231 Quantitative Analysis

CHEM-422 The Biochemistry of Nucleic Acids

CHEM-423 Biochemistry Nucleic Acids Laboratory

CHEM-424 The Biochemistry of Metabolism

CHEM-426 The Biochemistry of Proteins and Enzymes

CHEM-427 Biochemistry of Proteins and Enzymes Laboratory

CHEM-429 Biochemistry of Metabolism Laboratory

CHEM-311 Analytical Chemistry

Minor in Biology. Students minoring in biology complete 20 semester hours, including BIOL-101 Ecology and Evolution, BIOL-102 Cell Biology and Genetics, and BIOL-205 Organismal Biology. Students choose additional biology courses at the 200, 300 or 400 level. Although BIOL-500, BIOL-502, BIOL-550 and BIOL-560 may apply to the minor, other courses at the 500 level may not be taken for minor credit. At least one laboratory course is required in addition to BIOL-101, BIOL-102 and BIOL-205.

Honors in Biology. The departmental honors program encourages and recognizes superior academic performance in biology. To graduate with departmental honors, biology majors must request entry to the program or be nominated for entry to the program by a member of the biology faculty by the beginning of the senior year.

Candidates for academic honors must:

- Maintain a cumulative GPA of 3.25 and a GPA of 3.50 in biology courses to qualify for academic honors, and
- Successfully complete Student Research I and II (BIOL-510 and BIOL-511) and earn a grade of B- or better in these courses.

Candidates for research honors must:

- Be nominated by a member of the biology faculty by midterm of Student Research II (BIOL-511),
- Submit an acceptable research thesis based upon two semesters of Student Research (BIOL-510 and BIOL-511), and
- Pass an oral comprehensive examination of their thesis in their final semester.

Secondary Teaching Certification. Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least three semester hours in British or American literature, at least six semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners: Theory and Instruction, EDUC-380 Instructional Design, EDUC-424 Methods of Curriculum, Instruction and Assessment in Teaching Science, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching package (EDUC-501, EDUC-502, EDUC-503 and EDUC-600).

In addition, secondary education biology students complete all of the usual requirements for the biology major. When secondary education students satisfy the "choose 8 additional semester hours from the following courses" portion of the corollary course requirement, they must do so by taking PHYS-204-205 Introductory Physics I-II.

Biology Courses

BIOL-010 Issues in Biology

Emphasizes analysis of biological problems relevant to the human experience and presents basic biological concepts in a variety of contexts. Subject matter might include medicine, environmental issues, ecology, molecular biology, physiology and others. 4 SH. 3 lecture hours. 3 laboratory hours. CC: Scientific Explanations. If the topic being offered is Human Heredity or Brain and Behavior, the course is also Team Intensive. If the topic being offered is Spice of Life, the course is also Interdisciplinary and Team Intensive.

BIOL-020 Human Sexuality and Reproduction

A science-based exploration of human sexuality and reproduction, which involves consideration of sexual anatomy, physiology, social norms, gender, perception and behavior. From a social science perspective, sexuality is a key organizing factor for cognition, emotion and relationships. Biologically, sexuality represents the means for propagating our species and serves important evolutionary and survival functions. It is a complex topic that requires broad integrated thinking across disciplines. Prerequisite: Junior standing. 4 SH. 3 lecture hours. 3 laboratory hours. CC: Diversity Intensive, Interdisciplinary and Scientific Explanations.

BIOL-101 Ecology and Evolution

Examination of descent with modification from a common ancestor, evidence for evolution, processes by which evolutionary changes occur and how ecological interactions drive such changes. Course content will be linked to the five core concepts of biology (evolution; structure and function; information flow; energy transformations; and systems). Topics include the link between genotype and phenotype as it relates to natural selection and evolutionary change; mechanisms of microevolution; speciation processes; population growth and regulation; species interactions; and ecosystem structure and function. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Scientific Explanations, Team Intensive.

BIOL-102 Cell Biology and Genetics

Examination of life at the cellular level, focusing on the five core concepts of biology (evolution; structure and function; information flow; energy transformations; and systems). Topics include cell structure and function, protein structure and function as the link between genotype and phenotype, information flow from gene to protein, inheritance of traits in eukaryotic organisms, membrane structure and transport, energetics on the cellular level, cell cycle control and cancer. 4 SH. 3 lecture hours, 3 laboratory hours.

BIOL-157 The Biology of Women

Examines the genetic and biological basis of gender difference, the unique biology of the female body and women's health care issues. Topics include female reproductive anatomy and the menstrual cycle, pregnancy and birth, developmental differences in the sexes, and reproductive technologies. Also covers problems such as breast cancer, premenstrual syndrome and osteoporosis. Includes the role of women in the health care system, as well as biology and science in general. Not for biology major or minor credit. Same as WMST-250. 4 SH. CC: Diversity Intensive.

BIOL-201 Genetics

A workshop-style course that examines Mendelian, population, molecular and quantitative genetics. Laboratory topics include the structure and function of nucleic acids, bioinformatics, and the use of molecular techniques to study human disease and evolution. Prerequisite: BIOL-102 or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Diversity Intensive, Team Intensive.

BIOL-202 Systematic Biology

Systematic Biology is designed to introduce students to representatives of the kingdoms of life (e.g., prokaryotes, eukaryotic protists, fungi, animals and plants) in an evolutionary framework through an integrated lecture-laboratory experience. Using multiple methods, including light and electron microscopic examinations, students will have the opportunity to observe structures and other characters that bring diversity to all kingdoms of life. Students will use appropriate mathematical methods to model and infer evolutionary relationships between living organisms by molecular phylogenetics. Drawing on experiences in previous courses of the introductory sequence, students will explain the observations and results from the levels of molecules to ecosystems. These observations, results and explanations will provide the basis for journal-style writing projects. Same as ECOL-202. Prerequisite: BIOL-201 or ECOL-201 or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Team Intensive, Writing Intensive.

BIOL-205 Organismal Biology

Organismal Biology will focus on the level of the organism as the biological scale through which to build the student's understanding of five core concepts in biology: evolution, information flow, structure-function relationships, energy transformations and systems biology. This course is designed as an introductory course, meaning that it introduces fundamental concepts that will be elaborated on and reinforced at a more sophisticated and deeper level in the more advanced courses that are taken as distribution requirements in the junior and senior year. Prerequisites: BIOL-101 and BIOL-102 or permission of the instructor. 4 SH.

BIOL-220 Biostatistics

Biostatistics will focus on the collection and analysis of biological data. The course is designed to introduce students to the fundamental concepts of experimental and sampling design, as well as quantitative hypothesis testing. Some equations will be covered in the course; however, the emphasis will be on interpretation and presentation of statistical results. These concepts will be reinforced in upper-level biology/ecology/neuroscience courses taken by students to fulfill distribution requirements during their junior and senior years. Prerequisites: Sophomore standing and either BIOL-101, BIOL-102 or ECOL-100. 4 SH. 4 lecture hours. CC: Analytical Thought.

BIOL-250 STEM First-Year Seminar

This seminar is taken by students in the STEM Scholars' Program in the spring of their first year as a way of continuing to work together to build the STEM cohort, learn about STEM careers, and explore their own interests and aptitudes regarding future career options. Not for major or minor credit. 1 SH.

BIOL-300 Developmental Biology

Examines embryo development, focusing on cellular and regulatory mechanisms that guide the process. Topics include the events of development from fertilization through organogenesis in a range of animal systems from sea urchins through mammals. Prerequisite: BIOL-102. 3 SH. CC: Ethics Intensive.

BIOL-301 Developmental Biology Laboratory

An investigative approach to the study of animal development, emphasizing cellular and molecular techniques. Students work in small groups to conduct and analyze self-designed experiments with invertebrate embryos. Prerequisite: BIOL-102. 1 SH. 3 laboratory hours. CC: Ethics Intensive.

BIOL-302 Comparative Vertebrate Anatomy

Examines the evolutionary relationships among the vertebrate classes, using comparative morphological evidence. Uses an organ system approach to the study of anatomy and considers unique adaptations of individual vertebrates. Prerequisite: BIOL-205. 3 SH.

BIOL-303 Comparative Vertebrate Anatomy Laboratory

Organ-based study of representative vertebrates, including shark and cat dissections. Prerequisite: BIOL-205. 1 SH. 3 laboratory hours.

BIOL-304 Biogeodiversity

Explores the influences of geology (abiotic factors), environment (including climate), and place on the evolution and diversity of life. Students investigate multiple issues posed by the science and technology of the diversity of life on this planet. Particular issues include changing views of systematic relationships of living things, how many species occur on earth, and how to establish effective public policy guidelines for protection of life's diversity. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Team Intensive, Writing Intensive.

BIOL-306 Cell Biology

Examines the molecular aspects of cell structure and function and the molecular processes that regulate cell behavior. Emphasizes experimental and problem-based approaches, and includes information on the cell biology of human disease. Prerequisite: BIOL-102. 3 SH.

BIOL-307 Cell Biology Laboratory

Introduces the laboratory techniques commonly used in the study of cell biology. Includes labs on the isolation and characterization of proteins and nucleic acids. Prerequisite: BIOL-102. 1 SH. 3 laboratory hours.

BIOL-310 Animal Physiology

General and comparative physiology. Emphasizes membrane, neural, muscular and homeostatic physiology. Prerequisite: BIOL-205. 3 SH.

BIOL-311 Animal Physiology Laboratory

A laboratory in general and comparative physiology. Emphasizes physiological phenomena in such organ systems as the heart, muscle, membrane, neural and kidney. Uses several different vertebrate animals. Prerequisite: BIOL-205. 1 SH. 3 laboratory hours.

BIOL-312 Microbiology

An introduction to the morphology, physiology and genetics of microorganisms. Discusses the roles of microorganisms in the environment and in human disease. Prerequisite: BIOL-205. 3 SH.

BIOL-313 Microbiology Laboratory

Emphasizes basic bacteriologic techniques, including staining, culturing and identification. Laboratory may not be taken without BIOL-312. Prerequisite: BIOL-205. 1 SH. 3 laboratory hours.

BIOL-316 Molecular Biology

Examines the structure and function of DNA and RNA of prokaryotes and eukaryotes. Topics include recombinant DNA technology, genomics and bioinformatics. Prerequisite: BIOL-102. CHEM-221 strongly recommended. 3 SH.

BIOL-317 Molecular Biology Laboratory

Investigates the structure and function of DNA through techniques of molecular biology. Topics include agarose gel electrophoresis, DNA hybridization and gene cloning. Prerequisite: BIOL-102. 1 SH. 3 laboratory hours.

BIOL-319 Advanced Genetics

This workshop-style course will explore advanced topics in the expression, evolution and inheritance of genetic material, as well as the modern techniques that are used in their analysis. It will also consider the ethical issues that arise from the generation and potential uses of the resulting knowledge. It will build upon the basic molecular and Mendelian genetics concepts taught at the introductory level. Prerequisite: BIOL-102 or permission of instructor. 4 SH. 3 lecture hours. 1 laboratory hour. CC: Ethics Intensive.

BIOL-320 Exercise and Extreme Physiology

A study of physiological processes in humans related to exercise and participation in sports. This course also examines the effects and repercussions of exposure of the human body to extreme environments, such as those experienced by scuba divers, climbers and high-altitude pilots. Prerequisite: BIOL-205. 3 SH.

BIOL-321 Exercise and Extreme Physiology Laboratory

Investigates the physiological basis of human responses to exercise and extreme environments with an emphasis on neural muscular, respiratory and cardiovascular mechanisms. Uses some animal models. Prerequisite: BIOL-205. 1 SH. 3 laboratory hours.

BIOL-324 Animal Behavior

Explores the adaptive value of animal behavior with an emphasis on theory and hypothesis testing using examples drawn from primary literature. Major topics include sexual selection, mating systems, parental care, sociality, foraging theory, antipredator behavior, game theory and communication framed within an evolutionary context. Prerequisite: BIOL-101 or ECOL-100. 3 SH.

BIOL-325 Animal Behavior Laboratory

Field and laboratory techniques in behavioral data collection, experimental design and statistical analysis. Hypothesis development and testing emphasized. A portion of the grade is based on an independent research project. Laboratory may not be taken without BIOL-324. Prerequisite: BIOL-101 or ECOL-100. 1 SH. 3 laboratory hours.

BIOL-326 Invertebrate Zoology

An introduction to evolutionary themes and functional approaches to invertebrate animal biology. Course covers a broad survey of the invertebrate phyla. Within the coverage of each group, unique aspects of morphology, physiology, ecology and behavior are discussed in light of the selective forces that have favored their evolution. Prerequisite: BIOL-205. 3 SH.

BIOL-327 Invertebrate Zoology Laboratory

An introduction to invertebrate phyla and subgroups with emphasis on form and functional morphology, organ systems, life history, ecology and behavior. Course includes dissections, examination of preserved material, demonstrations and observations of living animals. In addition, students organize an invertebrate collection based on local fauna. Laboratory may not be taken without BIOL-326. Prerequisite: BIOL-205. 1 SH. 3 laboratory hours.

BIOL-328 Natural History of Early Vertebrates

This course will focus on early vertebrates' life history with great emphasis on systematics, evolution, phylogeny, morphology, reproduction, development and zoogeography. Plate tectonics and paleontology will have a pivotal role in explaining patterns and processes in the natural history of this unique subset of vertebrates, otherwise known as "Ichthyoids." This upper-level biology/ecology course is designed to be taken by students to fulfill distribution requirements during their sophomore, junior and/or senior years. Prerequisite: BIOL-205 or BIOL-202. 3 SH. 3 lecture hours.

BIOL-329 Natural History of Early Vertebrates Laboratory

This course will be an examination of patterns and processes in the natural history of this unique subset of vertebrates, otherwise known as "Ichthyoids." Through the different laboratories students will be introduced to field and laboratory methodologies of identifying Pennsylvania early vertebrates, specimen handling, collecting techniques, dissection, preparation, and field sign recognition. This upper-level biology/ecology course is designed to be taken by students to fulfill distribution requirements during their sophomore, junior and/or senior years. Prerequisite: BIOL-205 or BIOL-202. 1 SH. 3 laboratory hours.

BIOL-332 Population Biology

This course will introduce students to the biotic and abiotic factors that influence the size and trajectory of populations. Topics of the course will include understanding demographic rates, density independent and density dependent population growth rates, density, population dynamics of structured and non-structures populations, competitions, and predation. Prerequisite: BIOL-101 or ECOL-100. 3 SH.

BIOL-333 Population Biology Laboratory

This course will introduce students to methods used in estimating demographic rates and population parameters, such as age structure. Concepts fundamental to experimental design and statistical analysis of data will be stressed. Laboratory cannot be taken without BIOL-332. Prerequisite: BIOL-101 or ECOL-100. 1 SH. 3 laboratory hours.

BIOL-350 Investigative Problems in Biology

Offered for a capstone experience for biology majors in Group B. Provides an authentic research experience based in the area of expertise of the supervising faculty. Students will learn important laboratory and/or field approaches to collect novel data in order to answer research questions. Course elements include experimental design, data collection and analysis, and presentation in oral and written formats. Prerequisites: Senior standing and BIOL-101, BIOL-102, BIOL-205, and either BIOL-220 or MATH-108 or MATH-180 or permission of the instructor. 4 SH. Capstone. CC: Oral Intensive, Writing Intensive.

BIOL-400 Immunology

Investigates how the immune system defends vertebrate organisms against invasion by pathogenic microorganisms. Discusses recognition of antigens and interactions between components of the immune system from a molecular perspective. Prerequisite: BIOL-102. 3 SH.

BIOL-401 Immunology Laboratory

Techniques used in immunological studies. Topics include antibody purification, immunofluorescence and Western blot analysis. Laboratory cannot be taken without BIOL-400. Prerequisite: BIOL-102. 1 SH. 3 laboratory hours.

BIOL-404 Plant Physiology

The physiology of photosynthetic organisms. Includes photosynthesis, translocation, metabolism, mineral nutrition, photoperiodism, hormones, growth and development. Prerequisite: BIOL-205. 3 SH.

BIOL-405 Plant Physiology Laboratory

A series of experiments designed to illustrate the unique physiology of photosynthetic organisms. Prerequisite: BIOL-205. 1 SH. 3 laboratory hours.

BIOL-408 Aquatic Ecology

The ecology of freshwater ecosystems. Emphasizes biota of freshwater and their relationships with physical and chemical components of lakes, streams and reservoirs. Same as ECOL-408. Prerequisite: BIOL-101 or ECOL-100. 3 SH.

BIOL-409 Aquatic Ecology Laboratory

Field laboratory in aquatic ecology techniques. Topics include physical and chemical measurements and the identification and enumeration of phytoplankton, zooplankton, aquatic plants and benthic organisms. Same as ECOL-409. Prerequisite: BIOL-101 or ECOL-100. 1 SH. 4 laboratory hours.

BIOL-422 The Biochemistry of Nucleic Acids

This course integrates information from the disciplines of biology and chemistry to explore nucleic acid function and metabolism. In-depth discussions cover the forces behind DNA/DNA, DNA/RNA, and DNA/protein interactions as they apply to DNA structure and metabolism, RNA function and metabolism, protein synthesis, and gene regulation. Same as CHEM-422. Prerequisite: CHEM-222. Strongly recommended: BIOL-426/CHEM-426. 3 SH. 3 lecture hours.

BIOL-423 Biochemistry Nucleic Acids Laboratory

Exploration of nucleic acids, including methods of isolation, purification, identification and analysis. Same as CHEM-423. Prerequisite: CHEM-222. 1 SH. 3 laboratory hours.

BIOL-424 The Biochemistry of Metabolism

This course covers the structure and function of major biomolecules such as carbohydrates and lipids and their role in metabolism. Energy metabolism and biomolecule biosynthesis and degradation are emphasized. Same as CHEM-424. Prerequisite: CHEM-222. Strongly recommended: BIOL-426/CHEM-426. 3 SH. 3 lecture hours. CC: Team Intensive.

BIOL-426 The Biochemistry of Proteins and Enzymes

This course focuses on the structure of proteins, the thermodynamics of protein folding, enzyme catalytic mechanisms and enzyme kinetics. This course also introduces the field of bioinformatics, the use of computer databases to determine relationships between nucleic acid sequence, protein structure and protein function. Same as CHEM-426. Prerequisite: CHEM-222. 3 SH. 3 lecture hours.

BIOL-427 Biochemistry of Proteins and Enzymes Laboratory

This lab explores enzyme kinetics and inhibition, as well as methods of isolation, purification, identification, and analysis of proteins and enzymes. This lab is designed to provide technical skills necessary for biochemical research. Same as CHEM-427. Prerequisite: CHEM-222. 1 SH. 3 laboratory hours.

BIOL-429 Biochemistry of Metabolism Laboratory

This lab explores metabolic function and metabolites. The lab focuses on the isolation, purification, identification and analysis of metabolites. Same as CHEM-429. Prerequisite: CHEM-222. 1 SH. 3 laboratory hours. CC: Team Intensive.

BIOL-440 Behavioral Neuroendocrinology

This course deals with the interrelationships among hormones, the brain and behavior. The role of the nervous system and hormones in the development and regulation of behavior, as well as how experience can regulate neuroendocrine physiology, will be examined. This course puts special emphasis on generating and testing hypotheses based on knowledge gained from reviewing the primary literature. Specific topics covered include the endocrine regulation of reproductive behavior, aggressive behavior, biological rhythms, energy balance, stress, learning and memory. Prerequisite: BIOL-205. Corequisite: BIOL-441. 3 SH. CC: Writing Intensive.

BIOL-441 Behavioral Neuroendocrinology Laboratory

This course investigates the experimental methodology used by behavioral neuroendocrinologists to investigate the interrelationships among hormones, the brain and behavior. The course provides hands-on learning about laboratory techniques that examine neuropeptides, hormones, brain structures and behavior, as well as proper use of animals in research, experimental design and statistical analysis. Hypothesis development and testing is emphasized, and a portion of the grade is based on an independent research project. Prerequisite: BIOL-205. Corequisite: BIOL-440. 1 SH. 3 laboratory hours. CC: Writing Intensive.

BIOL-450 Advanced STEM Seminar

This seminar is taken by students in the STEM Scholars' Program in the second, third and fourth years as a way of continuing to work together to build the STEM cohort, learn about STEM careers, and explore their own interests and aptitudes regarding future career options. Not for major or minor credit. Prerequisite: BIOL-250. 0.5 SH.

BIOL-455 Functional Neuroanatomy

This course is a detailed look at the sophisticated cellular and molecular mechanisms in the nervous system and how these mechanisms provide the foundation for circuits and functional neuroanatomical structures capable of generating complex behaviors and physiological functions. This course connects functional cellular and anatomical units of the nervous system to behaviors typically addressed by the field of psychology, such as learning, motivation, addiction and psychological disorders. The initial material focuses on the molecular structure and function of neurons and then builds upon this foundation by progressively assembling the functional neuroanatomical structures of the nervous system and considering the complex behaviors that these structures generate. Prerequisites: BIOL-102, PSYC-101 and junior standing or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Interdisciplinary.

BIOL-460 Winter Ecology of Vertebrates

This course will survey all amniote vertebrates and their winter adaptations. It will focus on physiological ecology, evolution, morphology, reproduction and development of reptiles, birds and mammals. This upper-level biology/ecology course is designed to be taken by students to fulfill distribution requirements during their sophomore, junior and/or senior years. Prerequisite: BIOL-101 or ECOL-100. 3 SH. 3 lecture hours.

BIOL-461 Winter Ecology of Vertebrates Laboratory

This course will survey all amniote vertebrates and their winter adaptations. Through the different laboratories students will be introduced to field and laboratory methodologies of identifying Pennsylvania early vertebrates, specimen handling, collecting techniques, dissection, preparation and field sign recognition. This upper-level biology/ecology course is designed to be taken by students to fulfill distribution requirements during their sophomore, junior and/or senior years. Prerequisite: BIOL-101 or ECOL-100. 1 SH. 3 laboratory hours.

BIOL-500 Topics in Biology

Varying topics of interest to students and instructor. Possible topics include genetic engineering advances in embryology, plant products, reproductive physiology and stress ecology. Prerequisites: Prior course in general topic area and instructor's permission. Variable credit.

BIOL-501 Seminar in Biology

Weekly one-hour meetings in which students and staff report and discuss current biological research literature. Senior biology majors in Group B track require one semester. 2 SH. Capstone.

BIOL-502 Biology Internship

Career investigation for junior and senior biology majors. May be repeated once. A written report of the internship will be required. Prerequisite: First two years of the biology major program. 1 SH. Minimum of 5 contact hours.

BIOL-504 Independent Study in Biology

Investigation of a specific topic or problem in biology under the guidance of an appropriate faculty member. 1-4 SH.

BIOL-510 Student Research I

Introduces students to methods and techniques of biological research in the context of a collaborative research project. Required for students in the Group A track. Prerequisite: Instructor's permission. 4 SH. 16 contact hours. Capstone.

BIOL-511 Student Research II

Collaborative research with an emphasis on presentation of data and explanation of results. Required for students in the Group A track. Prerequisite: Instructor's permission. 4 SH. 16 contact hours. Capstone. CC: Oral Intensive, Writing Intensive.

BIOL-550 Explorations in Biology

Explores salient issues in the biological sciences. Prerequisites: BIOL-101 or BIOL-102, junior standing or instructor's permission. 2-4 SH.

BIOL-560 Interdisciplinary Explorations in Biology

Explores salient issues in the biological sciences from an interdisciplinary perspective. Prerequisites: Sophomore standing and either BIOL-101 or BIOL-102 or instructor's permission. 2-4 SH. CC: Interdisciplinary.

CHEMISTRY

Faculty

Geneive Elizabeth Henry, Ph.D., Professor of Chemistry, department head

Swarna Basu, Ph.D., Associate Dean of the School of Arts and Sciences, Professor of Chemistry

Wade Johnson, Ph.D., Associate Professor of Chemistry

Lou Ann Tom, Ph.D., Associate Professor of Chemistry

William G. Dougherty Jr, Ph.D., Assistant Professor of Chemistry

Courtney L. Thomas, Ph.D., Visiting Assistant Professor of Chemistry

Ashantha A. Fernando, Ph.D., Post-Doctoral Teaching Fellow

American Chemical Society Accreditation. The department's major in chemistry is accredited by the American Chemical Society.

Learning Goals:

- Demonstrate the ability to apply appropriate chemical and physical models to make predictions or draw conclusions regarding chemical systems or phenomenon. Examples of chemical systems are compound formation (synthesis), energy transfer, equilibrium composition, various physical properties, chemical reactivity, etc.
- Demonstrate mastery of laboratory skills and execute common experimental techniques.
- Demonstrate the ability to design, prepare, execute and adjust experiments.
- Describe the theoretical and operational principles of common laboratory instrumentation such as NMR, FT-IR, UV-Vis, AA, fluorescence spectrometers, GC-MS, HPLC and electrochemical analysis instrumentation, as well as their typical uses, sensitivities and limitations. Interpret the data collected with such instrumentation.
- Find topic-specific chemical literature, interpret and evaluate chemical studies as described in scientific journals, and describe these conclusions through written and oral presentations.
- Analyze and interpret data to detect trends, evaluate the quality of data and reach scientifically valid conclusions.

Requirements for the Majors in Chemistry, Biochemistry and Chemical Physics. Susquehanna offers a Bachelor of Arts degree in chemistry and Bachelor of Science degrees in chemistry, biochemistry and chemical physics.

Chemistry

The Bachelor of Arts degree in chemistry requires the following courses, with grades of C- or better:

4	General Chemistry I – choose from: CHEM-101, CHEM-103 or CHEM-111
4	General Chemistry II – choose from: CHEM-102, CHEM-104 or CHEM-112
4	CHEM-221 Organic Chemistry I
4	CHEM-222 Organic Chemistry II
4	CHEM-231 Quantitative Analysis
4	CHEM-341 Physical Chemistry I
4	CHEM-342 Physical Chemistry II

4 CHEM-450 Advanced Inorganic Chemistry

4 PHYS-204 Introductory Physics I (Calculus-based)

4 PHYS-205 Introductory Physics II (Calculus-based)

4 Four semester equivalents of CHEM-505 Seminar

0-8 Mathematics through MATH-112 Calculus II

Other chemistry courses selected to fulfill career goals.

The Bachelor of Science degree in chemistry requires a minimum of 41 semester hours in chemistry, including all courses required for the Bachelor of Arts degree, plus CHEM-430 Instrumental Analysis, one elective in chemistry or biochemistry, and an additional four-semester-hour mathematics or computer science course other than MATH-101 or MATH-105. All required courses must be completed with a grade of C- or higher.

A student may qualify to graduate as an American Chemical Society certified professional chemist by completing CHEM-430 Instrumental Analysis and CHEM-422 The Biochemistry of Nucleic Acids or CHEM-426 The Biochemistry of Proteins and Enzymes, and one advanced senior course beyond the Bachelor of Arts courses in chemistry.

Secondary Teaching Certification. The Chemistry Department offers secondary teaching certification for both chemistry and biochemistry majors.

Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least three semester hours in British or American literature, at least six semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship. Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners: Theory and Instruction, EDUC-380 Instructional Design, EDUC-424 Methods of Curriculum, Instruction and Assessment in Teaching Science, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching Package (EDUC-501, EDUC-502, EDUC-503 and EDUC-600).

In addition, secondary education chemistry students complete all of the usual requirements for the chemistry or biochemistry major.

Biochemistry

The Bachelor of Science degree in biochemistry requires the following courses with grades of C- or better:

4 General Chemistry I – choose from: CHEM-101, CHEM-103 or CHEM-111

4 General Chemistry II – choose from: CHEM-102, CHEM-104 or CHEM-112

4 CHEM-221 Organic Chemistry I

4 CHEM-222 Organic Chemistry II

4 CHEM-231 Quantitative Analysis

4 CHEM-341 Physical Chemistry I

4 CHEM-426 The Biochemistry of Proteins and Enzymes and CHEM-427 Biochemistry of Proteins and Enzymes Laboratory

4 CHEM-422 The Biochemistry of Nucleic Acid and CHEM-423 The Biochemistry of Nucleic Acid Lab or CHEM-424 The Biochemistry of Metabolism and CHEM-429 Biochemistry of Metabolism Lab

4 Four semester equivalents of CHEM-505 Seminar

4 PHYS-204 Introductory Physics I (Calculus-based)

4 PHYS-205 Introductory Physics II (Calculus-based)

4 BIOL-102 Cell Biology and Genetics

12 12 semester hours of biology courses beyond BIOL-102, at least 8 of which must be at or above the 300 level (excluding BIOL-501 and BIOL-510)

Chemical Physics

The Bachelor of Science degree in chemical physics requires the following courses with grades of C- or better:

4 General Chemistry I (Choose from: CHEM-101, CHEM-103 or CHEM-111)

4 General Chemistry II (Choose from: CHEM-102, CHEM-104 or CHEM-112)

4 CHEM-221 Organic Chemistry I

4 PHYS-204 Introductory Physics I

4 PHYS-205 Introductory Physics II

4 CHEM-341 Physical Chemistry I

4 CHEM-342 Physical Chemistry II

4 PHYS-404 Thermodynamics and Statistical Methods

4 MATH-111 Calculus I

4 MATH-112 Calculus II

4 MATH-201 Linear Algebra

4 Capstone, chosen from CHEM-500 Problems in Chemistry or PHYS-550 Physics Research

Other requirements: Students must select at least four courses from the following list, with at least one course from each department and no more than two courses from a single department. Students may take additional courses as long as the total number of semester hours in the major does not exceed 64.

Chemistry

CHEM-306 Nanoscience

CHEM-430 Instrumental Analysis

Mathematics

MATH-211 Multivariate Calculus

MATH-353 Differential Equations

Physics

PHYS-101 Introduction to Digital and Analog Electronics

PHYS-105 Independent Thought and Exploration in Physics

PHYS-306 Modern Physics

Honors in Chemistry. The departmental honors program encourages and recognizes superior performance in chemistry. To graduate with honors in chemistry, candidates must do the following:

- Petition the department in writing by the third week of their final semester,
- Maintain at least a 3.25 cumulative GPA overall and a 3.50 cumulative GPA in chemistry courses (plus biology courses for biochemistry majors),

- Submit an acceptable written thesis based on two four-hour semesters of senior research work in CHEM-500 Problems in Chemistry (or BIOL-510 if approved by chemistry department), and
- Pass an oral exam based on the submitted thesis.

Minor in chemistry. Students minoring in chemistry complete five courses: General Chemistry I (chosen from: CHEM-101, CHEM-103 or CHEM-111), General Chemistry II (CHEM-102, CHEM-104 or CHEM-112), CHEM-221 Organic Chemistry I, either CHEM-231 Quantitative Analysis or CHEM-311 Analytic Chemistry, and one course chosen from CHEM-222 Organic Chemistry II, CHEM-341 Physical Chemistry I, CHEM-422 The Biochemistry of Nucleic Acids, CHEM-424 The Biochemistry of Metabolism, and CHEM-426 The Biochemistry of Proteins and Enzymes.

Minor in biochemistry. Students minoring in biochemistry complete the General Chemistry I (chosen from: CHEM-101, CHEM-103 or CHEM-111), General Chemistry II (CHEM-102, CHEM-104 or CHEM-112), the Organic Chemistry I-II sequence (CHEM-221-222), The Biochemistry of Proteins and Enzymes lecture and lab (CHEM-426 and CHEM-427), and either CHEM-422 The Biochemistry of Nucleic Acids or CHEM-424 The Biochemistry of Metabolism.

Chemistry Courses

CHEM-100 Trends in Chemistry

Emphasizes the use of chemistry by society and in nature. This course presents the basic chemical concepts in a variety of contexts. Subjects might include environmentally friendly green chemistry, medicinal, nanotechnology, chemistry of movies and magic, or chemistry of everyday objects. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Scientific Explanations.

CHEM-101 General Chemistry I

Fundamental laws and principles, the properties and reactions of common elements and compounds, and principles of chemical equilibria. Students may receive credit for only one of the three introductory chemistry sequences, CHEM-101-102, CHEM-103-104, CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Scientific Explanations.

CHEM-102 General Chemistry II

Fundamental laws and principles, the properties and reactions of common elements and compounds, and principles of chemical equilibria. CHEM-221 is the next level. Students may receive credit for only one of the three introductory chemistry sequences, CHEM-101-102, CHEM-103-104, CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory hours.

CHEM-103 General Chemistry I: Teams

Fundamental laws and principles, the properties and reactions of common elements and compounds, and principles of chemical equilibria taught in a team-based format. Students may receive credit for only one of the three introductory chemistry sequences: CHEM-101-102, CHEM-103-104 or CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Scientific Explanations, Team-Intensive.

CHEM-104 General Chemistry II: Teams

Fundamental laws and principles, the properties and reactions of common elements and compounds, and principles of chemical equilibria taught in a team-based format. CHEM-221 is the next level. Students may receive credit for only one of the three introductory chemistry sequences: CHEM-101-102, CHEM-103-104 or CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Team-Intensive.

CHEM-111 General Chemistry I: Teams WS

Fundamental laws and principles, the properties and reactions of common elements and compounds, and principles of chemical equilibria taught in a team-based workshop format, with the lab and lecture integrated. Students may receive credit for only one of the three introductory chemistry sequences: CHEM-101-102, CHEM-103-104, CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Scientific Explanations, Team-Intensive.

CHEM-112 General Chemistry II: Teams WS

Fundamental laws and principles, the properties and reactions of common elements and compounds, and principles of chemical equilibria taught in a team-based workshop format, with the lab and lecture integrated. CHEM-221 is the next level. Students may receive credit for only one of the three introductory chemistry sequences: CHEM-101-102, CHEM-103-104, CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Team-Intensive.

CHEM-221 Organic Chemistry I

Basic concepts of stereochemistry, spectroscopy, and chemistry of aliphatic and aromatic hydrocarbons and derivatives. Prerequisite: CHEM-102, CHEM-104 or CHEM-112. 4 SH. 3 lecture hours, 3 laboratory hours.

CHEM-222 Organic Chemistry II

Basic concepts of stereochemistry, spectroscopy, and chemistry of aliphatic and aromatic hydrocarbons and derivatives. Prerequisite: CHEM-221. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Writing Intensive.

CHEM-231 Quantitative Analysis

Classical analytical methods for quantitative determination of chemical species. Techniques are selected from volumetric, gravimetric, potentiometric and spectrophotometric methods. Prerequisites: CHEM-101-102, CHEM-103-104 or CHEM-111-112. 4 SH. 2 lecture hours, 2 three-hour laboratories.

CHEM-300 Topics in Chemistry

Varied topics reflecting student and instructor interests. Possibilities include medicinal chemistry, nanoscience, forensic chemistry, pharmaceutical chemistry, environmental chemistry and green chemistry. Prerequisite: CHEM-222 (may be others for some topics). 1-4 SH. Offered as lecture only, laboratory only, as a lecture/laboratory combination.

CHEM-302 Medicinal Chemistry

This course integrates principles from the disciplines of chemistry, biology and pharmacology to study the discovery, design and mechanisms of action of important anticancer, antiviral, antibacterial, cardioprotective and antidepressant drugs. Major emphasis is placed on drug interactions with nucleic acids, enzymes and receptors. Prerequisites: Junior standing and CHEM-222. 4 SH. Offered as lecture only. CC: Interdisciplinary.

CHEM-303 Scientific Ethics, Blunders and Fraud

Examines the science and the scientific method through the lens of ethics to distinguish scientific error from outright fraud. The course looks at classic and contemporary scientific blunders and fraud cases in academia, industry and government. Examines ethical policy from the fallout of academic fraud. Prerequisites: Sophomore standing and CHEM-222. 4 SH. CC: Ethics Intensive, Interdisciplinary.

CHEM-304 Pharmaceutical Chemistry

In this course students will learn about partition coefficient and biopharmacy, physicochemical properties of drugs, stereochemistry, drug metabolism, volumetric analysis of drugs, analytical spectroscopy, stability of drugs and medicines, kinetics of drug stability, licensing of drugs and the British Pharmacopoeia, method validation, and GMPs. Prerequisites: Junior standing and CHEM-222. 4 SH. 4 lecture hour (may be taught 3 lecture hours, 3 laboratory hours). CC: Interdisciplinary.

CHEM-305 Forensic Chemistry

This course approaches the challenges, methods, analyses and ethics of forensic chemistry from fundamental chemical and biological perspectives, including quality assurance, sampling and evidence collection and preservation, instrumentation, drugs as physical evidence, analysis of seized drugs, drugs in the body, forensic toxicology, combustion and arson, explosives, firearms, colorants, polymers, paper and fibers, and forensic DNA analysis. Students will also be able to articulate the basic ethical questions and issues related to the study of forensics. Prerequisites: Junior standing

and CHEM-222. 4 SH. 4 lecture hours (may be taught 3 lecture hours, 3 laboratory hours). CC: Ethics Intensive, Interdisciplinary.

CHEM-306 Nanoscience

An introduction to many aspects of nanoscience and nanotechnology. Interdisciplinary connections between chemistry, physics, biology and material science are investigated through readings, discussions and laboratory experiments. Major topics include the formation and implementation of nano-structured systems, synthesis, and detection of nanoparticles, their current roles in technology, medical applications, ethical implications, and the likely future impact of such systems on society, industry and the environment. Prerequisites: Sophomore standing and CHEM-222. 4 SH. CC: Interdisciplinary.

CHEM-311 Analytical Chemistry

Chemical species are analyzed by classical quantitative and modern spectrometric methods. Theory of equilibrium, potentiometric, optical, chromatographic and mass spectral techniques are discussed. Laboratories range from volumetric, gravimetric and potentiometric wet techniques to photospectrometric methods (Uv-vis, FT-IR, AA) and mass spectrometry. This class is specifically designed for the chemistry minor and does not count toward the chemistry major, the biochemistry major or as an elective. Prerequisites: CHEM-101-102, CHEM-103-104 or CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory hours.

CHEM-341 Physical Chemistry I

An in-depth study of classical and statistical thermodynamics and reaction kinetics presented with applications to phase equilibria, chemical equilibria, solute-solvent interactions and nonequilibrium thermodynamics. Prerequisites: CHEM-231, MATH-112, and PHYS-205 (Calculus-based) or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Writing Intensive.

CHEM-342 Physical Chemistry II

Introduction to quantum chemistry and spectroscopy. Theory of quantum mechanics presented at a fundamental level with special attention paid to classical problems—particle in a box, harmonic oscillator, rigid rotor and hydrogen atom—and practical application to the electronic structure of atoms and molecules and to atomic and molecular spectroscopy. Prerequisites: CHEM-231, MATH-112 and PHYS-205 (Calculus-based) or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory hours.

CHEM-400 Research Experience

Individual investigation of a novel problem in chemistry or biochemistry in collaboration with a faculty member. May be repeated for credit. Prerequisite: Instructor's permission. 1-4 SH.

CHEM-422 The Biochemistry of Nucleic Acids

This course integrates information from the disciplines of biology and chemistry to explore nucleic acid function and metabolism. In-depth discussions cover the forces behind DNA/DNA, DNA/RNA and DNA/protein interactions as they apply to DNA structure and metabolism, RNA function and metabolism, protein synthesis, and gene regulation. Same as BIOL-422. Prerequisite: CHEM-222. Strongly recommended: BIOL-426/CHEM-426. 3 SH. 3 lecture hours.

CHEM-423 Biochemistry Nucleic Acids Laboratory

Exploration of nucleic acids, including methods of isolation, purification, identification and analysis. Same as BIOL-423. Prerequisite: CHEM-222. 1 SH. 3 laboratory hours.

CHEM-424 The Biochemistry of Metabolism

This course covers the structure and function of major biomolecules such as carbohydrates and lipids and their role in metabolism. Energy metabolism and biomolecule biosynthesis and degradation are emphasized. Same as BIOL-424. Prerequisite: CHEM-222. Strongly recommended: BIOL-426/CHEM-426. 3 SH. 3 lecture hours. CC: Team Intensive.

CHEM-426 The Biochemistry of Proteins and Enzymes

This course focuses on the structure of proteins, the thermodynamics of protein folding, enzyme catalytic mechanisms and enzyme kinetics. This course also introduces the field of bioinformatics, the use of computer databases to determine relationships between nucleic acid sequence, protein structure and protein function. Same as BIOL-426. Prerequisite: CHEM-222. 3 SH. 3 lecture hours.

CHEM-427 Biochemistry of Proteins and Enzymes Laboratory

This lab explores enzyme kinetics and inhibition, as well as methods of isolation, purification, identification and analysis of proteins and enzymes. This lab is designed to provide technical skills necessary for biochemical research. Same as BIOL-427. Prerequisite: CHEM-222. 1 SH. 3 laboratory hours.

CHEM-429 Biochemistry of Metabolism Laboratory

This lab explores metabolic function and metabolites. The lab focuses on the isolation, purification, identification and analysis of metabolites. Same as BIOL-429. Prerequisite: CHEM-222. 1 SH. 3 laboratory hours. CC: Team Intensive.

CHEM-430 Instrumental Analysis

Instrumental techniques of analysis, focusing on spectroscopy, chromatography and voltammetry. Prerequisite: CHEM-341-342 or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory hours.

CHEM-450 Advanced Inorganic Chemistry

Inorganic atomic structure and bonding, coordination compounds, acid-base theory and selected inorganic systems. Prerequisite: CHEM-342. 4 SH. 3 lecture hours, 3 laboratory hours.

CHEM-490 Chemistry Independent Study

Individual work for qualified students under the direction of a faculty member. Usually deals with specialized topics not covered in regularly offered courses. Prerequisites: Instructor and department head approval. 2-4 SH.

CHEM-500 Problems in Chemistry

Individual study of a problem in experimental chemistry under the direction of a faculty member. May be repeated for credit. Prerequisite: Instructor's permission. 4 SH. Capstone.

CHEM-505 Seminar

Weekly meetings in which students report on current chemical research literature. Researchers from other institutions and industry will also be invited to present their research. Four semester hours in a manner approved by the student's adviser are required for all majors. Prerequisite: Junior standing. Variable credit. CC: Oral Intensive.

CHEM-590 Chemistry Internship

Selected students work in the chemical industry under the supervision of an industrial chemist. Prerequisites: CHEM-231 and department head's permission. 4 SH. S/U grade.

COMMUNICATIONS

Faculty

Kate Hastings, Ph.D., Associate Professor of Communications, department head

Bev Romberger, Ph.D., Professor of Communications

David C. Kaszuba, Ph.D., Associate Professor of Communications

Craig A. Stark, Ph.D., Associate Professor of Communications

Stephanie Hines, Visiting Lecturer in Communications

Linda Burkley, Visiting Lecturer in Communications

Rebecca Willoughby, Visiting Assistant Professor of Communications

Part-time faculty: Professionals in media and communications from throughout the region are hired to teach classes.

Communications Studies

Learning Goals:

- Students will be able to identify, explain and apply theory.
- Students will demonstrate communication skills (oral, visual, written, research).
- Students will recognize ethical implications and relate them to various contexts.
- Students will develop and practice critical thinking.

Requirements for the Bachelor of Arts in Communications. Susquehanna offers a major in communications with three possible emphases: digital multimedia (with tracks in broadcasting, journalism or sports media), strategic communications (with tracks in advertising and marketing communications or public relations) and communication arts (with tracks in speech communication or communication studies). Majors complete university Central Curriculum requirements, plus 46 to 50 semester hours of courses in a selected emphasis and track. These include introductory courses, practica for learning skills and specific emphases requirements. A grade of C- or better is required for any course to apply to the major or minor. Courses may count toward only one emphasis or minor.

The department also expects communications majors and minors to participate each semester in related co-curricular activities. Options include WQSU-FM radio station; the student newspaper; *The Lanthorn* student yearbook; Sterling Communications, the student-run public relations firm; the Paul Dannelley chapter of PRSSA; and other activities supervised by department faculty.

Digital Multimedia Emphasis

Broadcasting Track. Students fulfill the university Central Curriculum requirements, participate fully in WQSU radio operations and successfully complete the following courses:

24 Department Requirements

2	COMM-100 Grammar for Communicators
4	COMM-101 Essentials of Digital Media

4 COMM-190 Communication/Media Theory

4 COMM-192 Public Speaking

4 COMM-201 Ethics and Leadership

4 COMM-481 Media Law

1 COMM-501 Practicum

1 COMM-501 Practicum

26 Broadcasting Requirements

4 COMM-171 Introduction to Media

2 COMM-182 Writing for New Media

4 COMM-277 Audio Production and Media Performance

4 COMM-282 Fundamentals of Digital Video Production

4 COMM-379 Interactive and Gaming Media

4 COMM-382 Intermediate Digital Multimedia Production

4 COMM-482 Professional Digital Multimedia Production

Journalism Track. Students fulfill the university Central Curriculum requirements, participate fully in various media activities and successfully complete the following courses:

24 Department Requirements

2 COMM-100 Grammar for Communicators

4 COMM-101 Essentials of Digital Media

4 COMM-190 Communication/Media Theory

4 COMM-192 Public Speaking

4 COMM-201 Ethics and Leadership

4 COMM-481 Media Law

1 COMM-501 Practicum

1 COMM-501 Practicum

22 Journalism Requirements

4 COMM-131 Introduction to Journalism

4 COMM-231 Newswriting and Reporting

4 COMM-331 Editing

4 COMM-435 Feature Writing

4 ARTS-243 Digital Photography

or COMM-282 Fundamentals of Digital Video Production

1 COMM-501 Practicum

1 COMM-501 Practicum

Sports Media Track. Students prepare for careers in sports media and/or sports public relations/promotion by fulfilling the university Central Curriculum requirements, participating in sports-related communications practica and successfully completing the following courses:

24 Department Requirements

- 2 COMM-100 Grammar for Communicators
- 4 COMM-101 Essentials of Digital Media
- 4 COMM-190 Communication/Media Theory
- 4 COMM-192 Public Speaking
- 4 COMM-201 Ethics and Leadership
- 4 COMM-481 Media Law
- 1 COMM-501 Practicum
- 1 COMM-501 Practicum

24 Sports Media Requirements

- 2 COMM-141 Sports Journalism
- 2 COMM-241 Sports Media Relations and Promotion
- 4 COMM-277 Audio Production and Media Performance
- 4 COMM-282 Fundamentals of Digital Video Production
- 2 COMM-341 Sports Media I: Contemporary Issues
- 2 COMM-342 Sports Media II: Historical/Critical Analysis
- 4 COMM-382 Intermediate Digital Multimedia Production
- 4 COMM-482 Professional Digital Multimedia Production
- or COMM-435 Feature Writing

For practicum the department requires participation in a co-curricular activity with a sports focus, such as serving as sports director or play-by-play game announcers for WQSU radio, serving as sports editor for the student newspaper or *Lanthorn* yearbook, etc. Practicum opportunities are also available through collaboration with the Athletics Department (e.g. operating electronic scoreboards, assisting with press box management, etc.).

Though not required, it is strongly recommended that students complete a sports-related internship with a television station, minor league team, etc. In addition, students are encouraged to take one or more of the following courses: ARTG-251 Computer Applications in Graphic Design, ARTS-243 Digital Photography, COMM-182 Writing for New Media, COMM-323 Computer Design Skills, INFS-174 Database Systems Analysis and Design, and MGMT-280 Marketing.

Strategic Communications Emphasis

Advertising and Marketing Communications Track. Students fulfill the university Central Curriculum requirements, participate fully in departmental activities appropriate to their interests and successfully complete the following courses:

24 Department Requirements

- 2 COMM-100 Grammar for Communicators
- 4 COMM-101 Essentials of Digital Media
- 4 COMM-190 Communication/Media Theory

4 COMM-192 Public Speaking

4 COMM-201 Ethics and Leadership

4 COMM-481 Media Law

1 COMM-501 Practicum

1 COMM-501 Practicum

14 Advertising Requirements

4 COMM-217 Principles of Advertising

4 COMM-317 Print and Web Advertising

2 COMM-371 Broadcast Advertising: Writing and Practices

4 COMM-418 Integrated Marketing Communications

9-12 Art Requirements

4 ARTS-111 Foundations of Art I

4 ARTG-251 Computer Applications in Graphic Design

And 1 course from among the following:

4 ARTG-252 Visual Communication

4 ARTG-354 Interactive Graphic Design I

4 ARTS-243 Digital Photography

1-4 COMM-504 Internship

8 Business Requirements

4 MGMT-280 Marketing

4 Choose from: MGMT-216 Introduction to Luxury Brand Management or MGMT-382 Consumer Behavior

Public Relations Track. Students fulfill the university Central Curriculum requirements, participate fully in departmental activities appropriate to their interests and successfully complete the following courses:

24 Department Requirements

2 COMM-100 Grammar for Communicators

4 COMM-101 Essentials of Digital Media

4 COMM-190 Communication/Media Theory

4 COMM-192 Public Speaking

4 COMM-201 Ethics and Leadership

4 COMM-481 Media Law

1 COMM-501 Practicum

1 COMM-501 Practicum

22-24 Public Relations Requirements

4 COMM-131 Introduction to Journalism

4 COMM-211 Public Relations

4 COMM-314 Public Relations Writing and Campaigns

4 COMM-411 Public Relations/Corporate Communications Management

4 COMM-418 Integrated Marketing Communications

2-4 One of the following: COMM-231 Newswriting and Reporting, COMM-296 Dynamic Presentational Speaking, COMM-321 Crisis Management, COMM-323 Computer Design Skills, COMM-504 Internship, ARTS-243 Digital Photography, or MGMT-280 Marketing

Communication Arts Emphasis

Speech Communication Track. Students fulfill the university Central Curriculum requirements, participate fully in departmental activities appropriate to their interests and successfully complete the following courses:

24 Department Requirements

2 COMM-100 Grammar for Communicators

4 COMM-101 Essentials of Digital Media

4 COMM-190 Communication/Media Theory

4 COMM-192 Public Speaking

4 COMM-201 Ethics and Leadership

4 COMM-481 Media Law

1 COMM-501 Practicum

1 COMM-501 Practicum

18 Speech Communication Requirements

4 COMM-191 Interpersonal Communication

2 COMM-295 Effective Listening

4 COMM-194 Intercultural Communication

4 COMM-296 Dynamic Presentational Speaking

4 COMM-491 Team Communication

8 Department Electives, chosen from any COMM course

Communication Studies Track. Students fulfill the university Central Curriculum requirements, participate fully in departmental activities appropriate to their interests and successfully complete the following courses:

24 Department Requirements

2 COMM-100 Grammar for Communicators

4 COMM-101 Essentials of Digital Media

4 COMM-190 Communication/Media Theory

4 COMM-192 Public Speaking

4 COMM-201 Ethics and Leadership

4 COMM-481 Media Law

1 COMM-501 Practicum

1 COMM-501 Practicum

2 Communication Studies Requirement

1 COMM-501 Practicum

1 COMM-501 Practicum

24 Department electives, chosen from communications courses

Honors. The departmental honors program encourages and recognizes outstanding performance in communications. To graduate with department honors, candidates must do the following:

- Complete major requirements under guidance of a Communications Department faculty adviser, who agrees to serve as a sponsor at the student's request,
- Petition the honors coordinator with a written honors proposal no later than the second to last week of the end of the junior year. The submission must be approved as honors quality by departmental faculty,
- Maintain a 3.70 cumulative GPA in department courses,
- Produce an acceptable written or production thesis based on one year of senior research/production work (COMM-503 Honors Study) beyond the required major track semester hours,
- Submit the thesis at least two weeks before graduation, and
- Successfully complete an oral defense of the honors thesis.

Honors work not meeting the required standards will be applied as a university elective course.

Departmental honors may be taken separately from or in conjunction with the university Honors Program.

Honor Societies. Students who meet the requisite national and local standards are eligible to join the national honorary society Lambda Pi Eta (communications).

Communication Minors
Communications majors may not count the same course for an emphasis and a minor. Moreover, courses selected require a grade of C- or higher and may not count toward more than one minor.

Minor in Advertising. Students are expected to participate in department activities appropriate to their interests and successfully complete 22-24 semester hours: COMM-100 Grammar for Communicators (for non-communications majors), COMM-217 Principles of Advertising, COMM-317 Print and Web Advertising, COMM-418 Integrated Marketing Communications, COMM-323 Computer Design Skills, COMM-371 Broadcast Advertising, two semesters of COMM-501 Practica, and one of the following electives: COMM-101 Essentials of Digital Media, ARTS-243 Digital Photography, ARTG-251 Computer Applications in Graphic Design, MGMT-382 Consumer Behavior or MGMT-216 Introduction to Luxury Brand Marketing and Management.

Minor in Broadcasting. Students are expected to participate in WQSU radio operations and successfully complete 26 semester hours: COMM-101 Essentials of Digital Media, COMM-182 Writing for New Media, COMM-171 Introduction to Media, COMM-277 Audio Production and Media Performance, COMM-282 Fundamentals of Digital Media Production, COMM-481 Media Law and COMM-501 (two practica–one in radio and one of the student's choice).

Minor in Journalism. Students are expected to participate in the student newspaper and/or *The Lanthorn* or other department activities appropriate to their interests and successfully complete 22 semester hours: COMM-131 Introduction to Journalism, COMM-231 Newswriting and Reporting, COMM-331 Editing, COMM-435 Feature Writing, either COMM-282 Fundamentals of Digital Media Production or ARTS-243 Digital Photography, and COMM-501 (two practica).

Minor in Public Relations. Students are expected to participate in PRSSA, Sterling Communications or various media activities appropriate to their interests and complete 22-24 semester hours: COMM-100 Grammar for Communicators, COMM-131 Introduction to Journalism, COMM-211 Public Relations, COMM-314 Public Relations Writing and Campaigns, COMM-411 Public Relations/Corporate Communications Management, and COMM-501 (two practica) and one of the following courses: COMM-101 Essentials of Digital Media, COMM-192 Public Speaking, COMM-323 Computer Design Skills, COMM-201 Ethics and Leadership, and COMM-418 Integrated Marketing Communications.

Minor in Speech Communication. Students are expected to participate in departmental activities appropriate to their interests and complete 22 semester hours: COMM-190 Communication/Media Theory, COMM-191 Interpersonal Communication, COMM-192 Public Speaking and COMM-491 Team Communication and six semester hours chosen from the following: COMM-295 Effective Listening, COMM-194 Intercultural Communication, COMM-201 Ethics and Leadership, COMM-296 Dynamic Presentational Speaking, or COMM-501 (two practica).

Communications Courses

Required of All Communications Majors

COMM-100 Grammar for Communicators

A review of American English grammar and punctuation, with emphasis on parts of speech, sentence structure, agreement, case and commas. 2 SH.

COMM-101 Essentials of Digital Media

This course includes basic operating concepts of computers and a hands-on introduction to word processing, email, spreadsheets, presentations, search, website creation and other uses. Students will be introduced to the design and production requirements for documents and content for Web distribution (Photoshop and Adobe Acrobat specifically). Media convergence and issues of audience consideration and usage will also be addressed. 4 SH. CC: Team Intensive.

COMM-190 Communication/Media Theory

An introductory exploration of the underlying theories that allow us to understand both person-to-person communication and communication media events and processes. Systems, sign theory, cognitive and behavioral, cultural and social, and critical perspectives are examined as they apply to interpersonal, group, organizational and media contexts. 4 SH. CC: Writing Intensive.

COMM-192 Public Speaking

Basic principles of effective extemporaneous speaking to inform and persuade an audience. Emphasizes audience analysis, idea development, organization and delivery skills. Students deliver, listen to and criticize classroom speeches. 4 SH. CC: Oral Intensive.

COMM-201 Ethics and Leadership

Uses case studies to examine the types of ethical challenges that face professional communicators across a variety of contexts, while requiring students to analyze those situations critically. The role of leadership in navigating ethical dilemmas is highlighted, as are several case studies where ethical questions intersect with diversity-related issues. 4 SH. CC: Diversity Intensive, Ethics Intensive.

COMM-481 Media Law

Examines legal aspects of print and electronic communications. Emphasizes First Amendment, freedom of the press, the right to know, copyright, libel and privacy. Prerequisite: Senior standing. 4 SH. CC: Interdisciplinary.

COMM-501 Practicum

Applied projects in broadcasting, print journalism and public relations. All department majors successfully complete the required number of semester hours required in the student's emphasis, but no more than six semester hours of practicum work. All projects require department approval, are graded, must be completed and include a minimum of five hours of project work per week. Students may complete only one project per semester and may not use practicum projects to fulfill simultaneously requirements of other courses. Prerequisite: Sophomore standing. 1 SH.

Digital Multimedia Emphasis

COMM-131 Introduction to Journalism

An introduction to journalism. Topics include American newspaper history, elements of libel, copyediting symbols, Associated Press style, news leads, inverted pyramid format, interviewing, attributing quotations, writing stories on speeches and meetings, and reading print and online newspapers critically. 4 SH. CC: Writing Intensive.

COMM-141 Sports Journalism

The foundational course in the sports media program. The course instructs students on the basics of writing sports stories, primarily game summaries for print media, such as newspapers and websites. Other topics include feature stories, column writing, interviewing technique, and Associated Press style. Attention is also given to writing game stories for broadcast media, such as television and radio, as well as writing for blogs and other new media platforms. 2 SH.

COMM-171 Introduction to Media

Survey of electronic media: history, evaluation, organization, convergence and function. Includes economic and cultural influences on society and legal, educational and artistic aspects. 4 SH.

COMM-182 Writing for New Media

Introduces students to basic media writing skills for broadcast and the Web. Students will engage in the production of Web writing and design, with an emphasis on interactive writing in script form, flowcharts and digital media environments. Prerequisite: COMM-101. 2 SH.

COMM-231 Newswriting and Reporting

The theory and practice of covering local government, police and courts and of writing obituaries. Topics include news sources, news selection, covering beats, basic photojournalism and ethical reporting. Prerequisites: COMM-101 and COMM-131. 4 SH.

COMM-241 Sports Media Relations and Promotion

Introduces students to the public relations function within the sports industry, especially the media relations position common to professional teams, leagues and university athletic programs. Students learn how to write news releases and arrange news conferences, in addition to learning about media guide assembly, press box management, and promotion of sports and athletes via social media. 2 SH.

COMM-277 Audio Production and Media Performance

Examines the theory and practice of audio production and broadcast operations, including sound and broadcast wave theory, console operation, microphone techniques, commercial production, digital editing and on-air procedures. Students will produce broadcast-quality audio projects in addition to developing a working knowledge and appreciation for high-quality sound and video production. Includes an examination and study of basic announcing techniques for audio and video, such as voice and diction, pronunciation and oral interpretation of American speech for broadcast and online distribution. Prerequisite: COMM-101. 4 SH.

COMM-282 Fundamentals of Digital Video Production

An introduction to small to medium format video production. Covers basic equipment, terminology, personnel and video production techniques in the studio and field. Includes writing, producing and editing of assigned short projects such as commercials or brief interview segments. Prerequisite: COMM-101. 4 SH.

COMM-331 Editing

The process of editing news for print and online outlets. Includes developing assignments, editorial judgment and ethical considerations, copy-editing, type styles and sizes, headline writing, graphic and photo design, and page layout. Prerequisite: COMM-131. 4 SH.

COMM-341 Sports Media I: Contemporary Issues

Students will critically examine contemporary issues in professional and/or amateur sports as presented through the mass media. The course will demonstrate how sports media covers and frames these issues with likely perspectives, including cultural, political, economic and/or feminist perspectives. 2 SH.

COMM-342 Sports Media II: Historical/Critical Analysis

This course provides students with an informative background of selected persons and events that have made an historical impact on sports and sports media. Historical examinations will start with a biographical approach by

providing necessary information and background. Students will also analyze past and contemporary media coverage of the persons and events through the critical lenses of cultural, economic, political and feminist perspectives. 2 SH.

COMM-379 Interactive and Gaming Media

This course engages students in the art and practice of contemporary media criticism with a focused attention on the industries that produce interactive digital media products such as video games and simulation technologies. Students will gain familiarity with various approaches of contemporary criticism and apply these approaches in the study, exploration and analysis of current and emerging interactive and gaming media. Students will gain a deeper understanding of the movement and interconnection that exists between these media technologies and their potential social, economic, cultural and political impacts and effects. The historical development, structure, organization, function and effects of interactive and gaming media will be incorporated into the analysis. The course also considers related products for educational use, medical applications, military applications and other virtual environments. 4 SH. CC: Writing Intensive.

COMM-382 Intermediate Digital Multimedia Production

An emphasis on advanced video editing techniques and special effects utilizing Adobe Premiere Pro editing software. Students edit and produce complete programs and projects from field-recorded video and student-recorded productions. Emphasis will be on both the technical operation of sophisticated editing systems and the aesthetics of program editing. Students will be required to engage the Web as a system for distribution of content and will be expected to produce and create their own personal Web pages and portfolio blogs. Prerequisites: COMM-277 and COMM-282. 4 SH.

COMM-435 Feature Writing

The process of determining a medium's audience, developing story ideas, writing query letters, and researching and writing feature articles. How-tos, profiles, and travel and human interest articles are among the assignments. Students prepare and print online portfolios. Prerequisites: Junior or senior standing and COMM-131. Capstone for Journalism or Communications Studies. 4 SH.

COMM-482 Professional Digital Multimedia Production

Engages students in the advanced methods of digital multimedia production. Students will produce a variety of projects that demonstrate their understanding of production skills, including audio and video production for broadcast and the Web. Students will be required to maintain personal portfolio blogs that showcase content produced in this course and others. Students will gain an understanding of the ethical and theoretical frameworks of video broadcasting. Prerequisites: Senior standing and COMM-382. Capstone for Broadcasting or Communications Studies. 4 SH.

Strategic Communications Emphasis

COMM-211 Public Relations

Survey of the history, development, principles and practices of public relations. Investigates public relations ethics, relationships and roles of mass media in a convergent society. Includes case studies in public relations practices. 4 SH.

COMM-217 Principles of Advertising

Students evaluate how advertisers select the appropriate media to reach their targeted audiences. They will be able to compare and contrast the advantages and disadvantages of various advertising options. 4 SH.

COMM-221 Corporate Communications

Overview of the development, principles and practices of corporate communications and principles of message design. Includes case studies and corporate simulations. 4 SH.

COMM-223 Corporate Communications Writing

Introduction to message content and style for corporate writing. Emphasizes memos, letters, advertisements and brochures. 2 SH.

COMM-314 Public Relations Writing and Campaigns

Emphasizes writing styles and techniques for brochures, publicity, news releases, fact sheets, backgrounders and biographies. Discussion of convergent media. Students produce creative work on actual public relations problems, as well as an overall plan to handle a simulated problem. Prerequisites: COMM-131 and COMM-211. 4 SH.

COMM-317 Print and Web Advertising

Students apply the principles and techniques of advertisements found in various print media and online. They use hands-on skills to design and create camera-ready ads in such media for products, services and nonprofit organizations. Prerequisites: COMM-217 and either COMM-323 or ARTG-251. 4 SH.

COMM-321 Crisis Management

In today's world crises are inevitable. Crisis management recognizes and deals with systems and system failures. This course introduces students to a management approach for working with crises before, during and after they occur. Communications-related elements and challenges are especially emphasized. Prerequisite: Junior standing. 4 SH.

COMM-323 Computer Design Skills

A study of design principles and computer software for the online content of newsletters, brochures and advertisements. Topics include fonts and typography, proportion, graphics, photographs, contrast and color. Prerequisite: COMM-131 or COMM-101. 2 SH.

COMM-371 Broadcast Advertising: Writing and Practices

Theory and technique of writing commercial scripts for radio and television. Covers broadcast ratings analysis and interpretation, time sales, personnel and client relationships. 2 SH.

COMM-411 Public Relations/Corporate Communications Management

Modules include management, strategy, government affairs and corporate advertising. Self-managed teams simulate agency communications consulting. Prerequisites: Second-semester junior or senior standing, COMM-211 and COMM-314, or COMM-221 and COMM-223. Capstone for Public Relations or Corporate Communications. 4 SH. CC: Team Intensive.

COMM-418 Integrated Marketing Communications

Reflects the growing practice of effectively combining an organization's communication tools in a united effort for goal accomplishment. Topics include advertising, public relations, sales promotions, marketing, social media, e-commerce and sponsorships. Legal and ethical considerations are also discussed. Same as MGMT-318. Prerequisite: Junior standing. Capstone for Advertising and Marketing Communications. 4 SH. CC: Interdisciplinary.

Communication Arts Emphasis

COMM-191 Interpersonal Communication

An introductory course on competent interpersonal communication skills. Topics include setting specific communication goals; ways we perceive, talk and listen to others; gender communication; how we use verbal and nonverbal communication; skills in relationships; and ethical considerations within the contexts of friendships, families, intimate partnerships and the workplace. 4 SH. CC: Social Interactions.

COMM-194 Intercultural Communication

An introduction to contemporary and foundational concepts, practices and processes of intercultural communication. Topics include the complex nature of social and cultural identities; privilege, power and oppression in historical and contemporary society; representations of cultures and identities in popular media; nonverbal codes and cultural space; and the relationship between language and culture. Special emphasis will be on ethical and mindful intercultural communication and social justice. 4 SH. CC: Diversity.

COMM-295 Effective Listening

Listening is almost a lost art. Effective listening is a person's willingness and ability to hear and understand, whether in a large meeting or in face-to-face encounters. This course helps improve listening knowledge, attitudes and skills in all aspects of listeners' personal, academic and professional lives. 2 SH.

COMM-296 Dynamic Presentational Speaking

Development of advanced skill in the construction and delivery of various types of presentations, including informative, persuasive, impromptu, briefings/reports, team and special occasions. Special emphasis on the solid use of PowerPoint visuals. Prerequisite: COMM-192. 4 SH. CC: Oral Intensive.

COMM-491 Team Communication

Theory and principles of effective team membership and leadership in the small group setting. Focuses on functional roles, verbal and nonverbal behaviors, decision making, problem solving, conflict resolution, ethics and diversity, and group dynamics through the observations of teams. Prerequisite: Junior or senior standing. Capstone for Speech Communication or Communications Studies. 4 SH. CC: Team Intensive.

COMM-500 Topics in Communications

Examines selected topics in communications, depending on student and instructor interest. Course may be repeated for credit if topic is different. 2-4 SH.

COMM-502 Individual Investigation

In-depth exploration of selected topics in broadcasting, film, public relations, print journalism, speech communication, mass communications or corporate communications with faculty guidance allows students to focus on topics outside normal sequence of course offerings. Prerequisite: Department-designated faculty director's permission. May be repeated but not for departmental major credit. 1-4 SH.

COMM-503 Honors Study

Independent study for candidates accepted into the departmental honors program. Candidates work under faculty direction, develop and submit written or production theses and defend their theses orally. 4 SH.

COMM-504 Internship

On-the-job, supervised experience at a corporation, governmental agency or nonprofit organization. Prerequisites: Junior or senior standing and internship coordinator's permission. Variable credit.

COMPUTER SCIENCE

Faculty

Edisanter Lo, Ph.D., Associate Professor of Mathematical Sciences, department head

Ken Brakke, Ph.D., Professor of Mathematical Sciences

Jeffrey A. Graham, Ph.D., Associate Professor of Mathematical Sciences

Toshiro Kubota, Ph.D., Associate Professor of Mathematical Sciences

Annika Kathryn Miller, Ph.D., Associate Professor of Math and Computer Science

Alex Wilce, Ph.D., Associate Professor of Mathematical Sciences

Lisa Schneider, Ph.D., Visiting Assistant Professor of Mathematical Science

Computer Science Studies

Learning Goals:

- The student attains knowledge of major computer science and mathematical concepts that will support the student's goals for further study or a career in computer science or related disciplines.
- The student develops the sufficient programming skills to support the student's goals.
- The student develops the ability to write professional documents in a style that is relevant to the student's goals.
- The student develops the ability to articulate computer science concepts.

Requirements for the Majors in Computer Science. Susquehanna offers two degree programs in computer science. To earn the Bachelor of Arts degree in computer science, students successfully complete, with grades of C- or better, the equivalent of the following 54 semester hours:

4	CSCI-181 Principles of Computer Science
4	CSCI-281 Data Structures
4	CSCI-282 Computer Organization
4	INFS-375 Database Programming
4	CSCI-381 Algorithms
4	MATH-111 Calculus I
4	MATH-180 Statistical Methods
4	MATH-201 Linear Algebra
4	MATH-221 Discrete Structures
12	12 semester hours of computer science (CSCI) courses at the 300 level or above
6	Six hours chosen from 150 level or above computer science, information systems, data science/analytics or other computer-related courses as approved by the Mathematical Sciences department head

Bachelor of Science in Computer Science. To earn the Bachelor of Science degree in computer science, a student must complete the requirements for the Bachelor of Arts in computer science plus MATH-112 Calculus II, PHYS-204 and either PHYS-101 or PHYS-205. All courses must be completed with a grade of C- or higher.

Minor in Computer Science. Students who minor in computer science successfully complete, with grades of C- or better, 24 semester hours, including CSCI-181 Principles of Computer Science, CSCI-281 Data Structures, four hours of computer science courses at the 300 level or above, and 12 additional hours of computer science courses or information systems courses above the 150 level, four of which must be above the 300 level.

Interdisciplinary Options. Students majoring in computer science can easily complete a minor in another department. Areas such as accounting, business, biology, chemistry, mathematics, physics or a foreign language are natural choices. Highly motivated students whose interests cross traditional departmental lines may also wish to consider the self-designed major option, developing an integrated program of study from courses in several departments. For further information, see the majors and minors section.

Capstone. The capstone requirement may be satisfied with CSCI-472 Software Engineering: Practicum, CSCI-483 Compiler Theory or CSCI-500 Senior Colloquium. Students need not fulfill the capstone requirement in their major, but they usually do. A capstone course taken as a junior does fulfill the requirement, but not as a sophomore.

Computer Science Courses

CSCI-151 Introduction to Programming

An introductory course in computer science for nonmajors. The course teaches computer programming with emphasis on logical thinking, problem solving and algorithmic development. PROCESSING or a similar programming language is used. Topics include variables, arithmetic and logical operators, graphics, user interface, built-in library calls, I/O operations, conditional statements, loops, functions, and classes. 4 SH. CC: Analytical Thought.

CSCI-181 Principles of Computer Science

An introductory course in computer science for majors. Also open to nonmajors. Emphasizes computer problem-solving methods and algorithmic development. Topics include programming in C++ or comparable language, techniques of good programming style, data types, file and screen input and output, control structures, subroutines, recursion, arrays, and pointers. 4 SH. CC: Analytical Thought.

CSCI-200 Multi-agent Modeling in the Natural and Social Sciences

This course will explore some of what computer science has to offer to the natural and social sciences. Many phenomena consist of interacting individuals that can be modeled as following a set of behavioral rules. Using a suitable computer language such as NetLogo, Repast or others, we will learn to model these phenomena. Some programming experience is helpful but not required. Prerequisites: Fulfillment of the Analytic Thought requirement, sophomore standing and completion of either the Social Interactions requirement or the Scientific Explanations requirement. Some programming experience would be helpful but is not required. 4 SH. CC: Interdisciplinary.

CSCI-235 Artificial Life

Science and mathematics describe natural phenomena so well that lines between real-world events and the corresponding theoretical world events have become blurred. Can computer models simulate key characteristics of life, such as behavior, motivation, reproduction, adaptation, perception and even intelligence? Proponents of strong artificial life believe that computers will eventually serve not only to model life processes but will actually think and be alive. These contentions are compared and contrasted with an emphasis on the current status and future implications of strong artificial life. This course is meant to be accessible to both majors and nonmajors. Same as MATH-235. Prerequisites: Junior standing and, to facilitate an elevated level of class discourse, completion of at least two of the following Central Curriculum requirements: Analytical Thought, Scientific Explanations or Ethics. 4 SH. CC: Ethics Intensive, Interdisciplinary.

CSCI-281 Data Structures

Second course in computer programming. Stresses the interplay between algorithms, data structures and their implementations. Topics include stacks, queues, linked lists, sorting, searching, binary trees and graphs. Prerequisite: CSCI-181 Principles of Computer Science. 4 SH.

CSCI-282 Computer Organization

Fundamentals of computer organization and machine architecture. Presents an overview of computer system organization and examines in detail the digital logic level, the register level and the operating system program interface. Uses the assembly language of an available machine for programming assignments. Prerequisite: CSCI-281 Data Structures or instructor's permission. 4 SH.

CSCI-351 Numerical Computing

An introduction to the computational techniques for solving mathematical problems. Topics include roots of nonlinear equations, interpolation, numerical differentiation and integration, and numerical solutions of differential equations. Same as MATH-351. Prerequisite: MATH-111 Calculus I; MATH-112 Calculus II is suggested. 2 SH.

CSCI-352 Numerical Analysis

A theoretical study of the standard numerical techniques for solving mathematical problems. Topics include roots of nonlinear equations, polynomial interpolation, solving systems of equations, numerical integration and numerical solutions of differential equations. Same as MATH-352. Prerequisites: CSCI-351 Numerical Computing, MATH-112 Calculus II and MATH-201 Linear Algebra. 2 SH.

CSCI-355 Operations Research

Mathematical models and optimization techniques useful in decision making. Includes linear programming, game theory, integer programming, queuing theory, inventory theory, networks and reliability. Further topics, such as nonlinear programming and Markov chains, as time permits. Same as MATH-355. Prerequisites: MATH-112 Calculus II, MATH-201 Linear Algebra, MATH-221 Discrete Structures, and either MATH-108 Introduction to Statistics or MATH-180 Statistical Methods, or instructor's permission. 4 SH.

CSCI-370 Cryptology and Number Theory

Cryptology is the study of hiding the meaning of messages. Cryptology is an interesting venue for the study of its mathematical underpinnings (number theory, matrix algebra, probability and statistics) and as an opportunity to implement techniques by means of computer programs. We consider monoalphabetic and polyalphabetic encryptions, public key cryptography, security and anonymity. Same as MATH-370. Prerequisite: MATH-221 Discrete Structures. 4 SH.

CSCI-381 Algorithms

Introduces the design and implementation of algorithms using an object-oriented programming language such as C++ or Java. Covers correctness and efficiency of algorithms for sorting, searching, graph problems and mathematical algorithms. Prerequisites: MATH-221 Discrete Structures and CSCI-281 Data Structures. 4 SH.

CSCI-391 Data Communications and Networks I

An overview of data communications and networks, including channel capacity, Ethernet, Internet protocols, DHCP, DNS, TCP, FTP, SMTP, HTTP, Web servers and file sharing. Prerequisite: CSCI-181 Principles of Computer Science. 2 SH.

CSCI-392 Data Communications and Networks II

Further topics in networks, with an emphasis on security. Includes authentication, encryption, verification, certificates, digital signatures, attacks and defenses, privacy and anonymity. Also covers current developments in networks. Prerequisite: CSCI-391 Data Communications and Networks I. 2 SH.

CSCI-460 Windows Programming

Programming in an event-driven environment, such as the Microsoft Windows operating system. Creation and management of windows, dialog boxes, mouse and keyboard input, message queues, and multithreading. Prerequisite: CSCI-381 Algorithms. 4 SH.

CSCI-471 Software Engineering: Methodology

The entire software development cycle is explored, from requirements gathering through analysis, design, implementation, testing and documentation procedures. This course discusses both the theory and the business-world reality of software development, with an emphasis on object-oriented methodologies. Prerequisite: CSCI-381 Algorithms or instructor's permission. 4 SH. CC: Writing Intensive.

CSCI-472 Software Engineering: Practicum

This course is designed to provide an experience similar to that of working in the software engineering industry. The methodologies discussed in CSCI-471 Software Engineering: Methodology are put into practice, as students work on project teams throughout one or more software development cycles. Current projects involve designing and developing software to guide a mobile robot. Prerequisites: Junior standing and CSCI-471 Software Engineering: Methodology. 4 SH. Capstone. CC: Team Intensive.

CSCI-481 Programming Languages

Studies the principles underlying various computer languages. Uses comparisons and evaluations of C, FORTRAN, ALGOL, Pascal, LISP, Smalltalk, PERL, PHP and Prolog to introduce the broad principles of language design and implementation. Prerequisite: CSCI-281 Data Structures. 2 SH.

CSCI-482 Theory of Computation

An introduction to the classical and contemporary theory of computation. Topics include the theory of automata and formal languages, computability by Turing machines and recursive functions, computational complexity and possibly quantum computers. Same as MATH-482. Prerequisites: MATH-221 Discrete Structures and CSCI-281 Data Structures. 2 SH.

CSCI-483 Compiler Theory

Studies the phases of compiler design, such as syntax specification, lexical analysis, parsing, symbol tables, error detection, code optimization and code generation. Term project is to write a complete compiler for a small subset of C. Prerequisites: CSCI-282 Computer Organization and MATH-221 Discrete Structures. 4 SH. Capstone.

CSCI-484 Computer Graphics

Basic interactive graphics programming in 2-D and 3-D using a common graphics library such as OpenGL. Introduces fundamental hardware and software concepts to implement graphics. Covers topics of drawing points, curves, surfaces, lighting, shading, animation, geometrical transformation, representation of 3-D shapes, and removal of hidden edges and surfaces as time permits. Prerequisites: CSCI-281 Data Structures and MATH-201 Linear Algebra or instructor's permission. 2 SH.

CSCI-485 Artificial Intelligence

A brief summary of the tools, techniques and applications of artificial intelligence. Introduces problem solving and knowledge representation and selects topics from techniques for constructing models, robot design, language processing, computer vision, neural networks and expert systems. Same as INFS-485. Prerequisites: CSCI-281 Data Structures, MATH-111 Calculus I and either MATH-108 Introduction to Statistics or MATH-180 Statistical Methods. 2 SH.

CSCI-486 Introduction to Operating Systems

Introduction to the principles of operating systems through detailed discussion of a popular operating system such as UNIX, with special attention to the areas of user interface, process management and file systems. Prerequisite: CSCI-281 Data Structures. 2 SH.

CSCI-487 Operating Systems

A study of general operating systems principles, processes, file systems, memory management, interprocess communication, I/O and concurrent processes. Includes a programming project in which the student writes a part of an operating system. Prerequisite: CSCI-486 Introduction to Operating Systems. 2 SH.

CSCI-488 Computer Architecture

A study of computer architecture, including logic circuits, CPU design, instruction sets, CISC, RISC, memory architecture, I/O, peripherals, pipelining, superscalar processors and multiprocessors. Includes hardware and software considerations. Prerequisite: CSCI-282 Computer Organization. 2 SH.

CSCI-500 Senior Colloquium

Experience in individual research and presentation of computer-related topics. Prerequisites: Senior standing and computer science department head's permission. 1 or 4 SH. Capstone. CC: Oral Intensive for the 4-semester-hour version.

CSCI-501 Topics in Computer Science

Subjects vary depending on instructor and student interest. Example topics include software engineering, cryptography, parallel processing, digital video compression, object-oriented technologies, neural networks and others as approved. Prerequisite: Instructor's permission. 2 or 4 SH.

CSCI-502 Independent Study

Individual work for capable students under the supervision of a faculty member. Prerequisite: Instructor consent and approval of computer science department head. Regularly scheduled courses are approved for independent study only under extraordinary circumstances. 2 or 4 SH.

CSCI-503 Independent Research

A research project culminating in a substantive paper on a selected topic or field in computer science or information systems by arrangement with an instructor. Prerequisites: Junior or senior standing and department head's permission. 2 or 4 SH.

CSCI-599 Internship

Full-time employment in computer science or information systems at an industrial firm or a public service organization. Prerequisites: Senior standing, appropriate background courses in computer science and department internship coordinator's permission. S/U grade. 2, 4 or 8 SH.

DATA SCIENCE/ANALYTICS

Faculty

Edisanter Lo, Ph.D., Associate Professor of Mathematical Sciences, program director

Minor in Data Science/Analytics. The minor in data science/analytics requires the completion of 20 semester hours of the following courses with grades of C- or better: MATH-180 Statistical Methods, MATH-201 Linear Algebra, CSCI-181 Principles of Computer Science, DATA-301 Data Mining, and DATA-401 Machine Learning.

Data Science/Analytics Courses

DATA-301 Data Mining

This course provides an introduction to the concepts in the automatic extraction of implicit, previously unknown and potentially useful information from large data that are generated in commerce, science and other areas. Topics include preprocessing of the data, application of the fundamental algorithms on the prepared data and interpretation of the patterns discovered by the algorithms. The fundamental algorithms for supervised learning, including classification and numerical prediction, and unsupervised earning, which includes association rules and clustering, are introduced. Prerequisites: MATH-180 Statistical Methods and CSCI-181 Principles of Computer Science. 4 SH.

DATA-401 Machine Learning

This course provides an introduction to the systematic study of algorithms and systems that improve their knowledge or performance with experience. A statistical approach that emphasizes concepts and the implementation of the methods is presented to make sense of large and complex data. Topics include linear regression, classification, resampling methods, shrinkage approaches, tree-based methods, support vector machines and clustering. Prerequisites: MATH-180 Statistical Methods, MATH-201 Linear Algebra and CSCI-181 Principles of Computer Science. 4 SH.

DIVERSITY STUDIES

Faculty

John J. Bodinger de Uriarte, Ph.D., Associate Professor of Anthropology, director

Learning Goals:

- Knowledge of the limits and contexts of one's own experience and the ability to value the different experiences of others.
- Recognition and understanding of the diversities of human experience.
- Continued growth development as a contributing member of a number of communities within human society.
- Commitment to an ongoing development of the life of the mind.

Minor in Diversity Studies. The minor in diversity studies consists of 22 semester hours, including DIVS-100 Introduction to Diversity Studies; the capstone course for the minor, DIVS-400 Diversity Encounters for a Changing World: Models of Impact; and 16 semester hours selected from courses in the women's studies program, courses in the Jewish and Israel studies program and other courses approved by the director of diversity studies.

Diversity Studies Courses

DIVS-100 Introduction to Diversity Studies

Introduces students to the study of diversity. Students learn the historical contexts of diversity issues and the scholarly language that has been developed to discuss these issues and investigate how diversity has operated in specific arenas (such as sports or music). 4 SH. CC: Diversity.

DIVS-400 Diversity Encounters for a Changing World: Models of Impact

The capstone course for the minor, this course is a continued examination of diversity issues as they affect personal, group, community and academic discourses. Students work with a faculty mentor to focus, develop and apply knowledge of diversity issues to a significant area of student interest, resulting in a major project. Students need to contact the director of diversity studies to sign up for this course and make arrangements for their particular project. 2 SH.

EARTH AND ENVIRONMENTAL SCIENCES

Faculty

Kathy Straub, Ph.D., Professor of Earth and Environmental Sciences, department head

Jennifer Mary Elick, Ph.D., Associate Professor of Earth and Environmental Sciences

Ahmed Lachhab, Ph.D., Associate Professor of Earth and Environmental Sciences

Dan Ressler, Ph.D., Associate Professor of Earth and Environmental Sciences

Derek J. Straub, Ph.D., Associate Professor of Earth and Environmental Sciences

Earth and Environmental Sciences Studies

Learning Goals:

- Understand the scientific method and how it is applied in the context of a discipline.
- Understand the earth system, the connections between abiotic and biotic systems, and the effect of the human society on the natural system. Understand the historical context of environmental awareness.
- Application of classification systems: vocabulary, observation and categorization.
- Scale interaction within space and time on earth science processes and outcomes.
- Geographic relationships of Earth, science processes, landforms and materials and comprehension of methods to relate these relationships.
- Data, plot and map interpretation and construction.
- Discipline-appropriate methods for observation, classification, characterization and description using relevant technologies and telemetries.
- Development of discipline-appropriate synthesis of readings, laboratory work and course material to produce original scientific understanding.

Requirements for the Major in Earth and Environmental Sciences. All majors must complete the department foundation courses, a choice of distribution courses, and the corollary science and mathematics courses listed below. To satisfy degree requirements, courses in the Department of Earth and Environmental Sciences must be completed with grades of C- or higher. Students who change majors after completing EENV-102, EENV-103, EENV-104, EENV-105 or EENV-213 may substitute that course in place of EENV-101 in the introductory sequence.

16 Department Introductory Sequence

- 4 EENV-101 Environmental Science
- 4 EENV-113 Geology and the Environment
- 4 EENV-220 Water Resources
- 4 EENV-240 Introduction to Meteorology

12 Distribution Requirements (one course each from 3 of the following 4 categories)

Water Distribution

- EENV-380 Wetlands Analysis
- EENV-420 Groundwater Hydrology

Geology Distribution

- EENV-283 Sedimentology/Stratigraphy
- EENV-313 The Susquehanna River

Surface Distribution

EENV-370 Environmental Geophysics

EENV-383 Soil Science

Climate/Energy Distribution

EENV-242 Climate and Global Change

EENV-332 Sustainable Energy Resources

8 Electives (8 SH from additional courses in the distribution list above or the following elective courses:)

4 ECOL-201 Ecosystems

4 EENV-250 Topics in Earth and Environmental Sciences

4 EENV-360 Geographic Information Systems

4 EENV-373 Air Quality

4 EENV-430 Chemistry of Natural Waters

4 CHEM-221 Organic Chemistry I

4 BIOL-408 Aquatic Ecology and BIOL-409 Aquatic Ecology Laboratory

20 Corollary Courses

Two of the following four courses for 8 SH:

4 MATH-108 Introduction to Statistics, MATH-111 Calculus I, MATH-112 Calculus II or MATH-201 Linear Algebra

4 General Chemistry I (Choose from: CHEM-101, CHEM-103 or CHEM-111)

4 General Chemistry II (Choose from: CHEM-102, CHEM-104 or CHEM-112)

4 PHYS-204 Introductory Physics I

4 Senior Research: EENV-510 Senior Project I

4 Capstone Experience: EENV-511 Senior Project II or 4 SH from an approved Capstone experience in another department

For the purposes of calculating the required 2.00 minimum GPA in the major, the Earth and Environmental Sciences Department uses all of the major courses with the EENV prefix.

Minor in Earth and Environmental Sciences. The minor requires 20 semester hours, with grades of C- or better, from among the courses in the major. No more than 8 SH in 100-level EENV courses may be applied toward the minor.

Honors in Earth and Environmental Sciences. The departmental honors program encourages and recognizes superior academic performance in earth and environmental sciences. To graduate with departmental honors, earth and environmental sciences majors do the following:

Candidates for academic honors must:

- Maintain a cumulative GPA of 3.25 and a GPA of 3.50 in major courses to qualify for academic honors.
- Take the department comprehensive exam and score 75 percent or better during their senior year.

Candidates for research honors must:

- Be nominated by a member of the Earth and Environmental Sciences faculty by Feb. 15 of their senior year.
- Submit an acceptable research thesis based upon two semesters of student research (EENV-595 and EENV-596) and earn a grade of B or better in these courses.
- Pass an oral comprehensive examination of their thesis in their final semester.

Earth and Environmental Sciences Courses

EENV-101 Environmental Science

Modern society functions with incredible resources and conveniences. Some of this progress has come at a great environmental price. This course investigates the scientific principles of the geosphere, hydrosphere, biosphere and atmosphere, and examines the environmental issues that our society faces. Topics include sustainability, ecology, resources, energy, pollution, wastes and approaches to living in a more sustainable way. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Scientific Explanations.

EENV-102 Environmental Hazards

Investigation of selected natural hazards, including volcanic eruptions, earthquakes, severe weather and landslides that affect and may be affected by humans. Topics are interrelated by case studies, discussion of current issues, and laboratory and field exercises. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Scientific Explanations.

EENV-103 Earth System History

This course focuses on life from its origin on this planet to its present diversity of species. Students learn about the fundamental physical and biological changes that have shaped and influenced the Earth system since its formation 4.6 billion years ago. Topics addressed include physical concepts that deal with geologic time and stratigraphic relationships, plate tectonics and nutrient cycling. Discussions cover such topics as the origin of life, evolutionary processes, the expansion of biodiversity, the radiation of organisms in the oceans, the conquest of land, mass extinctions, dinosaurs and the rise of humans. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Scientific Explanations.

EENV-104 Weather and Climate

Introduction to basic concepts in meteorology, including temperature, pressure, precipitation, winds, fronts, severe weather, forecasting and atmospheric measurements. The focus is on observing the atmosphere and explaining our observations. Labs include weather map analysis, lab experiments and field trips. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Scientific Explanations.

EENV-105 Energy and the Environment

Modern society relies on cheap and abundant energy for almost every aspect of daily life, from transportation to entertainment. Where does this energy come from? How much do we consume? How will we meet our future energy needs? What are the consequences of our energy use? These questions will be addressed as energy use and its impact on the environment is explored. Topics include the scientific principles that define energy and its transformation, society's current reliance on fossil fuels, climate change, and alternative and sustainable energy sources. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Scientific Explanations.

EENV-113 Geology and the Environment

Fundamental concepts and principles of geology and the processes and materials that interact at the surface of the Earth. The course includes rocks and minerals, plate tectonic interactions, weathering and erosion, the cycling of materials through different environments, and how we use these resources. Same as ECOL-113. 4 SH. 3 lecture hours, 3 laboratory/field hours.

EENV-213 Oceanography

Introduction to oceanography. The processes that control the formation and function of the oceans. The course focuses on food, mineral and energy resources associated with the ocean and societies' influence on those resources. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Diversity Intensive, Ethics Intensive, Scientific Explanations.

EENV-220 Water Resources

Introduction to watersheds and water resources. Students study the distribution and variation in water resources (lakes, rivers, groundwater) and the historical impact of water resources on societies past and present. Topics include surface water hydrology, fluvial geomorphology, hill slope processes, water budgets, stream flow, water allocation law,

water conflicts, and surface water and groundwater interactions. Prerequisite: EENV-101 or EENV-113. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Team Intensive.

EENV-240 Introduction to Meteorology

A comprehensive overview of the atmospheric processes responsible for observed weather patterns. This course provides students with an understanding of radiation and energy budgets, cloud formation, precipitation processes, surface and upper-level winds, the global circulation, and the development of midlatitude cyclones and severe weather. 4 SH. 3 lecture hours, 3 laboratory/field hours.

EENV-242 Climate and Global Change

An overview of the Earth's past, present and future climate. Topics include climate forcing, response and feedbacks; observed climate change; climate data; anthropogenic climate change; and climate change treaties. Prerequisite: sophomore standing. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Interdisciplinary, Writing Intensive.

EENV-250 Topics in Earth and Environmental Sciences

Selected topics vary depending on instructor, student interest and new advances in environmental science. Topics might include watershed modeling, geology of Pennsylvania, meteorology or the natural history of the Susquehanna River basin. Prerequisites: Earth and environmental sciences major or minor, environmental studies major or minor, or with permission nonenvironmental science students. 1-4 SH.

EENV-283 Sedimentology/Stratigraphy

An introduction to the properties, classification and nomenclature of soils, sediments and sedimentary rocks. Discusses processes that create, transport, deposit and lithify sediments. Students examine depositional environments where sediments form and accumulate, the properties of sedimentary rocks and the stratigraphic framework of sedimentary successions. Prerequisite: EENV-101, EENV-113 or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Writing Intensive.

EENV-313 The Susquehanna River

This course will examine the Susquehanna River drainage basin from multiple perspectives including its geologic history, ecologic relationships and influences throughout the basin, the historical colonization and use of resources within the basin, and our recent response to the environmental issues that currently plague the system. Through a multidisciplinary approach, we will begin to better understand this complex environment and its future outcome. Prerequisites: Sophomore standing, EENV-101, EENV-113 (same as ECOL-113). 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Ethics Intensive, Interdisciplinary.

EENV-332 Sustainable Energy Resources

An overview of energy use, its effect on the environment and the potential for sustainable energy solutions. Traditional, nonsustainable energy production from fossil fuels is first described in terms of energy efficiency, environmental impact and available reserves. This is followed by a description of individual sustainable energy technologies with a focus on the underlying science, energy production rates, viability and potential limitations. Specific technologies that are discussed include: wind turbines, solar thermal systems, solar photovoltaics, hydropower, wave and tidal energy capture, and geothermal heating. Prerequisites: PHYS-204, MATH-111, sophomore standing or instructor's permission. 4 SH. CC: Interdisciplinary.

EENV-360 Geographic Information Systems

An introduction to geographic information systems (GIS) theory, software and practical application. Students will use GIS software to organize, edit, analyze and display geographic data to develop new understanding and interpretation of both natural and human landscapes and resources. Mapping exercises and student projects will be used to develop skills in data management, spatial analysis and estimation (geostatistics), terrain analysis, and spatial modeling. Prerequisite: Sophomore standing. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Interdisciplinary, Oral Intensive.

EENV-370 Environmental Geophysics

Methods of near-surface geophysical explorations with emphasis on solving environmental and geotechnical problems. Students learn the basic physical variation in Earth and non-Earth materials and how these variations may be used to discern what lies beneath the Earth's surface. Examples of near-surface geophysical applications include detection of contaminant plumes, buried metallic objects, variations in geological materials, aggregates and mining, forensics, archaeology, and hydrogeology. Prerequisites: EENV-113, PHYS-204 and MATH-111 (PHYS-205 strongly recommended). 4 SH. 3 lecture hours, 3 laboratory/field hours.

EENV-373 Air Quality

An introduction to air quality and air pollution issues from the regional scale to the global scale. This course examines the various types and sources of air pollutants and the effects of air pollution on health, welfare and the environment. Specific topics include acid deposition, tropospheric and stratospheric ozone, visibility degradation, air pollution meteorology, and regulatory aspects of air quality. Laboratory experiments focus on air-quality measurement strategies. Prerequisites: EENV-240, CHEM-101-102, CHEM-103-104 or CHEM-111-112 or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory/field hours.

EENV-380 Wetlands Analysis

Wetlands are complex environments that are controlled by chemical, biological and physical interactions. The course explores the structure, function, management and jurisdictional delineation of non-tidal freshwater wetlands. Lecture material covers the history of wetlands use/abuse; current definitions and analysis of the common indicators of wetland function; and hydrology, soils and vegetation. The laboratory consists of plant identification, techniques for hydric soil analysis and identification of wetland hydrology indicators using current methodologies for delineation of jurisdictional wetlands. Same as ECOL-380. Prerequisites: CHEM-101-102, CHEM-103-104, or CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Writing Intensive.

EENV-383 Soil Science

Soil science is the exploration of the organic and mineral material that forms thin layers where atmospheric, biological and geological interactions occur. Students study the materials that make up soil, their relationship to each other, water and air interactions, and the biological, chemical and physical processes that are at work in soil. The course also explores how various cultures have used and abused this natural resource and how different diversity markers, such as sexual orientation, ethnic background, global residence and socioeconomic status, have affected the science and participation in federal support programs. Prerequisite: EENV-113 or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Diversity Intensive.

EENV-420 Groundwater Hydrology

A comprehensive study of groundwater and the technologies that locate, extract and protect this resource. Emphasizes practical knowledge, developing theoretical principles when applicable. Includes origin and movement of groundwater, exploration techniques and groundwater computer modeling. Prerequisites: EENV-101, EENV-113, PHYS-204 and MATH-111. 4 SH. 3 lecture hours, 3 laboratory/field hours.

EENV-430 Chemistry of Natural Waters

Chemical reactions in the atmosphere, the land surface and in the groundwater determine the distribution of both beneficial and toxic materials on earth that may affect resource distribution and human health. Chemistry of Natural Waters examines the elements and reactions that govern the mobility, stability and distribution of nutrients, salts and toxins in freshwater, marine, atmospheric and groundwater systems. Chemical analysis techniques, field methods, computer applications and problem solving are important components of the course. Prerequisites: CHEM-101-102, CHEM-103-104 or CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Oral Intensive.

EENV-510 Senior Project I

Introduces students to environmental research, reading, and writing in the context of a collaborative or independent research project. Prerequisite: Instructor's permission. 4 SH.

EENV-511 Senior Project II

A continuation of collaborative or independent research with an emphasis on written and oral presentation of data and explanation of results. Prerequisite: EENV-510 or instructor's permission. 4 SH. Capstone. CC: Oral Intensive, Writing Intensive.

EENV-560 Environmental Independent Study

Individual students select a contemporary environmental topic to investigate in depth and propose their plan of study to the department for approval. Each student is assigned a departmental faculty mentor to oversee the project. Projects require extensive literature searches accompanied by oral and written presentations. Prerequisites: Junior or senior standing and department approval of project. 4 SH.

EENV-590 Environmental Internship

Individual student work in private industry or public agency. Open only when positions are available. The student, employer and the department internship coordinator must complete the Student Learning Contract before the end of the drop/add deadline. Oral and written presentations and employer's written evaluation are required. Prerequisites: Junior or senior standing and department permission. May be repeated for credit. 2-4 SH. Capstone.

EENV-595 Research in Earth and Environmental Sciences

Independent research projects in the earth and environmental sciences. Prerequisites: Junior or senior standing and department permission. 2 SH. Capstone.

EENV-597 Field Program

Participate in another institution's summer field program and transfer the credits to satisfy the capstone experience requirement in earth and environmental sciences. Acceptable programs are those that are three to six weeks in length and include field instruction, independent projects and a final presentation of the completed work. Requirements to be met in residence at Susquehanna include attendance at capstone class meetings and completion of projects assigned therein, to include both written and oral presentation of the work. Prerequisite: Department permission. 2-4 SH. Capstone.

ECOLOGY

Faculty

Matt Persons, Ph.D., Professor of Biology, coordinator

Ecology is an interdisciplinary program that draws on the strengths of the Biology Department and the Earth and Environmental Sciences Department and provides students the possibility of earning either a major or a minor in ecology.

Learning goals:

- Ecology majors will learn to identify and describe the basic principles and theories of ecology and the related sciences (biology, environmental science and geology).
- Using these principles and theories, students will learn to construct and critique logical scientific arguments.
- Students will learn to use appropriate skills and techniques to acquire and evaluate scientific evidence.
- Students will recognize how basic ecological principles and theories are relevant to the broader university curriculum, as well as to their daily lives.

Requirements for the Major in Ecology. The Bachelor of Science degree in ecology requires 56 semester hours in biology, earth and environmental sciences and chemistry with grades of C- or better in ecology, biology, and earth and environmental sciences courses. The Bachelor of Science in ecology includes a four-course introductory sequence and a year or more of student research. In addition, the 56 semester hours include 24 semester hours of elective courses with at least 12 drawn from each of Category 1 and Category 2. In cases where the lecture and laboratory components of courses are listed separately, students in the ecology program must take both lecture and laboratory.

16 Introductory Sequence (16 semester hours)

- 4 ECOL-100 Introduction to the Science of Ecology (BIOL-101 Ecology and Evolution, EENV-101 Environmental Science, or EENV-103 Earth System History may substitute as an initial course in the introductory sequence)
- 4 ECOL-110 Biogeodiversity
- 4 ECOL-201 Community and Ecosystems Ecology
- 4 BIOL-220 Biostatistics

24 Elective Courses (24 semester hours chosen from the following, with at least 12 semester hours taken in Category 1 and 12 semester hours taken in category 2)

Category 1: Biology Electives (12 credits must be chosen from the following. The course must be accompanied with the laboratory when offered and at least two courses of the 12 credits must be lab-based)

- 4 BIOL-312-313 Microbiology
- 4 BIOL-324-325 Animal Behavior
- 4 BIOL-326-327 Invertebrate Zoology
- 4 BIOL-328-329 Natural History of Early Vertebrates
- 4 BIOL-332-333 Population Biology
- 4 BIOL-404-405 Plant Physiology
- 4 BIOL-408-409 Aquatic Ecology
- 4 BIOL-460-461 Winter Ecology of Vertebrates
- 2 ECOL-560 Explorations in Ecology (e.g. Sustainable Food Systems, Biology of Invasive Species, Amphibian Population Declines, Vertebrate Ecology of Costa Rica, Human Evolution and Behavior, etc.)

Category 2: Environmental Science Electives (12 credits must be chosen from the following:)

4 EENV-113 Geology and the Environment

4 EENV-213 Oceanography

4 EENV-220 Water Resources

4 EENV-240 Introduction to Meteorology

4 EENV-242 Climate and Global Change

4 EENV-283 Sedimentology/Stratigraphy

4 EENV-313 The Susquehanna River

4 EENV-360 Geographic Information Systems

4 EENV-380 Wetlands Analysis

4 EENV-383 Soil Science

4 EENV-420 Groundwater Hydrology

4 EENV-430 Chemistry of Natural Waters

8 Student Research

ECOL-509 Student Research I may be taken during the third year for students who require more than one field season of research. ECOL-510 Student Research I may be taken as either 2 or 4 semester hours senior year. Students who have completed ECOL-509 must take no more than 2 semester hours of ECOL-510.

2 ECOL-509 Student Research I

2 or 4 ECOL-510 Student Research I

4 ECOL-511 Student Research II

8 Required Corollary Courses

Students must complete the following corollary chemistry courses:

4 General Chemistry I - choose from: CHEM-101, CHEM-103 or CHEM-111

4 General Chemistry II - choose from: CHEM-102, CHEM-104 or CHEM-112

Note: Additional corollary courses are strongly recommended for those intending to pursue graduate training. These recommended courses include CHEM-221 Organic Chemistry I, CHEM-222 Organic Chemistry II, CHEM-231 Quantitative Analysis, PHYS-204 Introductory Physics I, and PHYS-205 Introductory Physics II.

Majors must also take a comprehensive ecology examination prior to graduation. Exam content will be drawn from introductory sequence courses. Students have multiple opportunities to take the comprehensive examination; only the highest score is recorded on the transcript. Performance on the comprehensive examination is reported on the transcript as high pass, pass or fail.

Requirements for the Minor in Ecology. The minor in ecology requires 24 semester hours in ecology, biology, and earth and environmental sciences with grades of C- or better. The first course in the minor may be one of the following: ECOL-100, BIOL-101, EENV-101 or EENV-103. That introductory course should be followed by the sequence of ECOL-201. Following the completion of the introductory sequence, the student will take at least four semester hours from Category 1 (biology) and four semester hours from Category 2 (earth and environmental sciences).

Category 1: Biology Electives (must be taken with the laboratory)

4 BIOL-312-313 Microbiology

4 BIOL-324-325 Animal Behavior

4 BIOL-326-327 Invertebrate Zoology

4 BIOL-328-329 Natural History of Early Vertebrates

4 BIOL-332-333 Population Biology

4 BIOL-404-405 Plant Physiology

4 BIOL-408-409 Aquatic Ecology

4 BIOL-460-461 Winter Ecology of Vertebrates

Category 2: Environmental Science Electives

4 EENV-213 Oceanography

4 EENV-220 Water Resources

4 EENV-240 Introduction to Meteorology

4 EENV-242 Climate and Global Change

4 EENV-283 Sedimentology/Stratigraphy

4 EENV-313 The Susquehanna River

4 EENV-360 Geographic Information Systems

4 EENV-380 Wetlands Analysis

4 EENV-383 Soil Science

4 EENV-420 Groundwater Hydrology

4 EENV-430 Chemistry of Natural Waters

Honors in Ecology. The ecology program encourages and recognizes superior academic performance in ecology. To graduate with program honors, ecology majors must request entry to the program or be nominated for entry to the program by one or more faculty members who teach required or elective distribution courses within the major. Request for entry or nominations for honors must be initiated by the beginning of the senior year.

Candidates for academic honors must:

- Maintain a cumulative GPA of 3.25 and a GPA of 3.50 in major courses to qualify for academic honors.
- Successfully complete Student Research I and II (ECOL-510 and ECOL-511) and earn a grade of B- or better in these courses.
- Receive a high pass on their highest score on the comprehensive exam.

Candidates for research honors must do the following:

- Be nominated by a member of the faculty who teaches within the ecology program by midterm of Student Research II (ECOL-511).
- Submit an acceptable research thesis based upon two semesters of Student Research (ECOL-510 and ECOL-511).
- Pass an oral comprehensive examination of their thesis in their final semester. The oral comprehensive examination is administered by faculty who teach within the ecology major.

Ecology Research Facilities. The Center for Environmental Education and Research (CEER) is an 87-acre tract of land immediately adjacent to campus that serves as a convenient field station for observational and manipulative studies in ecology.

The site also includes a research greenhouse, research plots and storage facilities for field equipment. In addition, the department operates the George A. Hepner Ecology Laboratory at Camp Karoondinha. It provides a modern research laboratory and a variety of habitats, offering students experience through short- and long-term experiments. The property
features more than 600 acres from 600 to 1,800 feet above sea level. It includes both deciduous and mixed coniferous forests, an 8-acre lake, Penns Creek and small streams.

Ecology Courses

ECOL-100 Introduction to the Science of Ecology

An introduction to ecology and its relationships with other disciplines of science. Emphasizes analysis of current problems in the ecological sciences, particularly as they relate to discussions that students will have to make as citizens of a scientific/technological society. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Scientific Explanations.

ECOL-110 Biogeodiversity

Explores the influences of geology (abiotic factors), environment (including climate), and place on the evolution and diversity of life. Students investigate multiple issues posed by the science and technology of the diversity of life on this planet. Particular issues include changing views of systematic relationships of living things, how many species occur on earth, and how to establish effective public policy guidelines for protection of life's diversity. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Team Intensive, Writing Intensive.

ECOL-113 Geology and the Environment

Fundamental concepts and principles of geology and the processes and materials that interact at the surface of the Earth. The course includes rocks and minerals, plate tectonic interactions, weathering and erosion, the cycling of materials through different environments, and how we use these resources. Same as EENV-113. 4 SH. 3 lecture hours, 3 laboratory/field hours.

ECOL-201 Community and Ecosystems Ecology

Ecosystem ecology addresses the interactions between organisms and their environment as an integrated system. The physical setting for an ecosystem, the climate, geology and soils interact with water, nutrients and energy to control the organisms that thrive there. Prerequisite: BIOL-101, ECOL-100 or EENV-101. 4 SH. 3 lecture hours, 3 laboratory/field hours.

ECOL-202 Systematic Biology

Systematic Biology is designed to introduce students to representatives of the kingdoms of life (e.g., prokaryotes, eukaryotic protists, fungi, animals and plants) in an evolutionary framework through an integrated lecture-laboratory experience. Using multiple methods, including light and electron microscopic examinations, students will have the opportunity to observe structures and other characters that bring diversity to all kingdoms of life. Students will use appropriate mathematical methods to model and infer evolutionary relationships between living organisms by molecular phylogenetics. Drawing on experiences in previous courses of the introductory sequence, students will explain the observations and results from the levels of molecules to ecosystems. These observations, results and explanations will provide the basis for journal-style writing projects. Same as BIOL-202. Prerequisite: BIOL-201 or ECOL-201 or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Team Intensive, Writing Intensive.

ECOL-220 Biostatistics

Biostatistics will focus on the collection and analysis of biological data. The course is designed to introduce students to the fundamental concepts of experimental and sampling design, as well as quantitative hypothesis testing. Some equations will be covered in the course; however, the emphasis will be on interpretation and presentation of statistical results. These concepts will be reinforced in upper-level biology/ecology/neuroscience courses taken by students to

fulfill distribution requirements during their junior and senior years. Prerequisites: Sophomore standing and either BIOL-101, BIOL-102 or ECOL-100. 4 SH. 4 lecture hours. CC: Analytical Thought.

ECOL-380 Wetlands Analysis

Wetlands are complex environments that are controlled by chemical, biological and physical interactions. The course explores the structure, function, management and jurisdictional delineation of nontidal freshwater wetlands. Lecture material covers the history of wetlands use/abuse; current definitions and analysis of the common indicators of wetland function; and hydrology, soils and vegetation. The laboratory consists of plant identification, techniques for hydric soil analysis and identification of wetland hydrology indicators using current methodologies for delineation of jurisdictional wetlands. Same as EENV-380. Prerequisites: CHEM-101-102, CHEM-103-104 or CHEM-111-112. 4 SH. 3 lecture hours, 3 laboratory/field hours. CC: Writing Intensive.

ECOL-408 Aquatic Ecology

The ecology of freshwater ecosystems. Emphasizes biota of freshwater and their relationships with physical and chemical components of lakes, streams and reservoirs. Same as BIOL-408. Prerequisite: BIOL-101 or ECOL-100. 3 SH.

ECOL-409 Aquatic Ecology Laboratory

Field laboratory in aquatic ecology techniques. Topics include physical and chemical measurements and the identification and enumeration of phytoplankton, zooplankton, aquatic plants and benthic organisms. Same as BIOL-409. Prerequisite: BIOL-101 or ECOL-100. 1 SH. 4 laboratory hours.

ECOL-509 Student Research I

Introduces students to methods and techniques of ecological research in the context of a collaborative research project. Prerequisite: Instructor's permission. 2 SH. 8 contact hours.

ECOL-510 Student Research I

Introduces students to methods and techniques of ecological research in the context of a collaborative research project. Prerequisite: Instructor's permission. 2 or 4 SH. 16 contact hours.

ECOL-511 Student Research II

Collaborative research with an emphasis on presentation of data and explanation of results. Prerequisite: Instructor's permission. 4 SH. 16 contact hours. Capstone. CC: Oral Intensive.

ECONOMICS

Faculty

Matthew C. Rousu, Ph.D., Professor of Economics, department head

Olu Onafowora, Ph.D., Professor of Economics

Katarina R. Keller, Ph.D., Associate Professor of Economics

Antonin Rusek, Ph.D., Associate Professor of Economics

Learning Goals:

- Demonstrate understanding of the concept of scarcity of resources and the opportunity cost associated with choices made.
- Demonstrate understanding of basic economic models of supply and demand, the role of prices in efficient allocation of resources, and how changes to supply and demand affect the market price and quantity of a particular good or service.
- Demonstrate understanding of how the national economy works, the role of government in the economy, and the reasons for macroeconomic policy proposals.
- Understand interactions in a global economy setting, the basis for exchange and the sources of comparative advantage that drive trade.
- Demonstrate understanding of international trade issues and the impact of appreciations and depreciations of exchange rates on different sectors of the economy.
- Understand economic data and some basic analysis methods.

Degree Programs in Economics. Susquehanna University has two degree programs in economics. The Bachelor of Arts (B.A.) degree is a liberal arts degree earned in the university's School of Arts and Sciences. Students pursuing a Bachelor of Arts in economics choose an emphasis in financial economics, general economics, or global economy and financial markets. The Bachelor of Science (B.S.) degree is a more technical degree and is earned in the Sigmund Weis School of Business. It integrates extensive business administration coursework into the study of economics.

Requirements for the Bachelor of Arts Degree–General Emphasis. Majors complete 32 semester hours in economics with a GPA of 2.00 or better. They also complete a required course in statistics, PRDV-100 Using Computers, and a required course in calculus or quantitative methods. The department recommends two courses in calculus for students planning graduate study in economics. Majors must earn grades of C- or better in all required courses except ECON-201 and ECON-202.

4	ECON-201 Principles of Macroeconomics
4	ECON-202 Principles of Microeconomics
4	ECON-311 Intermediate Macroeconomics
4	Choose from: ECON-313 Intermediate Microeconomics Theory or ECON-315 Managerial Economics
4	ECON-499 Applied Research Methods
4	One statistics course (MGMT-202, MATH-108, MATH-109, MATH-180, PSYC-123)
4	One course in calculus or quantitative methods
2	PRDV-100 Using Computers
12	12 hours of economics electives selected with faculty adviser guidance. Of these 16 elective hours, students may take only one of the following courses: ECON-330 International Trade and Finance,

ECON-341 Economic Policy, ECON-375 Topics in Economics, ECON-442 Emerging Markets Economics, and ECON-465 Global Financial Markets.

Financial Economics Emphasis. The financial economics emphasis is designed to provide both a sound theoretical background in economics and a considerable exposure to finance, all in one package. This degree is especially suitable for students who want to a have a strong liberal arts education combined with several business courses without having to follow the structure of a business program. Students earning their degrees in financial economics will acquire proper skills and connections needed to enter and succeed in rewarding careers. In addition, this degree can facilitate the completion of a minor or a second major.

Requirements for the Bachelor of Arts Degree–Financial Economics Emphasis. Majors are required to complete 50 semester hours, with a GPA of 2.00 or better, as follows:

4 ECON-201 Principles of Macroeconomics

4 ECON-202 Principles of Microeconomics

4 ECON-311 Intermediate Macroeconomics

4 ECON-313 Intermediate Microeconomics Theory or ECON-315 Managerial Economics

4 ECON-330 International Trade and Finance

4 ECON-331 Money, Banking and Financial Markets

4 ACCT-200 Financial Accounting

4 MGMT-340 Corporate Financial Management

4 MGMT-342 Investment Analysis

4 ECON-499 Applied Research Methods

2 PRDV-100 Using Computers

4 One statistics course (MGMT-202, MATH-108, MATH-109, MATH-180 or PSYC-123)

4 Four hours of electives, chosen with adviser's guidance from one 300 level and above economics course or POLI-333 Development, Globalization and Society.

No grade less than C- will be accepted in all required courses except ECON-201 and ECON-202. The department recommends students pursuing the financial economics emphasis take MGMT-340 and MGMT-342 in the fall and spring of the junior year, respectively.

Global Economy and Financial Markets Emphasis. This emphasis prepares students for careers in the global economy of the 21st century. The study concentrates on the understanding of economic and policy issues arising from the interconnectedness of national economies. Extensive attention is paid to issues and opportunities associated with capital mobility in the financially liberalized environment of the future world economy. Special courses analyzing the unique nature of globalized financial markets and introducing students to contemporary financial instruments (derivatives) are organic parts of the emphasis.

Requirements for the Bachelor of Arts Degree–Global Economy and Financial Markets Emphasis. Majors complete 36 semester hours in economics with a GPA of 2.00 or better. They also complete a required course in statistics and PRDV-100 Using Computers. Majors must earn grades of C- or better in all required courses except ECON-201 and ECON-202.

4 ECON-201 Principles of Macroeconomics

4 ECON-202 Principles of Microeconomics

4 ECON-311 Intermediate Macroeconomics

4 ECON-313 Intermediate Microeconomics Theory or ECON-315 Managerial Economics

4 ECON-331 Money, Banking and Financial Markets

4 ECON-465 Global Financial Markets

4 ECON-499 Applied Research Methods

4 One statistics course (MGMT-202, MATH-108, MATH-109, MATH-180, or PSYC-123)

8 Eight hours of electives selected from the following:

- 4 ECON-330 International Trade and Finance
- 4 ECON-335 Economic Development
- 4 ECON-338 International Political Economy
- 4 ECON-341 Economic Policy
- 4 ECON-442 Emerging Market Economies
- 4 POLI-333 Development, Globalization and Society

The department recommends students pursuing the global economy and financial markets emphasis take ECON-465 Global Financial Markets in the spring of either the junior or senior year. Emphasis electives should be taken in the fall of the sophomore, junior and senior years, respectively.

Requirements for the Bachelor of Science Degree with a Major in Economics. Candidates for the Bachelor of Science with a major in economics successfully complete the business foundation courses as follows and at least 20 semester hours of economics at the 300 level or above as listed below. No grade below a C- will be accepted toward graduation for foundation courses; upon earning a grade below C- in a foundation course, the student must retake the course the next semester in which it is offered. The course descriptions listed later in the catalog identify prerequisites, and these suggest a certain degree of order in completing the foundation. In addition to the foundation, first-semester Weis School students enroll in MGMT-102 Global Business Perspectives (four semester hours), which provides an introduction to liberal studies and college life, as well as an overview of business functional areas, career opportunities and the Sigmund Weis School curriculum. This course satisfies the Perspectives requirement of the Central Curriculum.

Business Foundation Courses for Economics (B.S.) Majors

Year 1

- 4 ECON-201 Principles of Macroeconomics
- 4 ECON-202 Principles of Microeconomics
- 2 PRDV-100 Using Computers
- 4 One statistics course (MGMT-202, MATH-108, MATH-109, MATH-180 or PSYC-123)

Year 2

- 4 INFS-174 Database Systems Analysis and Design
- 4 ACCT-200 Financial Accounting
- 4 ACCT-210 Legal Environment
- 4 MGMT-203 Quantitative Methods for Business and Economic Decisions
- 4 MGMT-280 Marketing
- 2 MGMT-105 Introduction to Professional Development

Year 3

- 4 ACCT-330 Cost Management
- 4 MGMT-340 Corporate Financial Management

4	MGMT-360 Management and Organizational Behavior
4	MGMT-390 Operations Management

Year 4

4	INFS-472 Management Support Systems
2 or 4	MGMT-404 Business and Social Responsibility or PHIL-223 Business Ethics
4	ECON-311 Intermediate Macroeconomics
4	ECON-313 Intermediate Microeconomics Theory or ECON-315 Managerial Economics
4	ECON-499 Applied Research Methods
8	Two economics courses at the 300 level or above. Of these two elective courses, students may take only one of the following courses: ECON-330 International Trade and Finance, ECON-341 Economic Policy, ECON-375 Topics in Economics, ECON-442 Emerging Markets Economics, and ECON-465 Global Financial Markets.

No grade less than C- will be accepted to satisfy major course requirements.

Minor in Economics. The economics minor completes ECON-201 and ECON-202 (or ECON-105 and another four-semester-hour economics course) and 12 additional semester hours in economics including either ECON-311 or ECON-313 (ECON-315 can substitute for ECON-313), or both, selected in consultation with the minor adviser. Except for ECON-201 and ECON-202 (or ECON-105), economics courses applied to other majors, minors or emphases may not be applied to the minor in economics. Students must complete courses applied to the minor with grades of C- or better.

Economics Courses

ECON-105 Elements of Economics

Basic macro- and microeconomics principles. Discusses unemployment, inflation, resource scarcity, and consumer and business behavior under various market structures. Not open to students pursuing a major in the Sigmund Weis School of Business or pursuing an economics B.A. major. 4 SH. CC: Social Interactions.

ECON-201 Principles of Macroeconomics

Introduces aggregate economics. Emphasizes current issues such as unemployment, inflation, stagflation, monetary and fiscal policies, and international economics. 4 SH. CC: Social Interactions.

ECON-202 Principles of Microeconomics

Introduces principles of supply and demand and how they affect levels of output, price and employment under various market structures. Prerequisite: Math placement of MATH-101 or higher or completion of MATH-099. 4 SH. CC: Social Interactions.

ECON-311 Intermediate Macroeconomics

A comprehensive study of the major economic aggregates and the theories of income determination. Includes applications to contemporary public issues, such as achieving full employment, price stability and a desired rate of economic growth. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-313 Intermediate Microeconomics Theory

Analyzes how consumers, businesses and suppliers of labor and other resources make their choices. Covers how individual markets for products and resources determine resource allocation, wages, prices, income distribution and levels of production. Students may earn credit for only ECON-313 or ECON-315. Prerequisites: Either a calculus course or MGMT-203 and either ECON-105, or both ECON-201 and ECON-202. 4 SH.

ECON-315 Managerial Economics

A study of the application of economic theory and methods to business and administrative decision-making processes, emphasizing the role that economic analysis plays in managerial decisions. Quantitative methods and tools—such as simple regression analysis, statistics, time series forecasting models, linear programming and spreadsheet packages—are introduced to assist students in gaining better insight into the methods of economic analysis and the applications of managerial economics to real-life decisions. Students may earn credit for only ECON-313 or ECON-315. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-322 Introduction to Econometrics

Examines the general linear regression model and its use to analyze economic data. Focuses on estimating economic models, verifying economic theories by testing alternative hypotheses and forecasting the future of economic variables. Prerequisites: ECON-105, or ECON-201 and ECON-202, and MATH-108, MATH-180, MGMT-202, or PSYC-123. 4 SH.

ECON-325 Labor Economics

Theoretical and empirical investigation of the functions and outcomes of labor markets. Discusses and analyzes current labor issues, trends and developments. Emphasizes how public policies, individual market characteristics of employees, firms and organized labor influence human resource allocation and compensation. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-330 International Trade and Finance

Examines contemporary and historical patterns of economic interactions and interdependence among national economies. In-depth analysis of exchange rates, capital flows and trade flows. Discusses problems of international resource transfers in the context of evolving international economic institutions. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-331 Money, Banking and Financial Markets

Examines depository and nondepository financial institutions, financial markets and instruments. The Federal Reserve System's structure and role in controlling the money supply and regulating financial institutions and markets are discussed in detail. The course examines Keynesian, monetarist and new classical approaches to monetary policy and controversies concerning inflation, unemployment, economic growth and balance of payments. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-332 Public Finance

Examines the influence of government in a market-oriented economy. Analyzes how tax and spending policies reallocate resources, redistribute income and affect stable economic growth. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-335 Economic Development

Examines theories of economic growth and development. Includes in-depth discussions of problems of economic development that confront developing nations. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-338 International Political Economy

Examines issues of political interaction with economic forces at the national, international and global levels. Topics studied include economic systems, international trade and finance, the European Union, NAFTA, CAFTA, OPEC, multinational corporations, economic development, poverty, inequality, and global environmental issues. Same as POLI-338. Prerequisites: Sophomore standing, ECON-201 or ECON-105, or instructor's permission. 4 SH. CC: Interdisciplinary.

ECON-341 Economic Policy

Examines theory and practice of economic policy in the contemporary open-economy environment. Includes detailed analysis of fiscal and monetary policies for interdependent national economies. Emphasizes the relationship between deficit financing and inflation. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-370 Game Theory

Analyzes the strategic interaction between parties. Normal and extensive form games will be studied, with discussions of dominant and mixed strategies, Nash Equilibrium, and incentive compatibility. This course has applications to economic decision making, industrial organization, bargaining and negotiation, and political science. Prerequisites: An introductory statistics course, ECON-202 or ECON-105, or instructor's permission. 4 SH. CC: Writing Intensive.

ECON-373 Political Economic Thought

Study the writings on political and economic issues from several different writers. The readings will be from a diverse set of writers, with views ranging from politically liberal to politically conservative. This course will examine and analyze these writers' views on social justice, tax policies, discrimination, socialism and much more. Prerequisites: Junior or senior standing, ECON-105, or both ECON-201 and ECON-202 or instructor's permission. 4H. CC: Diversity Intensive.

ECON-375 Topics in Economics

Study of selected topics as needed, based on student and instructor interest. 2-4 SH.

ECON-441 History of Economic Thought

A survey of the development of economic ideas. Examines the parallel development of economic doctrines and industrial systems from the Middle Ages to the present. Examines implications of these doctrines for current policy issues. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-442 Emerging Market Economies

Examines emerging market economies on both theoretical and practical bases and in historical perspective. Compares market-oriented economies arising from different sociocultural backgrounds. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-465 Global Financial Markets

Introduces the new and intriguing world of global finance. Explores theoretical and practical reasons for international capital flows. Studies the evolution of financial liberalization on a world scale in conjunction with interest rate and exchange rate dynamics. Practically analyzes the interplay of capital inflows and domestic economic policies using examples of economic collapses of Asia, South America and Eastern Europe. Impacts of European Monetary Union and the co-integrating relationship between the major financial centers conclude the course. Prerequisites: ECON-105, or ECON-201 and ECON-202. 4 SH.

ECON-499 Applied Research Methods

Introduces students to the empirical research methods in economics. Students are expected to use real data in a topic chosen in consultation with the instructor and present their findings. Prerequisites: Senior standing, statistics (MGMT-202, MATH-108, MATH-180, or PSYC-123), and either ECON-105 or both ECON-201 and ECON-202. 4 SH. Capstone.

ECON-500 Seminar in Economics

A course focusing on varying topics of interest to the students and the instructor. Topics may include public policies toward business, problems of manpower development, the role of population in economic development, development of various regions, or the use of mathematics in economics. Prerequisites: Senior standing, either ECON-105 or both ECON-201 and ECON-202, and instructor's permission. 2-4 SH.

ECON-501 Independent Study

Individual work on selected topics for qualified students under faculty supervision. Prerequisites: ECON-311 and ECON-313, plus four additional semester hours in economics and department head's permission. 2-4 SH.

ECON-503 Economics Internship

Off-campus, on-the-job supervised employment for juniors and seniors at a firm, corporation, government agency or nonprofit organization. Prerequisites: Faculty member's permission and acceptance by organization. 2-4 SH.

EDUCATION

Faculty

Valerie A. Allison, Ph.D., Associate Professor of Education, department head

David S. McLaughlin, Ph.D., Associate Professor of Education

Sarah Edwards Moore, Assistant Professor of Education

Stephanie J. Gardner, Ph.D., Assistant Professor of Education

Susan Welteroth, D.Ed., Lecturer in Education

James J. Ingerski, Ph.D., Director of Teacher Intern and Auxiliary Programs

Education Studies

Since 1904, Susquehanna University has prepared liberal arts students for teaching careers. In the teacher education program, students master professional knowledge and skills necessary for state certification and for developing successful and rewarding careers in education.

Upon completion of the education program, students will have learned to:

- Design instruction and prepare for all aspects of managing a classroom;
- Instruct students and assess their learning;
- Maintain a classroom environment that is welcoming, respectful and productive; and
- Fulfill other professional responsibilities.

Learning Goals:

- Understand how children learn and develop and can provide learning opportunities that support their intellectual, social and personal development.
- Understand and use a variety of instructional strategies to encourage students' development of critical thinking, problem solving and performance skills.
- Create a learning environment that encourages positive social interaction, active engagement in learning and self-motivation.
- Prepare and plan instruction based on knowledge of subject matter, students, curriculum goals, and formal and informal assessment strategies.
- Include every student—accommodating, adapting and/or differentiating instruction as appropriate, considering readiness, history, interests, achievement and learning styles; cultural, racial, social and ethnic affiliations; and exceptional needs and abilities.
- Use effective verbal, nonverbal and media communication techniques to foster active inquiry, collaboration and supportive interactions in the classroom.
- Function effectively within community-wide systems of education.
- Evaluate the effects of his/her choices and actions on others (students, parents and other professionals in the learning community) through ongoing reflective practice and actively seek opportunities to grow professionally.

Teacher Certification. The Susquehanna University Department of Education offers the following programs for teacher certification approved by the Pennsylvania Department of Education:

- Early childhood education (preK-4)
- Secondary (7-12) and (K-12) in areas listed below under Majors Approved for Teaching Certification

- Music education (K-12). See the music department for information about this program.

The Elementary Education Major. Students taking the course of studies necessary to gain one of the Pennsylvania teaching certificates for the elementary grades will major in elementary education. This major combines courses in various disciplines with teacher education courses, including student teaching.

Early Childhood Certification. Students who enter SU's elementary education program will earn a bachelor's degree in elementary education and prepare for preK-4 certification.

Middle Grades Certification. At this time, SU does not offer a program for middle-grades certification (grades 4-8).

Secondary Certification. Students who earn certification in secondary education must major in the subject they will teach. They earn a teaching certification in grades 7-12 by completing the teacher education program, which includes student teaching in the spring semester of the senior year. Courses required for the secondary teacher education program are listed below.

The Teacher Intern Program is a route to certification for those who have a bachelor's degree in an approved major. It is an option for students who do not complete certification requirements as undergraduates, including those who decide to pursue teaching late in their undergraduate program. For information about the program, contact the director of the Teacher Intern Program in the Susquehanna education department office or visit www.susqu.edu/education.

Majors Approved for Teaching Certification:

Major	Teaching Certification
Elementary Education	Early Childhood (preK-4)
English	English (7-12)
Creative Writing	English (7-12)
Spanish	Spanish (K-12)
French	French (K-12)
German	German (K-12)
Mathematics	Mathematics (7-12)
Music Education	Music Education (7-12)
Biology	Biology, General Science (7-12)
Chemistry	Chemistry, General Science (7-12)
Physics	Physics, General Science (7-12)
Biochemistry	General Science (7-12)
Psychology	Social Studies (7-12)
Sociology/Anthropology	Social Studies (7-12)
History	Citizenship Education, Social Studies (7-12)
Political Science	Citizenship Education, Social Studies (7-12)

(Some certifications, such as social studies, and some majors, such as biology, may require extra coursework because of state or university requirements.)

Certification Requirements. To qualify for teaching certification in Pennsylvania, students must complete a bachelor's degree in the appropriate major with a grade point average of 3.00 or higher. They must also complete an accredited teacher education program, such as that offered by Susquehanna University, and pass the PAPA, PECT and/or Praxis tests required by the Pennsylvania Department of Education (PDE). More detailed information about these and other certification requirements is available on the PDE website http://www.pde.state.pa.us.

Declaring Interest in Education. Students who wish to pursue early childhood, K-12 or secondary education certification should notify their academic adviser and the head of the education department when they make that decision. They should also inform the Office of the Registrar by completing the Declaration of Academic Program form, available in that office.

Applying to the Teacher Education Program. The Pennsylvania Department of Education requires that education students apply and be admitted to a teacher education program before student teaching. The application packet is available through the education department's website and in the education department office in Seibert Hall. Students may apply for admission to the teacher education program as early as the spring semester of their sophomore year if all requirements have been met. Students must apply and be admitted no later than the second semester of their junior year.

Requirements for Admission to the Teacher Education Program

- Completion of at least 48 semester hours of coursework, including three semester hours of English composition, three semester hours of English/American literature and six semester hours of college-level mathematics;
- Successful completion of EDUC-101 Introduction to Education and Society;
- A cumulative GPA of 3.00 or a cumulative GPA of 2.80 and successful completion of PAPA examinations;
- Completion of one 40-hour externship (see below), with completed forms returned to the education department;
- Current Act 24, Act 34, Act 151 and Act 114 (FBI) clearances;
- Two reference forms completed by Susquehanna University faculty; and
- A completed application form.

Externship. An externship consists of 40 hours in a school for observing and aiding in classrooms and other areas of the school, conducting staff interviews, etc. Applicants must complete an externship prior to admission to the education program. Externship information and forms can be obtained from the education department office or the education department website http://www.susqu.edu/education/.

Student Teaching. Student teaching usually occurs in the spring semester of the senior year. To participate in student teaching, students must already be admitted to the teacher education program. Students must also have current TB test results and clearances through Act 24, Act 34, Act 151 and Act 114. Student teachers must have completed all courses required for the major and all education courses except the student teaching block. Students should not take any additional courses during student teaching without written permission from the head of the education department.

Professional Conduct. The education department faculty reserves the right to make a judgment on the suitability of students for professional teaching practice. Practicum students (those in the schools observing and/or aiding a teacher) and student teachers must follow the policies of the host school district. Practicum students and student teachers are held to a professional standard of behavior as specified by the Pennsylvania Code of Professional Practice and Conduct for Educators and will be removed from a school site by a building administrator for unprofessional conduct. A student asked to leave a school site may be assigned academic work outside of student teaching to complete the credits needed for graduation. Grades will be assigned by the education department faculty based on the work completed and evaluations from Susquehanna faculty and the cooperating teachers.

Departmental Honors. Departmental honors may be awarded to elementary education majors who meet the following criteria:

- Overall GPA of 3.50 and GPA of 3.50 or higher in education courses;
- Completion of early childhood education program for graduation;
- Submission of a formal application for honors to the education faculty by the second Friday of September of the senior academic year and before implementation of the research project;
- Acceptance of the application by the education faculty committee;
- Selection of an honors adviser from the education faculty;
- Development, in consultation with the selected adviser, of a proposal to execute, interpret and report on the individual research project;
- Approval by the education faculty committee of the project proposal;
- Enrollment in EDUC-601 Independent Study (1-4 semester hours);
- Completion of the research project and a public presentation of results;
- Submission of a final written report on the project to the honors adviser on or before the last day of classes for the semester of graduation; and
- Determination of honors status by the education faculty based on student performance.

Education Honor Society. Susquehanna University has a chapter of the international education honor society, Kappa Delta Pi. Education students with a GPA of 3.40 or higher who qualify for admittance to the teacher education program will be invited to apply for membership.

Education Course Requirements

Please note: Elementary, K-12 and secondary education students are required to include the following courses in their certification program:

EDUC-260 Introduction to Special Education (4 SH)

EDUC-270 Instruction of Exceptional Students (4 SH)

EDUC-350 English Language Learners: Theory and Instruction (4 SH)

The exception to this rule is that music education students must follow requirements of the music education curriculum, which may allocate this content to different courses. EDUC-290 will be taken in place of EDUC-270 by Elementary (ECE) students who elect to complete the Special Education dual certification.

Early Childhood (preK-4) Course Requirements

Early Childhood (preK-4) Course Requirements. Candidates for an early childhood (preK-4) teaching certificate must complete university Central Curriculum requirements plus the following required courses for a Bachelor of Science in elementary education:

12 Coursework required by PDE for admission to the teacher education program:

3 semester hours of English composition

3 semester hours of English/American literature

6 semester hours of college-level mathematics (100 level or higher) (Please note that PDE's requirement for 2 semester hours of math beyond Susquehanna's Central Curriculum may be met by any math course that has a math prefix and a course number of 100 or higher. It may be taken at any accredited institution of higher education and does not have to be accepted by Susquehanna as a transfer course.)

68 Education courses taken before student teaching:

- 2 EDUC-101 Introduction to Education and Society
- 2 EDUC-102 Historical and Philosophical Foundations of Education
- 4 EDUC-240 Cognition and Classroom Learning: Early Childhood
- 4 EDUC-260 Introduction to Special Education
- 4 EDUC-270 Instruction of Exceptional Children
- 4 EDUC-300 Arts in Education
- 4 EDUC-310 Math Methods: Pre-school
- 4 EDUC-311 Math Foundations: Primary Grades
- 4 EDUC-330 Technology in Education
- 4 EDUC-350 English Language Learners: Theory and Instruction
- 4 EDUC-365 Pre-school Language and Emergent Literacy
- 4 EDUC-366 Primary Literacy Development
- 4 EDUC-367 Literacy Assessment and Interventions
- 4 EDUC-380 Instructional Design
- 2 EDUC-389 Assessment
- 4 EDUC-400 Social Studies Methods: Early Childhood
- 2 EDUC-410 Family and Community
- 4 EDUC-430 Science Methods: Early Childhood
- 4 EDUC-490 Pedagogy and Classroom Environment

16 *Cognate courses* (some may also satisfy university Central Curriculum requirements):

- 4 PSYC-101 Principles of Psychology
- 4 PSYC-238 Developmental Psychology: Conception Through Childhood
- 4 United States History (HIST-111, HIST-112 or HIST-115)
- 4 INTD-320 The Sciences

14 Student teaching courses taken during the spring semester of the senior year (students may not enroll in other courses during this semester without written permission from the head of the Department of Education):

- 4 EDUC-501 Preparation and Planning
- 4 EDUC-502 Classroom Teaching
- 4 EDUC-503 Classroom Management
- 4 EDUC-600 Seminar

Special Education (PreK-8) Dual Certification

This four-course program consisting of EDUC-290, EDUC-320, EDUC-340, and EDUC-415 is only open to students enrolled in the Early Childhood Education program. Students earning the Special Education certification complete EDUC-290 in place of EDUC-270.

Upon successful completion of the Early Childhood program, the four courses specific to the Special Education certification, and student teaching that includes a placement in a special education classroom, teacher candidates will be eligible to apply for the Special Education (PK-8) certification in addition to their Early Childhood Education (PreK-4) certification. Beyond the program requirements listed above, teacher candidates must pass the PECT PreK-4 and the PECT PreK-8 Special Education exams in order to be certified to teach in Pennsylvania. Successfully passing PECT exams are requirements for certification but not for graduation.

Students seeking the Special Education (PreK-8) certification are eligible to begin course work upon completion of prerequisite courses (EDUC-101, 102, 240, and 260) and sophomore standing. Students must have a minimum 3.33 (B+) cumulative GPA in their education courses or have permission from the department chair and must submit a program application available through the Education Department in order to enroll in the four courses specific to the program.

ESL Program Specialist Dual Certification

This four-course program consisting of LANG 360, EDUC 440, EDUC 441, and EDUC 442 is only open to students enrolled in an Education program. The program is most compatible with the program requirements of Early Childhood Education (ECE) majors, but it is also open to students pursuing a secondary education certification and to Music Education majors. Upon successful completion of the four courses and their integrated field experiences (60 hours), teacher candidates will be eligible for the dual certification and potential employment as ESL Program Specialists in PreK – 12 settings. The ESL program prepares teachers to address the learning needs of English Language Learners (ELLs) in inclusive settings, as well as to coach and support classroom teachers who are not similarly trained but have ELLs in their classrooms.

Students seeking the ESL Program Specialist certification are eligible to begin course work upon completion of prerequisite courses (EDUC 101, 102 and 350) and sophomore class standing. Students must earn an A- in EDUC 350 and must submit a program application available through the Education Department in order to enroll in ESL certification courses.

Secondary Education Emphasis

Secondary Education (7-12) Course Requirements. Candidates for a secondary teaching credential must major in an approved subject, meet all of the university's requirements for a bachelor's degree in that subject (see that department's section of the catalog) and complete the required courses listed below. All courses required for secondary teacher certification must be completed with a grade of C- or higher.

12 Coursework required by PDE for admission to the teacher education program:

- 3 semester hours of English composition
- 3 semester hours of English/American literature
- 6 semester hours of college-level mathematics (Please note that PDE's requirement for 2 semester hours of math beyond Susquehanna's Central Curriculum may be met by any math course that has a math prefix and a course number of 100 or higher. It may be taken at any accredited institution of higher education and does not have to be accepted by Susquehanna as a transfer course.)

24 Education courses taken before the senior year:

- 2 EDUC-101 Introduction to Education and Society
- 2 EDUC-102 Historical and Philosophical Foundations of Education
- 4 EDUC-250 Educational Psychology
- 4 EDUC-260 Introduction to Special Education
- 4 EDUC-270 Instruction of Exceptional Children
- 4 EDUC-350 English Language Learners: Theory and Instruction

2 EDUC-380 Instructional Design

2 EDUC-330 Technology in Education

8 *Education courses taken during the fall semester of the senior year (the Secondary Education Methods Block):*

4 EDUC-479 Principles of Learning and Teaching in Secondary Education

2 EDUC-421-427 Methods of Curriculum, Instruction and Management

2 EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education

14 *Student teaching courses taken during the spring semester of the senior year (students may not enroll in other courses during this semester):*

4 EDUC-501 Preparation and Planning

4 EDUC-502 Classroom Teaching

4 EDUC-503 Classroom Management

2 EDUC-600 Seminar

Education Courses

EDUC-101 Introduction to Education and Society

Introductory study of education. Emphasizes teaching as a profession and current educational practice. Requires school-based practicum. 2 SH.

EDUC-102 Historical and Philosophical Foundations of Education

The role of education in American society and the historical, cultural and philosophical forces that have influenced the school. 2 SH.

EDUC-125 Residential Leadership for Social Justice and Community Development

This course is designed to prepare resident assistants for their role as leaders in the Susquehanna University residential community. Coursework will include an introduction to theory and the philosophy relating to student development and the liberal arts. The course will survey diversity and inclusion principles by challenging students to think critically about their own identity as it relates to others. 2 SH.

EDUC-205 Topics in Education

Studies of current and past issues in education. Topics vary according to instructor preference. 2-4 SH.

EDUC-240 Cognition and Classroom Learning: Early Childhood

An overview of educational principles, theories and strategies that positively influence student development and learning, focusing on early childhood through middle school ages. Approaches to teaching and learning are based on the understanding of children as individuals and as members of a group. Includes required school-based field experiences. Prerequisites: Sophomore standing and either EDUC-101 or MUED-200. 4 SH. CC: Social Interactions, Writing Intensive.

EDUC-250 Educational Psychology

An overview of psychological and educational principles as they apply to the classroom. Topics include instructional planning, developmental characteristics of students and learning theories. Also covers evaluation, discipline and classroom management. 4 SH. CC: Social Interactions, Writing Intensive.

EDUC-260 Introduction to Special Education

An overview of the needs of students with disabilities in multiple settings, examining both typical and atypical development, as well as all major areas of exceptionality and instructional strategies that support student success in inclusive classrooms. Additionally, legal, ethical, and professional responsibilities of teachers working with children

with disabilities, including those with multicultural and multilingual backgrounds are emphasized. Includes required special education school-based field experiences. 4 SH. CC: Diversity Intensive.

EDUC-270 Instruction of Exceptional Children

Explores methods of designing and delivering effective instruction for individuals with special learning requirements. Prerequisites: EDUC-260 and either EDUC-240 or EDUC-250. 4 SH.

EDUC-290 Instruction: Mild Disabilities

This course emphasizes experiential learning and builds upon students' understanding of the diverse needs of children who are struggling and those with identified mild disabilities, particularly in terms of research-based approaches to provide effective instruction in inclusive and special education classrooms. Students will specifically learn how to develop and implement appropriate and individualized standards-aligned instruction for learners who have Individualized Education Plans (IEPs). Students will identify and implement research-based learning/teaching strategies to promote learners' progress (focusing on both those with high incidence disabilities) as well as a range of ways in which to differentiate instruction and implement universal design for learning principles to meet individual needs in all content areas. Only available to students accepted into the Special Education (PreK-8) Dual Certification program. Prerequisites: Sophomore class standing and successful completion of EDUC-240 and EDUC-260. 4SH.

EDUC-300 Arts in Education

Basic music and art fundamentals, methods of music and art instruction in elementary classrooms, and strategies for integrating music and art into the teaching of other elementary subjects. Prerequisites: Sophomore standing and either EDUC-101 or MUED-200. 4 SH. CC: Artistic Expression.

EDUC-310 Math Methods: Pre-school

Methods of developing curriculum and instruction for pre-school children in numbers and mathematical operations. This knowledge will be applied in field experiences. Prerequisites: Junior or senior standing and elementary education major. 4 SH.

EDUC-311 Math Foundations: Primary Grades

Methods of developing curriculum and instruction for primary-grade children in numbers and mathematical operations. This knowledge will be applied in field experiences. Prerequisites: EDUC-310, junior or senior standing, and elementary education major. 4 SH.

EDUC-320 Instruction: Moderate and Severe

This course will address knowledge and skills educators need to plan individualized programs for students with moderate and severe disabilities, including those with physical and cognitive impairments as well as autism. Emphasis will be on teaching and supporting students within both special education and regular classes/typical school activities, based on a vision of adult participation in typical community activities and settings. Associated topics of discussion include learning characteristics of students with moderate and severe disabilities, program planning and IEP development, assessment and instructional planning in foundation skills, communication, assistive technology, supporting participation and progress in the general education curriculum, social skills and facilitating peer relationships, and transition planning. Only available to students accepted into the Special Education (PreK-8) Dual Certification program. Prerequisites: Sophomore class standing and successful completion of EDUC-240 and EDUC-260. 4SH.

EDUC-330 Technology in Education

The theory and practice of using educational technology in the classroom. Includes practice with computers, multimedia and telecommunications. 2 SH.

EDUC-340 Behavior Interventions

This course will focus on having students develop a foundational understanding of behavior modification principles and classroom management strategies in order to be able to most effectively teach any type of student in an inclusive setting. Special attention will be given to individuals with emotional and behavior disorders and a variety of techniques for

implementing specific behavior intervention strategies at the school-wide and classroom levels will be discussed in addition to appropriate assessment procedures and behavior plan writing. Students will also learn evidence-based methods for providing academic instruction in core content areas for this population of students. Only available to students accepted into the Special Education (PreK-8) Dual Certification program. Prerequisites: Sophomore class standing and successful completion of EDUC-240 and EDUC-260. 4SH.

EDUC-350 English Language Learners: Theory and Instruction

Using knowledge of language systems, language acquisition and sociocultural influences on learning and communication to design instruction and assessment for students whose home language is not English. Includes field experiences. Prerequisites: Either MUED-200 or both EDUC-101 and EDUC-102. 4 SH.

EDUC-365 Pre-school Language and Emergent Literacy

An overview of research on and theories of young children's language development and methods of assessing and guiding the development of language skills in very young children, including skills that facilitate later learning of reading and writing. Includes field experiences at early childhood sites. Prerequisites: Sophomore standing and either EDUC-101 or MUED-200. 4 SH.

EDUC-366 Primary Literacy Development

Methods of designing and delivering explicit instruction in reading, writing and the related language arts to children in grades K-4. Includes field experiences at school sites. Prerequisite: EDUC-365. 4 SH.

EDUC-367 Literacy Assessment and Interventions

Methods of assessing young children's literacy development and providing interventions suited to the needs of each child. Includes field experiences at school sites. Prerequisites: EDUC-365 and EDUC-366. 4 SH. CC: Writing Intensive.

EDUC-370 The Theory and Practice of Peer Education

An introduction to a broad range of approaches to successful tutoring, this course focuses particularly on addressing diverse learning styles and understanding the impact of social-cultural differences on learning. Students will develop diverse peer tutoring strategies to facilitate learning and will be prepared to serve as tutors in a variety of settings. Prerequisite: GPA of 2.75 or instructor's approval. 2 SH.

EDUC-380 Instructional Design

Methods of designing instruction to enhance student learning by using clear objectives, appropriate assessment and flexible learning activities that conform to state curriculum standards. Prerequisites: Sophomore standing and either EDUC-101 or MUED-200. 2 SH.

EDUC-389 Assessment

Methods of designing and using a wide range of assessment types and assessment data to implement instructional or programmatic revisions in education. Includes field experiences at school sites. Prerequisites: A Central Curriculum Analytical Thought course, senior standing and admission to the teacher education program. 2 SH.

EDUC-400 Social Studies Methods: Early Childhood

Methods of designing and delivering effective instruction in social studies in early childhood classrooms. Includes field experiences at school sites. Prerequisites: Senior standing and elementary education major. 4 SH. CC: Team Intensive.

EDUC-410 Family and Community

Examines the connections among schools, families and communities and methods teachers can use to establish and maintain positive collaborative relationships with the families of their students. Includes field experiences at school or community sites. Prerequisites: Senior standing and admission to the teacher education program. 2 SH.

EDUC-415 Assessment in Special Education

The course covers methods and materials used in assessing students who may be eligible for special education. Class sessions will involve experiential learning activities related to the assessment of students. Students will take this course the semester before student teaching, in concurrence with a practicum. This course includes technical prerequisites of

understanding standardized assessment and the rationale for using curriculum-based measurement (CBM) within the broad context of special education programming. Students will develop competencies in utilizing norm-referenced, criterion-referenced, curriculum-based, and teacher-made assessment for instructional and placement decisions. Only available to students accepted into the Special Education (PreK-8) Dual Certification program. Prerequisites: Sophomore class standing and successful completion of EDUC-240 and EDUC-260. 4SH.

EDUC-421 Methods of Curriculum, Instruction and Assessment in Teaching English

Methods courses in the secondary program address content and techniques used to develop and implement instruction in the specific content area. (Music education majors should refer to the music department's methods course list.) All methods courses include field experiences. These courses are taken in the first semester of the senior year as part of the Secondary Education Methods Block. Prerequisites: EDUC-102, either EDUC-250 or EDUC-240, either EDUC-101 or MUED-200, senior standing, and admission to the teacher education program. 2 SH.

EDUC-422 Methods of Curriculum, Instruction and Assessment in Teaching Foreign Languages

Methods courses in the secondary program address content and techniques used to develop and implement instruction in the specific content area. (Music education majors should refer to the music department's methods course list.) All methods courses include field experiences. These courses are taken in the first semester of the senior year as part of the Secondary Education Methods Block. Prerequisites: EDUC-102, either EDUC-250 or EDUC-240, either EDUC-101 or MUED-200, senior standing, and admission to the teacher education program. 2 SH.

EDUC-423 Methods of Curriculum, Instruction and Assessment in Teaching Mathematics

Methods courses in the secondary program address content and techniques used to develop and implement instruction in the specific content area. (Music education majors should refer to the music department's methods course list.) All methods courses include field experiences. These courses are taken in the first semester of the senior year as part of the Secondary Education Methods Block. Prerequisites: EDUC-102, either EDUC-250 or EDUC-240, either EDUC-101 or MUED-200, senior standing, and admission to the teacher education program. 2 SH.

EDUC-424 Methods of Curriculum, Instruction and Assessment in Teaching Science

Methods courses in the secondary program address content and techniques used to develop and implement instruction in the specific content area. (Music education majors should refer to the music department's methods course list.) All methods courses include field experiences. These courses are taken in the first semester of the senior year as part of the Secondary Education Methods Block. Prerequisites: EDUC-102, either EDUC-250 or EDUC-240, either EDUC-101 or MUED-200, senior standing, and admission to the teacher education program. 2 SH.

EDUC-425 Methods of Curriculum, Instruction and Assessment in Teaching Social Studies

Methods courses in the secondary program address content and techniques used to develop and implement instruction in the specific content area. (Music education majors should refer to the music department's methods course list.) All methods courses include field experiences. These courses are taken in the first semester of the senior year as part of the Secondary Education Methods Block. Prerequisites: EDUC-102, either EDUC-250 or EDUC-240, either EDUC-101 or MUED-200, senior standing, and admission to the teacher education program. 2 SH.

EDUC-427 Methods of Curriculum, Instruction and Assessment in Teaching Citizenship

Methods courses in the secondary program address content and techniques used to develop and implement instruction in the specific content area. (Music education majors should refer to the music department's methods course list.) All methods courses include field experiences. These courses are taken in the first semester of the senior year as part of the Secondary Education Methods Block. Prerequisites: EDUC-102, either EDUC-250 or EDUC-240, either EDUC-101 or MUED-200, senior standing, and admission to the teacher education program. 2 SH.

EDUC-430 Science Methods: Early Childhood

Methods of teaching scientific knowledge and the elements of scientific thinking and experimenting in developmentally appropriate ways to children through fourth grade. Includes field experiences at schools and other sites and may include one or more Saturdays. Prerequisites: INTD-320, junior or senior standing, and admission to the teacher education program. 4 SH.

EDUC-440 ELL Language and Literacy Development

This course focuses on the academic language needed for ELLs to be successful in U.S. schools. The course begins with an emphasis on foundational knowledge of language structures (i.e., English phonology, morphology, and syntax) as well as a thorough review of key theories and principles in first and second language acquisition. The course looks at the particular issues faced by students at different points in their education: elementary, middle and high school, as well as the role of literacy in content area learning. Students will understand the complexities associated with reading and writing development in more than one language. The tutoring component of the course will give students an opportunity to apply theoretical knowledge to practice and conduct hands-on analyses and diagnostic assessments. Prerequisites: EDUC-350 and LANG-360. 4 SH.

EDUC-441 Teaching and Learning Languages

In this course, sociocultural and political dimensions of language learning and teaching are explored. Learning a language is not a politically neutral enterprise: Issues of power are related to who is encouraged to learn a language and who is prevented from accessing linguistic resources. The course emphasizes the interplay between the macro-level relations of power in society and the micro-level experiences of language learners by focusing on sociocultural, political, racial, and economic perspectives. Throughout the semester, you will be encouraged to make connections between theory and practice. As part of making connections between theory and practice, 20 hours of field experience will be a part of the course assignments and requirements. Prerequisites: EDUC-350 and LANG-360. 4 SH. CC: Diversity Intensive.

EDUC-442 Language Teaching Foundations

The purpose of this course is to introduce students to current research-based methods, strategies, frameworks and resources in K-12 ESL education, with an emphasis on both curriculum and assessment components. The course offers a critical overview of a variety of ESL teaching methods, with the focus on recent developments in content-based, task-based, and critical pedagogies, in addition to appropriate assessment principles and techniques. Students will also explore a variety of ways to use technology for instructional purposes. The course includes a concurrent, required field experience (20 hours total; two observation hours per week) where candidates will work with an ELL in the field, identify their instructional needs through assessment and then work with the learner to meet instructional needs through different forms of curriculum. 4 SH.

EDUC-479 Principles of Learning and Teaching in Secondary Education

A study of current curricular and instructional practices. Topics include components of professional practice, planning and preparation, classroom environment, classroom assessment, and professional development. (A summer section of EDUC-479 may be offered for students participating in the Teacher Intern Program. This summer section carries two semester hours of credit and is not available to undergraduate students.) This course is taken in the first semester of the senior year as part of the Secondary Education Methods Block (see secondary education in the education course requirements section on page 65.) This course includes a practicum. Prerequisites: Senior standing and admission to the teacher education program. 4 SH.

EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education

An overview of the current models of classroom management and strategies for meeting diverse needs and unique abilities of students from many different backgrounds. Topics include classroom management techniques for exceptional learners, urban and rural students, and culturally and linguistically diverse students. Includes field experiences at a school site. This course is taken in the first semester of the senior year as part of the Secondary Education Methods Block. Prerequisites: Senior standing and admission to the teacher education program. 2 SH.

EDUC-490 Pedagogy and Classroom Environment

A course for seniors in the early childhood (preK-4) certificate program, which covers methods of early childhood teaching, including instructional planning, responsive classroom management, diversity in the classroom and professional ethics. The second half of the course is spent at the school site with the cooperating teacher to whom each senior is assigned for student teaching in the spring semester. Prerequisites: Senior standing in the elementary education major and admission to the teacher education program. 4 SH.

EDUC-501 Preparation and Planning

Taken together, EDUC-501, EDUC-502, EDUC-503, and EDUC-600 require observation and student teaching in nearby schools under supervision of a public school teacher and a university supervisor and attendance at a weekly seminar. During this 15-week period, students in early childhood education spend a minimum of 450 hours of observation/teaching experience, and students in secondary education spend a minimum of 420 hours of observation/teaching experience. To enroll in this block of courses, students must be admitted to the teacher education program and have approval from their advisers. Students may not enroll in any additional courses for this semester without prior written approval from the head of the Education Department. Prerequisites: All other courses required for the major and for the teacher education program, as well as admission to the teacher education program. . Capstone for elementary education majors. 4 SH CC: Oral Intensive.

EDUC-502 Classroom Teaching

Taken together, EDUC-501, EDUC-502, EDUC-503, and EDUC-600 require observation and student teaching in nearby schools under supervision of a public school teacher and a university supervisor and attendance at a weekly seminar. During this 15-week period, students in early childhood education spend a minimum of 450 hours of observation/teaching experience, and students in secondary education spend a minimum of 420 hours of observation/teaching experience. To enroll in this block of courses, students must be admitted to the teacher education program and have approval from their advisers. Students may not enroll in any additional courses for this semester without prior written approval from the head of the Education Department. Prerequisites: All other courses required for the major and for the teacher education program, as well as admission to the teacher education program. Capstone for elementary education majors. 4 SH CC: Oral Intensive.

EDUC-503 Classroom Management

Taken together, EDUC-501, EDUC-502, EDUC-503, and EDUC-600 require observation and student teaching in nearby schools under supervision of a public school teacher and a university supervisor and attendance at a weekly seminar. During this 15-week period, students in early childhood education spend a minimum of 450 hours of observation/teaching experience, and students in secondary education spend a minimum of 420 hours of observation/teaching experience. To enroll in this block of courses, students must be admitted to the teacher education program and have approval from their advisers. Students may not enroll in any additional courses for this semester without prior written approval from the head of the Education Department. Prerequisites: All other courses required for the major and for the teacher education program, as well as admission to the teacher education program. Capstone for elementary education majors. 4 SH CC: Ethics Intensive, Oral Intensive.

EDUC-600 Seminar

Taken together, EDUC-501, EDUC-502, EDUC-503, and EDUC-600 require observation and student teaching in nearby schools under supervision of a public school teacher and a university supervisor and attendance at a weekly seminar. During this 15-week period, students in early childhood education spend a minimum of 450 hours of observation/teaching experience, and students in secondary education spend a minimum of 420 hours of observation/teaching experience. To enroll in this block of courses, students must be admitted to the teacher education program and have approval from their advisers. Students may not enroll in any additional courses for this semester without prior written approval from the head of the Education Department. Prerequisites: All other courses required for the major and for the teacher education program, as well as admission to the teacher education program. Capstone for elementary education majors. 2 SH.

EDUC-601 Independent Study

A detailed exploration of a selected educational topic or problem under faculty direction. Project may relate to the development of a significant skill in teaching. Requires approval of supervising professor and department head. 1-4 SH.

INTD-320 The Sciences

Students in this course will examine the disciplines of the natural sciences (physics, chemistry, biology, earth and space) together with related technologies. The course introduces students to science as a human activity with a long history and the following habits of mind: values and attitudes, computation and estimation, manipulation and observation,

communication, and critical-response skills. Particular attention is given to the underlying themes of science: systems, models, constancy and change, and scale. Laboratories will be taught together with the lecture portion of the class. However, some laboratory experiences may be on Saturdays. Prerequisites: Sophomore standing, EDUC-102, completion of the Analytical Thought requirement, and either MUED-200 or EDUC-101. 4 SH. CC: Interdisciplinary, Scientific Explanations, Team Intensive.

ENGLISH AND CREATIVE WRITING

Faculty

Laurence D. Roth, Ph.D., Professor of English, co-department head

Glen Retief, Ph.D, Associate Professor of English & Creative Writing, co-department head

Tom Bailey, Professor of English

Gary W. Fincke, Ph.D., Professor of English

Catherine Zobal Dent, Associate Professor of English

Drew Hubbell, Ph.D., Associate Professor of English

Karla Anne Kelsey, Ph.D., Associate Professor of Creative Writing

Karen E. Mura, Ph.D., Associate Professor of English

Randy Robertson, Ph.D., Associate Professor of English & Creative Writing

Rachana Sachdev, Ph.D., Associate Professor of English

Betsy Verhoeven, Ph.D., Associate Professor of Creative Writing

Silas Dent Zobal, Assistant Professor of English

Hasanthika Sirisena, M.F.A., Visiting Assistant Professor of Creative Writing

Harvey Partica, M.A., Visiting Lecturer in English & Creative Writing

Marcus Burke, M.F.A., Creative Writing Fellow

English and Creative Writing Studies

Students in English and Creative Writing study literature from three different perspectives: as writers, readers, and editor-entrepreneurs. Foundational courses taken by all students in the first and second years show how literary history, literary theory, and literary diversity are integral to formal concerns and to emerging digital contexts. These provide a common learning experience. After the foundational courses, English–Literature and English–Secondary Education majors take advanced seminars in literary history and theory; English–Publishing & Editing majors take advanced courses in literary criticism and professional skills; and Creative Writing majors take advanced writing workshops. Coursework in each major is completed through a capstone experience. English–Literature and English–Secondary Education majors pursue an independent research project; English–Publishing & Editing majors take a course in which they reflect on the cultural, political, and commercial functions of publishing; and Creative Writing majors prepare a portfolio of their original work.

ENGLISH

English – Literature

The English Major - Literature is designed to prepare students for a successful, fulfilling life and career in the 21st century by training them to understand the theoretical implications and historical context of all forms of writing and become expert writers. A graduate from this program will have superb analytic and problem-solving skills, powerful methods to understand cultural context and meaning, and the ability to perform advanced research in any text-based field, such as law, education, government, library science, publishing, editing, marketing and public advocacy.

Learning Goals:

- Critical thinking: originality and appreciation of nuance
- Interpretation: history, theory and criticism
- Literacy: reading, intertextuality and cosmopolitanism
- Style: rhetoric, genre and audience

Requirements for the English Major–Literature. 40 - 42 semester hours with grades of C- or better.

4	ENGL-240 Literary Themes
4	One course chosen from among ENGL-245 Studies in Comparative Literatures of the Americas, ENGL-250 World Literature, ENGL-255 Jewish Literature, and ENGL-240 Literary Themes. Students cannot repeat a course with the same content.
4	ENGL-265 Forms of Writing
4	ENGL-290 Aesthetics and Interpretation
4	Mid-level writing course chosen from among ENGL-295 Voice and Audience, WRIT-240 Introduction to Genre Writing, WRIT-250 Introduction to Creative Writing, WRIT-251 Introduction to Fiction, WRIT-252 Introduction to Poetry, and WRIT-253 Introduction to Creative Nonfiction
16	Advanced study to be chosen from among courses in the ENGL-300 to ENGL-390 range. 4 semester hours of this work must be in an early period course.
2-4	ENGL-540 Internship in field related to likely career
2	ENGL-440 Independent Research: Issues in Literature

Of the semester hours listed above, 4 semester hours taken at the 200 or 300 level must be early period, defined as pre-1865 America or pre-1789 British. 4 semester hours taken at either the 200 or 300 level must be multicultural/non-western.

The English-secondary education major is designed to prepare students to teach English in grades 7-12 and be successful on standard exams required of teaching candidates. This major is offered by the Department of English and Creative Writing in conjunction with the Department of Education. It is designed to be a program leading to teacher certification, and students formally apply to the teacher education program by February of their sophomore year or as soon after that as possible. At the time of application, the candidate must have at least a 3.00 overall GPA and a 3.00 English GPA.

Requirements for the English–Secondary Education Major, 48 semester hours with grades of C- or better.

Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American Literature, at least 6 semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction

to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners, EDUC-380 Instructional Design, EDUC-421 Methods of Curriculum, Instruction, and Assessment in Teaching English, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching Package (EDUC-501, EDUC-502, EDUC-503, and EDUC-600).

English – Publishing and Editing

The English–Publishing and Editing major prepares students for careers in a digitally mediated publishing industry and for related careers in marketing, public relations, arts journalism, library and information science, and media management. Courses focus on both the intellectual and practical uses of literary study, especially the technologies of writing and reading, the businesses of literature, and craft.

Students in the English - Publishing and Editing major complete the following 42 - 46 semester hours with grades of C- or better.

4	ENGL-190 Introduction to Modern Publishing
4	WRIT-270 Small Press Publishing and Editing
4	COMM-331 Editing
2-4	ENGL-540 Internship
4	MGMT-280 Marketing
or	ENGL-375 History of the Book
4	ENGL-388 Publishing: Ethics, Entertainment, Art, Politics
2-4	One course from among COMM-182 Writing for New Media, COMM-211 Public Relations, ENGL-298 Book Reviewing, and ENGL-299 Professional Writing.
8	ENGL-265 Surveys in Forms of Writing (students may not repeat the same form)
2	ENGL-269 English Grammar and the Writing Process
4	ENGL-290 Aesthetics and Interpretation
4	One ENGL course at the 300 level other than ENGL-375 and ENGL-388

English – Secondary Education

The English–Secondary Education Major is designed to prepare students to teach English in grades 7-12 and be successful on standard exams required of teaching candidates. This major is offered by the Department of English and Creative Writing in conjunction with the Department of Education. It is designed to be a program leading to teacher certification, and students formally apply to the teacher education program by February of their sophomore year or as soon after that as possible. At the time of application, the candidate must have at least a 3.00 overall GPA and a 3.00 English GPA.

Requirements for the English–Secondary Education Major, 48 semester hours with grades of C- or better.

Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American Literature, at least 6 semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC_260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350

English Language Learners, EDUC-380 Instructional Design, EDUC-421 Methods of Curriculum, Instruction, and Assessment in Teaching English, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching Package (EUDC-501, EDUC-502, EDUC-503, and EDUC-600).

Major GPA Calculation. For the purposes of calculating the required 2.00 minimum GPA in any of the four majors offered by the department, the English and Creative Writing Department uses all of the major courses with the ENGL and WRIT prefixes.

Minor in English. English minors complete, with grades of C- or better, four semester hours from ENGL-265 Forms of Writing courses, four semester hours from Surveys in Traditions of Literatures courses and 12 semester hours from Advanced Studies and Themes courses. Courses are chosen by the student with the guidance of a departmental adviser.

Minor in Publishing and Editing. Students earning the minor in publishing and editing must complete five courses (a total of 18 semester hours) with a grade of C- or above. The required courses are ENGL-190 Introduction to Modern Publishing, WRIT-270 Small Press Publishing and Editing, COMM-331 Editing, ENGL-540 Internship, and ENGL-388 Publishing: Ethics, Entertainment, Art, Politics.

Minor in Professional and Civic Writing. Students earning the minor in professional and civic writing must complete a total of 20 semester hours with a grade of C- or above. The required courses are listed below:

4	Choose from: (INTD-201, DIVS-100 or LANG-300)
2	ENGL-269 English Grammar and the Writing Process
4	COMM-194 Intercultural Communication
4	ENGL-299 Professional and Civic Writing: Practice and Theory
4	Choose from: (ENGL-381, ENGL-382 or ENGL-390, when the topic addresses a rhetorical theory)
2	ENGL-540 Internship

CREATIVE WRITING

The creative writing major emphasizes literature and writing courses that will be most valuable in preparing students not only for careers in writing, but also for related careers in law, education, publishing and editing. Courses are organized to offer breadth and depth, practical skills, and intensive independent writing, presentation and production experiences.

Requirements for the Creative Writing Major. 48 semester hours with grades of C- or better.

4	WRIT-251 Introduction to Fiction
4	WRIT-252 Introduction to Poetry
4	WRIT-253 Introduction to Creative Nonfiction
8	Intermediate creative writing workshops chosen from WRIT-351 Intermediate Fiction, WRIT-352 Intermediate Poetry and WRIT-353 Intermediate Creative Nonfiction
4	Advanced creative writing workshops chosen from WRIT-451 Advanced Fiction, WRIT-452 Advanced Poetry and WRIT-453 Advanced Creative Nonfiction
2	WRIT-550 Senior Writing Portfolio
2-4	WRIT-520 Practicum
or	WRIT-540 Internship

8 ENGL-265 Forms of Writing, with no repetition of genre and no limitation of topic within the course topics listed below:

ENGL-265: Novel

ENGL-265: Short Story

ENGL-265: Formal Structure of Poetry

ENGL-265: Narrative Poetry

ENGL-265: Lyric Poetry

ENGL-265: Prose Poetry/Lyric Essay

ENGL-265: Personal Essay

ENGL-265 Memoir

ENGL-265 Literary Journalism

ENGL-265 Popular Writing

2 ENGL-269 English Grammar and the Writing Process

4 ENGL-290 Aesthetics and Interpretation

4 ENGL courses at the 300 level other than ENGL-381, ENGL-382, and ENGL-388

Note: A student is required to participate in a senior reading and to produce a senior chapbook in order to graduate with a creative writing major.

Creative Writing – Secondary Teaching Certification

The creative writing secondary education major emphasizes literature and creative writing courses that will be most valuable in preparing students for a career in teaching. Courses are organized to develop not only the writing skills of the student, but also to enhance the ability to teach creative writing and literature. Courses in literature are chosen specifically to enable students to master the core of literature needed to both succeed on standardized examinations required of teaching candidates and to be familiar with secondary school curricula.

This major is offered by the Department of English and Creative Writing in conjunction with the Department of Education. It is designed to be a program leading to teacher certification, and students formally apply to the teacher education program by February of their sophomore year or as soon after that as possible At the time of application, the candidate must have at least a 3.00 overall GPA and a 3.00 English GPA.

Requirements for the Creative Writing Secondary Education Major. 44-50 semester hours in Department of English and Creative Writing courses with grades of C- or better.

Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American Literature, at least 6 semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners, EDUC-380 Instructional Design, EDUC-421 Methods of Curriculum, Instruction, and Assessment in Teaching English, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching Package (EDUC-501, EDUC-502, EDUC-503, and EDUC-600).

4	WRIT-251 Introduction to Fiction
4	WRIT-252 Introduction to Poetry
4	WRIT-253 Introduction to Creative Nonfiction (These 200-level courses must be completed before the end of the student's junior year.)
4	Intermediate creative writing workshops chosen from WRIT-351 Intermediate Fiction, WRIT-352 Intermediate Poetry, and WRIT-353 Intermediate Creative Nonfiction
4	Advanced creative writing workshops chosen from WRIT-451 Advanced Fiction, WRIT-452 Advanced Poetry, and WRIT-453 Advanced Creative Nonfiction
2	ENGL-269 English Grammar and the Writing Process
4	ENGL-290 Aesthetics and Interpretation
2	WRIT-550 Senior Writing Portfolio
4	ENGL-265 Forms of Writing
12	12 semester hours in advanced study to be chosen from among courses in the ENGL-300 to ENGL-390 range. 4 semester hours of this work must be in an early period course, defined as pre-1865 America or pre-1789 British. Creative writing - secondary education majors are strongly encouraged to fulfill this early period requirement via ENGL-350 Major Authors: Shakespeare. A further 4 semester hours must be multicultural/non-Western.

Note: The Department of Education requires a cumulative grade point of 3.00 overall and in the major. Also, a student is required to participate in a senior reading and to produce a senior chapbook in order to graduate with a creative writing major.

Major GPA Calculation. For the purposes of calculating the required 2.00 minimum GPA in any of the four majors offered by the department, the English and Creative Writing Department uses all of the major courses with the ENGL and WRIT prefixes.

Minor in Creative Writing. Creative writing minors complete, with grades of C- or better, at least 20 semester hours beyond ENGL-100 and including a WRIT 300-level, intermediate workshop class. The remaining courses are chosen with guidance and approval of the departmental minor adviser from departmental offerings in writing. See the course descriptions for information about which courses may be repeated. COMM-131 Introduction to Journalism also satisfies requirements of the minor. Declaration of a creative writing minor requires submission of a six- to eight-page creative writing sample to the director of creative writing. Select members of the creative writing faculty will review this sample to ensure that students have the ability to succeed in this minor. Note that approval of a creative writing minor does not guarantee a place in workshop classes. The creative writing minor is not open to students pursuing the creative writing major.

English Courses

ENGL-090 College Writing

An intensive introduction to college reading and writing, intended to prepare students for the challenge of college writing and to empower them to become members of a larger writing community. Sections limited to 18 students. For elective credit only; not for credit in the English major or minor or the Central Curriculum. 4 SH.

ENGL-100 Writing and Thinking

An introduction to college writing, reading and discourse. Active discussion among students and instructors in sections limited to 18 participants. Seminars typically focus on a current social problem or a topic of particular interest to the instructor. Not for credit in the major or minor. 4 SH. CC: Writing and Thinking.

ENGL-190 Introduction to Modern Publishing

An introduction to the history of modern publishing, to the art and business of producing books (including current trends and problems), and to the practical knowledge and critical skills needed to pursue employment in the industry. Prerequisite: Sophomore standing. 4 SH. CC: Interdisciplinary.

ENGL-205 Literature Studies

Specialized courses surveying a particular theme or topic of literary study and fostering in students the capacity for critical thinking. Texts are chosen according to the interest and expertise of instructors. Recent examples are Wilderness Literature, Beat Literature, Living Writers and Travel Literature. Prerequisite: Sophomore standing or second-semester first-year students who have successfully completed the Writing and Thinking course. 4 SH. CC: Literary Expression.

ENGL-240 Literary Themes

An introductory historical survey of prominent themes in literature, including those related to national, transnational and ethnic literatures. Course topics vary and may include coming of age, human-nature relations, war and revolution, technology, and publishing house culture. Prerequisite: Sophomore standing or second-semester first-year students who have successfully completed ENGL-100. 4 SH. CC: Literary Expression.

ENGL-245 Studies in Comparative Literatures of the Americas (Multicultural/Non-Western)

Surveys the literature of one or more cultural groups both within and outside the U.S., including African-American, Native American, Latina/Latino, Asian American and others. In every case, factors of race, ethnicity, gender, sexual orientation and class will be of prime concern. Course selections and course topics vary according to instructor preference. Prerequisite: English and creative writing major or sophomore standing. Satisfies Multicultural/Non-Western requirement. 4 SH. CC: Diversity, Literary Expression.

ENGL-250 World Literature (Multicultural/Non-Western)

Surveys the literature, primarily in translation, of both historical and contemporary world writers, emphasizing the global context of literature. Prerequisite: English and creative writing major or sophomore standing. Satisfies Multicultural/Non-Western requirement. 4 SH. CC: Literary Expression.

ENGL-255 Jewish Literature (Multicultural/Non-Western)

A variable topic survey, in English translation, of the texts, writers, histories and languages that describe Jewish literatures. The course is especially concerned with debates over definitions of "Jewish literature" (what makes Jewish literatures Jewish?), the significance of Jewish literary and cultural diversity and Jewish literary navigations between diaspora and homeland, secularism and religiosity. Readings may include Hebrew and Israeli literature, Yiddish literature, Sephardic literature, or Jewish literatures of Europe and the Americas. Same as JWST-255. Prerequisite: Sophomore standing. Satisfies Multicultural/Non-Western requirement. 4 SH. CC: Diversity, Literary Expression.

ENGL-265 Forms of Writing

Courses designed to examine both the formal characteristics of a particular genre and its historical development. Focus of a particular section may be the novel, the short story, drama, poetry, the essay, memoir, epic or popular writing. Prerequisite: English or creative writing major or sophomore standing. 4 SH. CC: Diversity Intensive, Literary Expression, Writing Intensive.

ENGL-269 English Grammar and the Writing Process

A descriptive study of American English grammar and the history of the English language. 2 SH. CC: Oral Intensive.

ENGL-290 Aesthetics and Interpretation

Intensive and advanced study of reading and writing about literature. Includes close analysis of literary texts in historic, generic and cultural contexts; study of research methods and writing the research paper; and attention to traditional and recent critical theory. Prerequisite: English or creative writing major or sophomore standing. 4 SH. CC: Artistic Expression, Interdisciplinary, Writing Intensive.

ENGL-295 Voice and Audience

This course introduces students to academic writing in English studies by exploring varied models of successful scholarly writing. Emphasis is placed on students developing the skills and strategies writers need in order to participate effectively in the diverse conversations that define this field. Prerequisites: ENGL-100. 4 SH. CC: Writing Intensive.

ENGL-298 Book Reviewing

An introduction to and an intensive, rigorous workshop in the basic forms of book reviewing: the short book review, the review essay and the longer literary critical essay. The course builds on the writing skills students have learned in ENGL-100 and 200-level courses in literature, and it includes intensive reading in the forms listed above. Prerequisites: ENGL-100 or the equivalent and sophomore standing or instructor's permission. 4 SH.

ENGL-299 Professional and Civic Writing: Practice and Theory

This course offers experience in theory and practice of professional writing (writing that occurs in the workplace, especially in businesses, in government and for nonprofits). While the course is required for students in the publishing and editing emphasis of the Department of English and Creative Writing, students from other majors are welcome. Students will first choose a company or organization for which they would like to write. They will then gain experience writing a wide range of genres, such as letters and memos, feature stories, interviews, biographical sketches, press kits, fliers and brochures, and proposals. We will also study the theory of professional writing, including how genres (generally seen as set formulas) evolve over time in response to changing situations, how genres engage power relations and how genres can be made more open to divergent points of view. Prerequisite: ENGL-100. 4 SH. CC: Writing Intensive.

ENGL-300 History of the English Language (Early Period)

The development of the language from its origin to the present. Includes standards of written and spoken English and the differences between English spoken in England and that spoken in various parts of America and elsewhere in the world. Partially satisfies early period requirement. 4 SH.

ENGL-305 Themes in Early British Literature (Early Period)

Readings in prose, poetry and drama from the sixth to 17th centuries. Sections may focus on a particular period or range across centuries, and topics vary according to instructor preference. The texts will be in English but will not necessarily have been composed in Great Britain. Partially satisfies early period requirement. 4 SH.

ENGL-315 Themes in Early Modern British Literature (Early Period)

Readings in prose, poetry and drama from the late 17th century to 1900. Sections may focus on a particular period or range across centuries, and topics vary according to instructor preference. The texts will be in English but will not necessarily have been composed in Great Britain. Partially satisfies early period requirement. 4 SH. CC: Writing Intensive.

ENGL-325 Themes in Modern British Literature

Readings in prose, poetry and drama from 1900 to the present. Sections may focus on a particular period or range across centuries, and topics vary according to instructor preference. The texts will be in English but will not necessarily have been composed in Great Britain. 4 SH.

ENGL-335 Themes in Early American Literature (Early Period)

Readings in prose, poetry and drama by writers representing various American cultures and literatures, from the pre-Colonial period through 1865. Sections may focus on a particular period or range across centuries, and topics vary according to instructor preference. Partially satisfies early period requirement. 4 SH. CC: Writing Intensive.

ENGL-345 Themes in Modern American Literature

Readings in prose, poetry and drama by writers representing various American cultures and literatures, from 1865 to the present. Sections may focus on a particular period or range across centuries, and topics vary according to instructor preference. Prerequisite: 8 semester hours of English course work at the 100 and 200 levels. 4 SH.

ENGL-350 Studies in Major Authors

A study of literary works by a single author or perhaps of two writers whose works may be studied in tandem. By reading a number of texts by a single author, students will come to understand individual works better and will gain insight into the author's particular vision and sense of literary craft. Offerings are likely to include Chaucer, Shakespeare, Milton, Twain, Austen, Dickinson and Morrison. 4 SH. CC: Writing Intensive. Course also counts as Team Intensive, but only when the topic is Shakespeare: Cultural Performances.

ENGL-355 Studies in Anglophone Literature (Multicultural/Non-Western)

A study of literature written originally in English by writers from countries other than the United States and Britain. The course may include writers from Canada, Ireland, the Indian subcontinent, the Caribbean and English-speaking countries in Africa. Satisfies Multicultural/Non-Western requirement. 4 SH.

ENGL-361 Studies in Literary Forms

Advanced courses designed to examine the formal characteristics of a genre, as well as the historical factors influencing its development or manifestation at any given moment, and the theoretical approaches to understanding the genre. The focus of a particular section may be the novel, short story, drama, poetry, the essay or autobiography. 4 SH.

ENGL-365 Studies in Literature and Gender

Courses exploring such topics as women in literature, literature by women, literature and sexuality, the construction of gender in literature, and feminist literary theory. Same as WMST-365. 4 SH. CC: Writing Intensive.

ENGL-375 History of the Book

In this course we will study the book as a material object, a concrete text that is produced, sold, circulated and read. More broadly, we will address the wider social and political pressures that have shaped book production, as well as the social and political consequences of producing books and other media. We will first examine manuscripts and manuscript culture through a consideration of the New Testament's publication history. We will then shift our attention to the medium of print. As a class, we will study the wider implications of the invention of the printing press. What effect, for instance, did printing have upon literacy, the rise of natural science, the transformation of religion, and the twin concepts of authorship and literary property (copyright)? How did censorship constrain what writers, printers and booksellers were able to publish? Finally, we will study the Internet as an engine of change. In many scholars' estimation the Internet will have a more profound impact upon society than did the printing press. We will try to gauge this impact and to appraise the ways in which hypertext is changing literature, journalism and what's more, how we read and write. 4 SH.

ENGL-381 Advanced Composition: Rhetoric and the Environment

An interdisciplinary workshop course focusing on the environment. Students explore the way scientists' knowledge, methods and values have informed public rhetoric and scholarly rhetorical criticism, as well as the ways that rhetorical criticism and awareness have in turn had an impact on scientific discourse. Fundamental to the course is the crafting of students' written arguments in response to readings and personal involvement with environmental issues. The process of writing these arguments is informed by research from the field of composition and models the best practices of that field, making this course useful for future teachers and professional writers, as well as to those who are interested in environmental issues. Prerequisite: Sophomore standing. 4 SH. CC: Interdisciplinary, Writing Intensive.

ENGL-382 Reading/Writing/Teaching Difference

Students explore the ways that difference impacts everyone's—students', instructors' and others'—experiences of reading, writing and teaching/learning. "Difference" includes, among other factors, gender, race, class, religion, ability, sexuality and national origin. This interdisciplinary course uses readings and concepts from the fields of education, literature, and composition and rhetoric. Students will apply these concepts and readings to their own or to others' reading, writing and learning experiences inside and/or outside of the traditional classroom. Prerequisites: ENGL-100 and sophomore standing or instructor's permission. 4 SH. CC: Interdisciplinary, Diversity Intensive.

ENGL-388 Publishing: Ethics, Entertainment, Art, Politics

This course explores the cultural, political and commercial functions of publishing. We explore how published texts ask us to take on certain ethical roles as art critics, citizens and consumers. We start by reading Addison and Steele's

Spectator; next we examine Jurgen Haberma's theory that newspapers' publication of literary criticism helped enable democratic government; finally, we consider the ways changes in marketing, new formats like the Internet and increases in profitability have obscured the political purposes that may have been served in publishing. 4 SH. Capstone. CC: Ethics Intensive, Writing Intensive.

ENGL-390 Special Themes and Topics

Occasional offerings of specialized courses exploring subjects of serious interest to faculty members and to students. 4 SH. CC: Writing Intensive. When the topic being offered is Race and Identity in U.S. Literature, the course is Diversity Intensive and Ethics Intensive but not Writing Intensive.

ENGL-440 Independent Research: Issues in Literature

The majority of this course is a research workshop that allows seniors to pursue individual interests in a serious, scholarly way. It is the capstone course of the English and English-secondary education majors. Prerequisites: Junior or senior standing and at least eight hours at the 200 level or above. 2 SH. Capstone. CC: Oral Intensive, Writing Intensive.

ENGL-500 Directed Reading and Research

Independent research and writing under the supervision of an appropriate member of the department. Prerequisites: 24 credit hours in ENGL 200- and 300-level courses, 48 total credit hours with at least a 3.00 GPA in the major and department approval. 2-4 SH.

ENGL-505 Independent Study

Independent research and writing under the supervision of an appropriate member of the department. Prerequisites: 24 credit hours in ENGL 200- and 300-level courses, 48 total credit hours with at least a 3.00 GPA in the major and department approval. 2-4 SH.

ENGL-520 Practicum

Applied projects in language, literature or craft, including supervised work in literacy projects, in writing projects, at public and school libraries, in shelters, and in public institutions. The Susquehanna University Office of Volunteer Programs provides contacts. May apply for major or minor credit to a maximum of four semester hours, depending on the nature of the project. Prerequisites: 24 credit hours in ENGL 200- and 300-level courses, 48 total credit hours with at least a 3.00 GPA in the major and department approval. S/U grade. 2-4 SH.

ENGL-540 Internship

Research, writing and editing for various public and private organizations and various on- and off-campus publications. Open only when positions are available. May apply for major or minor credit to a maximum of four semester hours, depending on the nature of the internship. Prerequisites: 24 credit hours in ENGL 200- and 300-level courses, 48 total credit hours with at least a 3.00 GPA in the major and department approval. 2-4 SH.

Creative Writing Courses

WRIT-240 Introduction to Genre Writing

This workshop writing course introduces students to the craft of various types of writing, including screenwriting, children's literature and science fiction. Genres vary depending on semester and instructor expertise. 4 SH. CC: Artistic Expression when the topic is Experimental Writing.

WRIT-241 Environmental Writing

In this hands-on course students will develop creative writing projects around specific, local, environmentally important/precarious sites. In doing so, students will perform both traditional academic (scientific/historical) and experiential (place-based/creative) research that evolves into works of poetry, fiction, creative non-fiction, or cross-genre work. In this course you will dwell in the space between and including environmental studies and creative writing, developing your own voice and vision as witness to environmental change and trauma. 4 SH.

WRIT-250 Introduction to Creative Writing

Introductory workshop course in the study and practice of genre topics other than fiction, poetry, and creative nonfiction. 4 SH. CC: Team Intensive, Writing Intensive. May be repeated so long as the topic changes.

WRIT-251 Introduction to Fiction

Introductory workshop course in the study and practice of fiction. 4 SH. CC: Team Intensive, Writing Intensive.

WRIT-252 Introduction to Poetry

Introductory workshop course in the study and practice of poetry. 4 SH. CC: Team Intensive, Writing Intensive.

WRIT-253 Introduction to Creative Nonfiction

Introductory workshop course in the study and practice of creative nonfiction. 4 SH. CC: Team Intensive, Writing Intensive.

WRIT-270 Small Press Publishing and Editing

An introductory workshop course in the study and practice of publishing and editing for small presses; includes both historical study of the industry and hands-on publishing and editing projects. 4 SH. CC: Artistic Expression.

WRIT-350 Intermediate Creative Writing

An intensive, rigorous discussion of student writing in a workshop atmosphere. This course builds upon what students learned in WRIT-250 Introduction to Creative Writing. It includes intensive reading of literature in the genre being studied. Special emphasis on the development of a body of work. Genre topics include all those other than fiction, poetry, and creative nonfiction. Prerequisite: WRIT-250 or instructor's permission. 4 SH. CC: Literary Expression, Team Intensive, Writing Intensive. May be repeated so long as the topic changes.

WRIT-351 Intermediate Fiction

An intensive, rigorous discussion of student writing in a workshop atmosphere. This course builds upon what students learned in WRIT-250 Introduction to Fiction. It includes intensive reading of fiction. Special emphasis on the development of a body of work. Prerequisite: WRIT-251 or instructor's permission. 4 SH. CC: Literary Expression, Team Intensive, Writing Intensive. May be repeated so long as the topic changes.

WRIT-352 Intermediate Poetry

An intensive, rigorous discussion of student writing in a workshop atmosphere. This course builds upon what students learned in WRIT-250 Introduction to Poetry. It includes intensive reading of poetry. Special emphasis on the development of a body of work. Prerequisite: WRIT-252 or instructor's permission. 4 SH. CC: Literary Expression, Team Intensive, Writing Intensive. May be repeated so long as the topic changes.

WRIT-353 Intermediate Creative Nonfiction

An intensive, rigorous discussion of student writing in a workshop atmosphere. This course builds upon what students learned in WRIT-250 Introduction to Creative Nonfiction. It includes intensive reading of creative nonfiction. Special emphasis on the development of a body of work. Prerequisite: WRIT-253 or instructor's permission. 4 SH. CC: Literary Expression, Team Intensive, Writing Intensive. May be repeated so long as the topic changes.

WRIT-450 Advanced Creative Writing

An intensive, rigorous discussion of student writing in a workshop atmosphere, along with intensive reading in the genre. Special emphasis on the development of a significant body of work in preparation for an understanding of what is required to write a book in the genre being studied. Genre topics include all those other than fiction, poetry, and creative nonfiction. Prerequisite: WRIT-350 or instructor's permission. 4 SH. May be repeated.

WRIT-451 Advanced Fiction

An intensive, rigorous discussion of student writing in a workshop atmosphere, along with intensive reading in fiction. Special emphasis on the development of a significant body of work in preparation for an understanding of what is required to write a fiction book. Prerequisite: WRIT-351 or instructor's permission. 4 SH. May be repeated.

WRIT-452 Advanced Poetry

An intensive, rigorous discussion of student writing in a workshop atmosphere, along with intensive reading. Special emphasis on the development of a significant body of work in preparation for an understanding of what is required to write a poetry book. Prerequisite: WRIT-352 or instructor's permission. 4 SH. May be repeated.

WRIT-453 Advanced Creative Nonfiction

An intensive, rigorous discussion of student writing in a workshop atmosphere, along with intensive reading. Special emphasis on the development of a significant body of work in preparation for an understanding of what is required to write a creative nonfiction book. Prerequisite: WRIT-353 or instructor's permission. 4 SH. May be repeated.

WRIT-520 Practicum

Applied projects in writing under the supervision of an appropriate member of the department. Prerequisites: 24 credit hours in WRIT 200- and 300-level courses, 48 total credit hours with at least a 3.00 GPA in the major and department approval. 2-4 SH.

WRIT-540 Internship

Research, writing and editing for various public and private organizations and various on- and off-campus publications. Open only when positions are available. 2-4 SH.

WRIT-550 Senior Writing Portfolio

The capstone course for all creative writing majors (and interested creative writing minors). Students will prepare a portfolio of their written work with the expectation of the portfolio going "public," that is, meeting the demands of graduate school, employment or the marketplace. Required for senior creative writing majors; others by successful completion of WRIT-350. 2-4 SH. Capstone. CC: Oral Intensive.

WRIT-590 Independent Writing Project

Completion of a suitable portfolio of fiction, poetry, drama or creative nonfiction. Permission of the faculty member directing the project must be obtained during preregistration. Prerequisites: 24 credit hours in WRIT 200- and 300-level courses, 48 total credit hours with at least a 3.00 GPA in the major and department approval. 2-4 SH.

ENVIRONMENTAL STUDIES

Faculty

Kathy Straub, Ph.D., Professor of Earth and Environmental Sciences, director

Environmental studies is an interdisciplinary program that allows students to study environmental problems from multiple disciplinary perspectives. Drawing on courses from the departments of Earth and Environmental Sciences, Political Science, English and Creative Writing, Economics, Religious Studies, Sociology and Anthropology, and others, as well as two environmental studies synthesis courses, students develop a holistic, applied approach to environmental problem-solving. Students may earn a major or a minor in environmental studies.

Learning goals:

- Students will be able to describe broad environmental problems in terms of their interrelated scientific, political, economics, ethical, and human dimensions.
- Students will attain factual, in-depth knowledge of contemporary environmental issues from multiple disciplinary backgrounds.
- Students will develop critical thinking, research, and analysis skills.
- Students will understand the inherent complexity of environmental problems and will be able to communicate effectively a position to various stakeholders.

Environmental Studies Major. To earn the B.A. in environmental studies students must complete 56 semester hours of coursework, all with grades of C- or higher. All majors must complete 44 semester hours of program foundation courses and 12 semester hours of electives.

44 Foundation

4	EENV-101 Environmental Science or ECOL-100 Introduction to the Science of Ecology or BIOL-101 Ecology and Evolution or BIOL-010 Issues in Biology when the topic is one of the following: Biology of Climate Change, Conservation Biology, Environmental Biology, or Human Ecology
4	EENV-105 Energy and the Environment
or	EENV-332 Sustainable Energy Resources
4	EENV-242 Climate and Global Change
4	ENST-335 Environmental Laws and Regulations
4	WRIT-241 Environmental Writing or ENGL-381 Rhetoric and the Environment or ENGL-205 Literature Studies when the topic is Literature of Climate Change
4	RELI-235 Environmental Ethics
4	POLI-212 Introduction to Public Policy
4	ECON-202 Principles of Microeconomics
or	ECON-105 Elements of Economics
4	ACCT-210 Legal Environment
4	ENST-301 Current Topics in Environmental Studies
4	ENST-500 Negotiating International Climate Treaties: Institutions, Law, Theory

Electives (12 semester hours)

Students must complete 12 semester hours forming a cohesive focus, with advisor approval. No more than 4 semester hours may be taken at the 100 level or lower, and at least 4 semester hours must be taken at the 300 level or higher. It is not necessary for students to complete all 12 semester hours from the same category.

Biology/Ecology/Earth Sciences

2	BIOL-560 Interdisciplinary Explorations in Biology when the topic is either Sustainable Food Systems or Biology of Invasive Species
4	ECOL-201 Community and Ecosystems Ecology
4	ECOL-408 Aquatic Ecology and ECOL-409 Aquatic Ecology Lab
4	EENV-213 Oceanography
4	EENV-220 Water Resources
4	EENV-360 Geographic Information Systems
4	EENV-383 Soil Science

Cultural Studies

4	ENGL-205 Literature Studies when the topic is Literature of Climate Change (if not taken for Foundation credit)
4	ENGL-295 Voice and Audience
4	ENGL-315 Themes in Early Modern British Literature, when the topic is Green Romanticism
4	ENGL-381 Rhetoric and the Environment (if not taken for Foundation credit)
4	WRIT-241 Environmental Writing (if not taken for Foundation credit)
4	HIST-324 Pennsylvania's Pasts and Their Publics
4	PHIL-150 Everyday Ethics: Philosophical Issues in the Private Realm
4	RELI-101 Introduction to Religious Studies
4	RELI-105 World Religions

Economics/Business

4	ECON-201 Principles of Macroeconomics
4	ECON-313 Intermediate Microeconomics Theory
4	ECON-338 International Political Economy
4	ECON-370 Game Theory
4	MGMT-280 Marketing
4	MGMT-330 Small Business and Entrepreneurship: Theory, Practice and Concept
4	MGMT-369 Values, Ethics and the Good Life

Political Science

4	POLI-111 American Government and Politics
4	POLI-121 Comparative Government and Politics
4	POLI-215 Law and Politics
4	POLI-317 The U. S. Congress
4	POLI-319 State and Local Government and Politics
4	POLI-333 Development, Globalization and Society
4	POLI-334 International Organizations and Law

Public Relations

4 COMM-192 Public Speaking

4 COMM-211 Public Relations

4 COMM-321 Crisis Management

Sociology/Anthropology/Psychology

4 ANTH-152 Public Culture

4 ANTH-162 Introduction to Anthropology

4 ANTH-311 Regulating Bodies: Food, Sex, Drugs and the Economy

4 PSYC-232 Environmental Psychology

4 SOCI-101 Principles of Sociology

4 SOCI-333 Development, Globalization and Society

4 SOCI-316 Social Justice

4 SOCI-410 Economic Sociology

Minor in Environmental Studies. The minor in environmental studies requires 24 semester hours from courses listed as Foundation or Elective courses in the major. Only courses completed with a grade of C- or higher may be counted toward the minor. No more than 8 semester hours may be taken at the 100 level or lower. As specified in the general requirements for interdisciplinary minors, at least 16 semester hours in the minor may not be counted toward a student's major.

Courses applied to the environmental studies minor must include the following:

4 Introductory (100-level) environmental science, biology, or ecology

4 Upper-level (200-level or higher) environmental science, biology, or ecology

4 Political science, law, or economics

4 English, philosophy, religious studies, sociology/anthropology, or creative writing

4 Any course from the Foundation or Electives list

4 ENST-301 Current Topics in Environmental Studies

Honors. To graduate with honors, environmental studies majors must:

- Maintain a cumulative GPA of 3.25 and a GPA of 3.50 in the program,
- Request nomination from the ENST program coordinator at the beginning of ENST-500 Environmental Studies Capstone, and
- Complete and publicly present an honors-quality project in the spring of their senior year.

Environmental Studies Courses

ENST-301 Current Topics in Environmental Studies

An in-depth analysis of a current environmental issue. The topic will be explored through an integration of disciplines, including science, ethics, economics, policy, law and literature, as well as the role of citizen activism. Prerequisite: Sophomore standing or permission of the instructor. 4 SH.

ENST-335 Environmental Laws and Regulations

Surveys important state and federal environmental legislation, the principles on which these laws are founded, and the problems that arise in their practical application. Employs case studies to illustrate how environmental laws function in contemporary American society. 4 SH.

ENST-500 Negotiating International Climate Treaties: Institutions, Law, Theory

Students will apply their research in complex systems modeling risk management, international law and climate science in mock negotiations for a new climate accord modeled on the UNFCCC process. Prerequisite: Junior or senior standing. 4 SH. CC: Oral Intensive.

FILM STUDIES

Faculty

Kate Hastings, Ph.D., Associate Professor of Communications, coordinator

Learning goals:

- Film students understand films as works of art.
- Film students understand the relationship between films and their audiences and cultures.
- Film students possess a vocabulary to describe and evaluate films.
- Film students explore otherness through films.

Minor in Film Studies. The minor in film studies is an interdisciplinary program using courses in several departments and coordinated by the Film Institute. It provides students with a broad introduction to motion pictures as an art and cultural phenomenon. Students minoring in film studies complete, with grades of C- or better, 20 semester hours from the following: FILM-150, FILM-180, FILM-210, FILM-220, FILM-230, FILM-240, FILM-300, COMM-282 or COMM-382. Independent Studies and COMM-502 Individual Investigation are also available for credit toward the film studies minor, with Film Institute and instructor approval.

Film Production

The Department of Communications offers the following film-related production courses: COMM-282 Fundamentals of Digital Video Production and COMM-382 Intermediate Digital Multimedia Production.

Film Courses

FILM-150 Introduction to Film

An interdisciplinary study of film as an art and cultural phenomenon. Stresses the history, aesthetics and social implications of film rather than movie-making techniques. Studies commercial cinema in connection with traditional humanistic disciplines such as literature, history and philosophy. 4 SH. CC: Artistic Expression.

FILM-180 Film and Human Values

Focuses on religious, ethical, aesthetic and epistemological values as exemplified in selected films. Examines such issues as peace and war, personal ethics, civil disobedience, deception, truth, beauty, and the sordid. Emphasizes the nature of the ethical choices and value systems and the extent to which these are adequately represented or oversimplified and distorted by films. 4 SH.

FILM-210 Film and Literature

A study of films based upon literary works and their cinematic adaptations. Stresses an understanding of the relative criteria of artistic form for film and literature and problems of translating the written word into visual images, techniques of narration and questions of verisimilitude. 4 SH.

FILM-220 International Film

An interdisciplinary study of outstanding foreign films as works of art and cultural artifacts. Stresses film theories and criticism, as well as the appreciation of foreign films as creative exemplifications of national mores and culture. Includes particular attention to the work of distinguished directors such as Eisenstein, Lang, Renoir, Bunuel, Fellini, Kurosawa and Bergman. 4 SH. CC: Artistic Expression.

FILM-230 American Film and Culture

An interdisciplinary study of American film as an art, industry and cultural phenomenon. Stresses the history and aesthetics of American cinema, as well as the interaction between the American film industry and major events in U.S. history from 1895 to present. 4 SH.

FILM-240 Female Action Heroines in Film

This course examines the emergence and development of the female action heroine in film over the course of the last 50 years within the popular "action film" genre. This course critically evaluates visual and thematic markers of femininity, masculinity, sexuality, race and class with respect to representations of female action heroines in a variety of films. Same as WMST-240. 4 SH. CC: Artistic Expression, Diversity Intensive.

FILM-300 Film Seminar

Intensive study of advanced or specialized areas in film and its relation to the humanities and fine arts. Subjects vary and may include Imagination and the Artist, Film Theory and Criticism, studies in national cinema, individual artists, and film-based study of historical phenomenon. May be repeated with permission of the Film Institute coordinator. 4 SH.

HEALTH CARE STUDIES

Faculty

Jan Reichard-Brown, Ph.D., Associate Professor of Biology, director

Learning Goals:

- The student will be able to assess career options and make informed choices about which are the best for him or her given his or her interests and abilities.
- The student should be able to describe the nature of the health care system.
- The student should understand the impact of health care delivery on individuals and communities worldwide.
- The student should develop an appropriate knowledge base of key biomedical subjects related to the health care professions.

The creatively designed minor addresses the needs of very goal-oriented prehealth professional students, as well as serving as a means for undecided students to explore health care career options. Both tracks require 24 credits of coursework and two separate 40-hour internships, which each carry one credit.

As the largest interdisciplinary minor on campus, this program attracts students from many academic majors, including biochemistry, biology, business, communications, computer science, music and music education, neuroscience, psychology, Spanish and sociology. The interactions of students from such varying academic backgrounds enrich the experiences of all the students and contribute to their ability to view a topic from multiple perspectives. The intentional choice to create this program as a minor ensures that while students will receive recognition for this body of work, they are not locked into a professional track and are free to alter their career plans.

Health Care Studies Minor Graduate Prerequisite Program

The minor requires 24 semester hours, including four-semester-hour courses HLCR-301 Human Anatomy, HLCR-302 Human Physiology, HLCR-370 Human Health and Disease and PHIL-224 Bioethics and a two-semester-hour course HLCR-080 The Business of Health Care. Students also take a four-semester-hour elective course to be chosen from one of the following: BIOL-157 The Biology of Women; BIOL-320 Exercise and Extreme Physiology; BIOL-440 Behavioral Neuroendocrinology; BIOL-441 Behavioral Neuroendocrinology Lab; BIOL-560 Interdisciplinary Explorations in Biology when the topic being taught is either Human Parasites or Teratology; CHEM-302 Medicinal Chemistry; CHEM-305 Forensic Chemistry; CHEM-426 The Biochemistry of Proteins and Enzymes; CHEM-427 Biochemistry of Proteins and Enzymes Lab; PSYC-242 Health Psychology; PSYC-320 Abnormal Psychology; PSYC-342 Behavioral Neuroscience; RELI-305 Topics in Religion, with Issues at the End of Life as the topic; HIST-323 History of American Medicine; HIST-390 Topics in History when the topic is History of Medicine; or another four-semester-hour course based upon the students' interests, with approval of the health care studies director. Two one-semester 40-hour minimum internship experiences, which may be completed outside of the academic year, are also required. This minor is designed for students who plan on entering graduate programs that require Human Anatomy as a prerequisite course. These fields include but are not limited to: physical therapy, physician's assistant, optometry, occupational therapy, accelerated nursing programs and other allied health careers. The minimum GPA for enrolling in the graduate prerequisite track is 3.30.

Health Care Studies Minor Explorations Program

The minor requires 24 semester hours, including three four-semester-hour courses HLCR-302 Human Physiology, HLCR-370 Human Health and Disease and PHIL-224 Bioethics and a two-semester-hour course HLCR-080 The Business of Health Care. Students also take two four-semester-hour elective courses to be chosen from the following: BIOL-157 The Biology of Women; BIOL-320 Exercise and Extreme Physiology; BIOL-440 Behavioral Neuroendocrinology; BIOL-441 Behavioral Neuroendocrinology Lab; BIOL-560 Interdisciplinary Explorations in Biology when the topic is either Human Parasites or Teratology; CHEM-302 Medicinal Chemistry; CHEM-305 Forensic Chemistry; CHEM-426 The Biochemistry of Proteins and Enzymes; CHEM-427 Biochemistry of Proteins and Enzymes Lab; PSYC-242 Health Psychology; PSYC-320 Abnormal Psychology; PSYC-342 Behavioral Neuroscience; RELI-305 Topics in Religion, with Issues at the End of Life as the topic; HIST-323 History of American Medicine; HIST-390 Topics in History when the topic is History of Medicine; or another four-semester-hour course based upon the students' interests, with approval of the health care studies director. Two one-semester-hour 40-hour minimum internship experiences, which may be completed outside of the academic year, are also

required. Students enrolled in the explorations program of the health care studies minor may take HLCR-301 Human Anatomy as one of their four-semester-hour classes on a space-available basis.

Health Care Studies Courses

HLCR-080 The Business of Health Care

This course considers the effects of social influences and business practices as they apply to health care professions. Through application of theoretical concepts and use of case examples, this course introduces students to a variety of topics in the business of health care. Possible topics include historical and social influences on health care and its delivery; developments in health insurance, including the rise of HMOs; organizational mission and performance objectives; accounting practices; marketing principles and competitive factors; alternative organizational structures; personnel management, including staffing, training and diversity; and managing for organizational change. 2 SH.

HLCR-301 Human Anatomy

This course examines the major organ systems of the human body with an emphasis on structure as it influences function. It is designed to fulfill the entrance requirements of several health fields' postbaccalaureate and graduate training programs. The course is taught in a workshop format with the laboratory integrated into the lecture topics. Included in this workshop are hands-on study of the human skeleton, intensive dissection of the cat and dissection of other pertinent mammalian organs. Students will be required to identify most of the major mammalian anatomical systems and their detailed structures using either human models, isolated mammal organs or a dissected cat. Included in the course will be a discussion of some of the pathologies associated with human anatomy. This course cannot be used as a substitute for those courses in other programs that require cadaver dissection. Prerequisite: BIOL-101 or BIOL-102 or instructor's permission. 3 lecture hours, 3 laboratory hours. 4 SH.

HLCR-302 Human Physiology

This class focuses on the complex functioning of the individual organ systems of the body and how changing function may influence or be influenced by structure. The integrated interactions of each organ system with other body systems will be studied in detail within the contextual framework of maintaining homeostasis. Laboratory studies encompass many aspects of physiology, ranging from cell physiology to using humans as experimental subjects. Prerequisite: BIOL-101 or BIOL-102 or instructor's permission. 3 lecture hours, 3 laboratory hours. 4 SH.

HLCR-370 Human Health and Disease

This capstone course builds on the prerequisite courses in Human Anatomy and Human Physiology by focusing on select mechanisms and how they affect homeostasis and thereby create varying states of human health. These processes will be contrasted with pathological processes involved in the development of human disease. An organ system approach will be used to facilitate the study of pathology, pathophysiology and organic disease states. In addition, this course also addresses the psychological, social and cultural impact of disease and the disease process on patients, their families and their community. It is most beneficial if Bioethics and the Business of Health Care have been taken before this course. This class is not intended to take the place of a formal pathology course as may be required by specific professional programs. Prerequisites: HLCR-301, BIOL-320, junior standing and HLCR-302 to be taken prior to or simultaneously with HLCR-370. 4 SH. CC: Interdisciplinary, Oral Intensive.

HLCR-400 Independent Study in Health Care

Study of a particular topic in health care under the guidance of an appropriate faculty member. 1-4 SH.

HLCR-500 Health Care Internship

A minimum of 40 hours of experience is required for each internship. Students may arrange for an internship from a wide range of health care disciplines and clinical settings, depending upon their interests. Typical settings include hospital or clinic-based practice, private practice, public health areas and service-learning opportunities. Internship experiences may range from strictly observational to more hands on, depending upon the actual internship. Students must apply through the Office of the Registrar and submit a Student Learning Contract before beginning their internship. 1 SH.

HISTORY

Faculty

Edward S. Slavishak, Ph.D., Associate Professor of History, department head

Linda A. McMillin, Ph.D., Co-COO/ Provost and Dean of Faculty, Professor of History

Karol K. Weaver, Ph.D., Professor of History

David M. Imhoof, Ph.D., Associate Professor of History

Maria L.O. Muñoz, Ph.D., Associate Professor of History

Holly Caldwell, Ph.D., Visiting Assistant Professor of History

History Studies

Students of history learn, above all, the skills of the historian—to read, analyze and express themselves well. They study the past to learn from it *and* to prepare for a variety of future careers. While students focus on a variety of subjects (culture, military, gender, race, politics) or a specific geographic region in their major, they leave here with a broad, international perspective on history. The major is flexible and works well with other majors and minors. It also offers students the ability to study abroad.

Learning Goals:

- Research, write and present a senior project following professional guidelines.
- Present and defend a historical argument in a public setting.
- Prepare a career-planning portfolio.
- Participate in at least one off-campus co-curricular activity in which students demonstrate connections to their study of history.

Requirements for the History Major reflect the commitment to history as a way of knowing and thinking about the world.

Breadth courses (survey classes at the 100 level) focus on (a) the scope of civilization, usually in separate geographical areas, and (b) teaching students how to think like historians. They introduce students to broad developments while also using specific historical material to help students draw conclusions about these larger trends.

Depth courses are upper-division classes (200 or 300 level) that focus on more specific topics in a specific area or smaller thematic framework. These classes ask students to compare historical material and the arguments of other historians in order to craft their own conclusions about the past.

A *methodology* course, History Methods, taken in the sophomore year, teaches students the specific skills of the historian. This class then helps students learn to explain their analyses better in verbal and written form, with an eye toward the senior thesis.

Collective Inquiry in History, taken in the junior year, continues to teach students the skills of the historian and prepares them for their senior thesis.

Finally, in Senior Seminar, majors carry out detailed research on a topic of their choice and work one-on-one with a faculty adviser to write their senior thesis that is the capstone of their work as history majors.

In all three of these courses for majors, students spend time working on career plans (creating resumes, interviewing, discussing various career paths) and learning to explain the value of their history major.

Two more upper-division classes are required, at least one of which must focus on Asian, African or Latin American history.

The history major completes at least 40 semester hours in history, with grades of C- or better, and four semester hours in a related field outside of the major. Students must maintain a 2.00 GPA in their major courses. In summary, the major consists of the following courses:

12	Breadth courses: three survey courses, each in a different geographic area
	Choose from the following:
	4 Africa (HIST-171 or HIST-172)
	4 Asia (HIST-151 or HIST-152)
	4 Europe (HIST-131 or HIST-132)
	4 Latin America (HIST-180 or HIST-181)
	4 United States (HIST-111, HIST-112 or HIST-115)
8	Depth courses: two history courses at the 200 and 300 level, related by geography, chronology or topic
4	Course in a cognate field complementing the depth course
4	HIST-300 History Methods
4	Another history course at the 300 level
4	One course at the 200 or 300 level in a geographic area other than U.S. or European history
4	HIST-401 Collective Inquiry in History
4	HIST-410 Seminar in History
or	HIST-501 Independent Study

Transfer, AP or study abroad classes may apply to the major.

The Minor in History is designed to enhance nonmajors' interest in history; it consists of 20 hours or five classes. Students take two breadth (100 level) courses from different geographical areas, two depth (200 or 300 level) courses with a specific emphasis (e.g., a certain area of the world or a particular theme) and one more depth course of their choice. Students must earn a grade of at least C- in courses for the minor. Transfer, AP or study abroad classes may apply to the minor.

Honors. Students may earn departmental honors by obtaining at least a 3.50 overall GPA and completing a senior research project deemed outstanding by members of the department.

Teacher Certification. Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American literature, at least 6 semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners: Theory and Instruction, EDUC-380 Instructional Design, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching package (EDUC-501, EDUC-502, EDUC-503, and EDUC-600).

In addition to completing the history major and the courses listed above, secondary education history students must complete certification in either social studies or citizenship. The requirements for certification in social studies are EDUC-425 Methods of Curriculum Instruction and Assessment in Teaching Social Studies, SOCI-101 Principles of Sociology, ANTH-162 Introduction to Anthropology, ECON-105 Elements of Economics, POLI-111 American Government and Politics, POLI-121 Comparative Government and Politics, PSYC-101 Principles of Psychology, HIST-322 Pennsylvania History or HIST-324 Pennsylvania's Pasts and Their Publics, 1 course in U. S. history (HIST-111, HIST-112 or HIST-115), 1 course in European history (HIST-131 or HIST-132), and 1 course in non-Western history (HIST-151,

HIST-152, HIST-171, HIST-172, HIST-180, or HIST-181). The requirements for certification in citizenship are EDUC-427 Methods of Curriculum, Instruction, and Assessment in Teaching Citizenship, ANTH-162 Introduction to Anthropology, ECON-105 Elements of Economics, POLI-111 American Government and Politics, POLI-121 Comparative Government and Politics, HIST-322 Pennsylvania History or HIST-324 Pennsylvania's Pasts and Their Publics, 1 course in U. S. history (HIST-111 or HIST-112), 1 course in European history (HIST-131 or HIST-132), and 1 course in non-Western history (HIST-151, HIST-152, HIST-171, HIST-172, HIST-180, or HIST-181).

History Courses

HIST-111 United States History to 1877

Covers the emergence of an independent American state, the development of a distinctively American society and culture, the conflict over states' rights and slavery, and the Civil War. Considers changes in the lives of diverse American peoples. 4 SH. CC: Historical Perspectives.

HIST-112 United States History Since 1877

Considers industrialization, immigration, domestic politics, foreign relations and changing definitions of citizenship in the United States since the late 19th century. 4 SH. CC: Historical Perspectives, Diversity Intensive.

HIST-115 African American United States History

A survey of United States history with African-American experiences as its centerpiece. By adopting cultural, economic, political, and social approaches to the past, the course emphasizes themes of identity, strategy, and agency. 4 SH. CC: Historical Perspectives, Diversity Intensive.

HIST-131 Europe 800-1648

European history from about 800 to the middle of the 17th century. Pays particular attention to major epochs during this lengthy period–medieval, Renaissance, Reformation. 4 SH. CC: Historical Perspectives, Team Intensive.

HIST-132 Europe, 1648-Present

Modern Europe from the dawn of science and Enlightenment thought to the end of communism and after. Focuses on political, intellectual, cultural and social developments, showing the ways in which ideas shaped people's daily lives. Pays special attention to the human impact of the modern state's development, as well as industrialization, empire building, modernism, world war and genocide. 4 SH. CC: Historical Perspectives.

HIST-151 Traditional East Asia

An introduction to the civilization of East Asia from earliest times to the 17th century, surveying major political, social and cultural developments in China, Japan and Korea. Special attention is given to the origins and the evolution of civilizations; the relationship between state, society and religion; and the writing of history. The course provides students with a better understanding of different cultures, to awaken them to world developments and to encourage cross-cultural analysis and appreciation. 4 SH. CC: Historical Perspectives.

HIST-152 Modern East Asia

A survey course that introduces the foundation and development of modern East Asia from the 17th century to the present. It emphasizes the transformation of political and economic institutions and the social and cultural trends of modern China, Japan, Korea and Vietnam. It studies how international diplomatic, commercial, military, religious and cultural relationships joined with internal processes to direct the development of East Asian societies. 4 SH. CC: Historical Perspectives.

HIST-171 African Civilization

Survey of key developments in early African history from the agricultural revolution to the advent of trade with Western Europe. This course covers the topics of technology, economy, politics, constructions of gender and religious institutions between circa 16,000 B.C.E. up to 1,400 C.E. 4 SH. CC: Historical Perspectives.

HIST-172 Early Modern Africa

An examination of the processes of change that have led to modern political, economic and social institutions in Africa. Topics include the analysis of the historical development of urbanization, state formation, the slave trade, monetary systems and leisure culture. This course focuses on issues of continuity and change between 1400 and the present. The central questions addressed are: How have African communities viewed modernity? and How have different people endeavored to create a modern Africa? 4 SH. CC: Historical Perspectives, Team Intensive.

HIST-180 Latin America, 1492-1825

An examination of Latin America from pre-Columbian times to independence. Traces developments fundamental to the establishment of colonial rule, the formation of colonial society and the origins of the independence movements in Spanish America and Brazil. Topics include contact period, the cultural and political assimilation and resistance of indigenous and African peoples, the role of the church, government and economic systems in colonial organization. 4 SH. CC: Diversity Intensive, Historical Perspectives.

HIST-181 Latin America 1825-Present

Study of Latin America from the era of independence to the present. Focuses on Latin America and the global economy; revolutions and their consequences; ethnic, cultural and socio-economic diversity of the region; the relationship between the U.S. and Latin American nations; and changing politics of citizenship. 4 SH. CC: Diversity Intensive, Historical Perspectives.

HIST-215 The Civil War in the American Experience

This course considers the Civil War in its economic, political and cultural contexts. Students focus on the war as a human struggle with roots in racial, class, gender and regional identities. The course also emphasizes historians' debates about causes and consequences. Prerequisite: 100-level history course or instructor's permission. 4 SH.

HIST-218 Work and Play in the U.S.A.

This course examines the connections between the history of labor and leisure in the United States from the early 19th century to the late 20th century. Particular emphasis is placed on social and cultural analysis of labor and leisure systems. Students read several historical case studies and synthesize course material in an original research project on a topic of their choosing. Prerequisite: 100-level history course or instructor's permission. 4 SH.

HIST-226 Soviet and Russian Politics

Looks at Russian and Soviet politics and foreign policy. The Soviet Union is examined, with particular emphasis on the policies of Gorbachev and the 1991 disintegration of the U.S.S.R. The post-Soviet period is also studied, especially the challenges of democratization and of moving toward a market economy. While primary attention is paid to the situation in Russia, issues in other former Soviet republics and Eastern Europe are discussed. Same as POLI-226. 4 SH.

HIST-258 Modern China

A history of China from the fall of the last imperial dynasty to the People's Republic. It covers the major political events and revolutions, such as the Opium War, the Republican revolution and the Communist revolution. It also emphasizes the social and cultural lives of various human actors and social institutions, such as peasants, workers, women, ethnic minorities, migrants within and beyond China, educational system, and nationality laws. It explores such questions as what is Chineseness and what modernity means to different people at different times. It also studies China as an integral part of world history. Prerequisite: 100-level history course or instructor's permission. 4 SH. CC: Diversity.

HIST-300 History Methods

A study of the research methods employed by historians: searching for sources with electronic and published retrieval systems, annotated bibliographies, and methods of citation. A consideration of epistemological issues, such as fact, truth, inference and synthesis. Completion of a historiographical essay, a short research project and other writing in order to build and refine skills. History Methods is a critical course in the professional development of historians; therefore, the intended audience is history majors and minors. Prerequisite: 100-level history course. 4 SH. CC: Ethics Intensive, Writing Intensive.

HIST-313 Social History of the United States

Studies the changing group setting for individual Americans, including family, community and class and race/ethnicity, with a dual focus on popular culture and the process of industrialization/urbanization. Also examines historians' models of social change. Prerequisite: 100-level history course or instructor's permission. 4 SH.

HIST-314 The Long Civil Rights Movement

This course examines the twentieth-century movements of African Americans to secure legal, social, and economic equality in the United States. Course readings and assignments focus on the structure of social movements, including their political, legal, and identity-based aspects, and specific case studies since the 1910s. The course also considers the nature of African-American agency and its limitations over time. Prerequisite: 100-level history course or instructor's permission. 4 SH. CC: Diversity Intensive.

HIST-316 Making a Multicultural United States

This course examines United States history through the lens of ethnic and racial interplay. Students consider the experiences of a diverse set of historical actors, emphasizing shifting definitions of national identity, citizenship and opportunity in America. Prerequisite: 100-level history course or instructor's permission. 4 SH. CC: Diversity Intensive.

HIST-321 European Union

Examines the post-World War II development, institutional structure and policies of the European Union and its predecessors in the movement toward European integration, with a special emphasis on the current situation. Same as POLI-321. 4 SH.

HIST-322 Pennsylvania History

An examination of the history and government of Pennsylvania. In addition to analyzing political developments and the structure of the state constitution, students consider the experiences of a diverse set of historical actors who co-existed from the colonial period to the late 20th century. The course emphasizes the ways in which these groups interacted, as well as the means by which individuals made sense of such widespread changes as industrialization, demographic shifts and urbanization. Students may not receive credit for both HIST-322 and HIST-324. Prerequisite: 100-level history course or instructor's permission. 4 SH.

HIST-323 History of American Medicine

An analysis of the history of American medicine from the colonial period to today. In addition to studying professional medical practice, the class investigates the following topics: Native American medicine, enslaved healers, alternative medical practices, gender and medicine, race and medicine, class and medicine, and disease. Using both primary and secondary sources, students analyze several important questions: What is medicine? What is disease? How did race, gender and class affect American medical care? How has medicine changed or stayed the same over time? What is unique about American medicine? Prior knowledge of medicine or American history is not required. 4 SH. CC: Diversity Intensive.

HIST-324 Pennsylvania's Pasts and Their Publics

This course examines Pennsylvania history by considering how the state's past can be conveyed via diverse media for multiple audiences. Students analyze the political and social history of the colonial, early republic, and industrial eras while considering the experiences of a diverse set of historical actors who co-existed in what is now Pennsylvania. The

course features research projects that move beyond the traditional paper format and take the form of museum exhibits, walking tours, and interactive digital media. Students may not receive credit for both HIST-324 and HIST-322. Prerequisite: One 100-level history course or instructor's permission. 4 SH.

HIST-330 The Middle Ages

Focuses on the social, economic and intellectual changes and developments during the time of enormous creativity and transition from the 9th to the 14th centuries. Examines the social and intellectual synthesis of the medieval period as an essential link between the classical and modern worlds. Prerequisite: 100-level history course or instructor's permission. 4 SH.

HIST-338 The Holocaust

Examines the origins, implementation and consequences of the Nazi program of mass murder over the course of the 20th century. Students study various primary and secondary sources of the Holocaust and consider the lasting impact of how we represent and remember these events. Prerequisite: 100-level history course or instructor's permission. Same as JWST-338. 4 SH.

HIST-370 American Women

This course traces the history of American women from the 17th through the 21st centuries. It considers the history of American women in relation to gender, race, ethnicity, class, sexual orientation and religion. Same as WMST-370. 4 SH.

HIST-375 Piracy

Pirates have long been a fear and fascination of communities mythologized in popular culture. From literature to film to music and even fashion, pirates are a favorite inspiration. In this course we examine, from several philosophical and cultural perspectives, piracy in its various forms. We also examine how several disciplines have approached and/or defined the subject; the disciplines include history, anthropology, law, literature and art. Prerequisites: Sophomore standing and one of the following: ANTH-162, a 100 or 200-level course in economics, or a 100-level course in history, philosophy, political science, or religious studies. 4 SH. CC: Interdisciplinary.

HIST-381 Film and History

This interdisciplinary course unites film studies and history as a way to understand two things: the ways that film functions as history and the ways we use film to consider history. Using films therefore as primary and secondary sources, it will analyze one epoch in detail. Students will use the tools of the historian to study film and the tools of the film scholar to analyze film's function in shaping perspectives on history. Prerequisites: Sophomore standing and either one course in history or one course in film. 4 SH. CC: Interdisciplinary.

HIST-383 Popular Music and History in the 20th Century

Merging the study of music and history, this interdisciplinary class offers a unique way to understand people's lives in Europe and the United States in the 20th century. The focus on popular music, in particular, looks at recorded music, which helps minimize differences in students' abilities to read and analyze music. Prerequisites: Sophomore standing and either a 100-level history or 100-level music course (ideally both), or instructor's permission. 4 SH. CC: Interdisciplinary.

HIST-389 Enlightenment and Revolution

This seminar traces the history of the Enlightenment and French Revolution from a comparative perspective. Using and analyzing secondary and primary sources, the class will explore various themes related to the Enlightenment, including the importance of science, the role women played, the rise of print culture, and the impact of the philosophes. In the second half of the semester, the class will turn its attention to the French Revolution, revolution in the French colonies, and how Americans viewed the Revolution. Prerequisite: 100-level history course or instructor's permission. 4 SH. CC: Diversity.

HIST-390 Topics in History

Topics vary according to instructor. Recent topics included film and history, African diaspora, intellectual history of Europe, Islam in Africa, Indian Ocean history, Latin American revolutions, American women and global migrations. Prerequisite: Completion of at least one history course or instructor's permission. 4 SH. CC: Diversity when the topic is Asian American History: 1850-Present.

HIST-401 Collective Inquiry in History

Collective work that bridges the courses History Methods and Seminar in History and helps students construct their senior thesis topic. Also emphasizes editing, publishing, Web work and attention to career choices. Prerequisite: HIST-300 or instructor's permission. 3-4 SH. CC: Team Intensive.

HIST-410 Seminar in History

The capstone course that brings together students' work in various classes, employing especially their research, analytical, interpretative, communication and writing skills. Students create a substantial research project in conjunction with a faculty member and present their work publicly. Required for history majors. Prerequisite: HIST-300 or instructor's permission. 4 SH. Capstone. CC: Oral Intensive, Writing Intensive.

HIST-420 Internship in History

Supervised work in fields related to history, including museum work, publishing and editing, historic site surveys, and other activities in public history. Not for Central Curriculum credit. Variable credit up to 8 SH.

HIST-501 Independent Study

Detailed exploration of a selected historical period, topic or problem under a faculty member's direction. Involves either a reading program or a major research paper. Open to all majors. Prerequisite: Department permission. Variable credit.

HIST-502 Honors Conference

Writing a thesis under the personal supervision of a department member. 4 SH.

HONORS PROGRAM

Faculty

Dave Ramsaran, Ph.D., Professor of Sociology, director

The Faculty. Honors Program faculty, selected from many disciplines and departments, are committed to fostering a diverse and challenging intellectual community for the university.

Curriculum. Students typically enroll in one Honors course during each of their eight semesters at Susquehanna. Students must earn a grade of C- or better in all Honors Program courses.

Students participating in the Honors Program **must maintain an overall grade point average of 3.40** during each semester at Susquehanna. If a student earns any grade below a C- in any Honors-designated course, the student, at the discretion of the director, may be removed automatically from the Honors Program. The director of the program reviews students' GPAs at the end of each semester. If an Honors student's GPA falls below the 3.40 level, the student will receive a **warning letter from the director of the program.** After a second semester below a 3.40 level GPA, the student is dismissed from the program. Copies of the warning and dismissal will be on file with the registrar and the student's adviser.

During the first year, students enroll in HONS-100 Thought, which focuses on ideas and their expression, and HONS-200 Thought and Civilization, an interdisciplinary look at literature and cultures. In their sophomore year, students select either HONS-240 Thought and Social Diversity or HONS-250 Thought and the Natural Sciences, which offer cross-disciplinary approaches. Each of these courses satisfies requirements in the Central Curriculum. Sophomore Honors students also enroll in HONS-290 Sophomore Essay/Project, in which they write and present a position paper/science project/visual project on a self-designed topic. This experience offers students an opportunity to work one-on-one with faculty early in their undergraduate careers.

As juniors and seniors, students select eight semester hours from a series of 300-level Honors seminars that serve as especially interesting and challenging electives. As seniors, they enroll in HONS-400, the Honors Program capstone course.

Honors Courses

HONS-100 Thought

A study of ideas and their expression, this course examines how we learn, what constitutes serious thought within various disciplines and how we distinguish knowledge from opinion or belief. Through analysis of traditional and contemporary paradigms of thought and by means of individual practice, students investigate how hypotheses are formed, how assertions are made and how thinkers arrive at coherent statements. 4 SH. CC: Writing and Thinking.

HONS-200 Thought and Civilization

An introduction to Western thought, emphasizing how thinkers resist or assimilate tradition. Philosophical, historical, religious and literary texts and other forms of art are examined in the light of unifying themes. 4 SH. CC: Literary Expression.

HONS-240 Thought and Social Diversity

A diversity course in the context of an issue of substantial concern to individuals and society. Each year an issue is identified, and its historical, psychological, social, political, economic and/or ethical elements are explored. Students are introduced to the concepts and methods of the social sciences, read primary sources within several disciplines and learn in a highly participatory classroom environment. 4 SH. CC: Diversity Intensive, Social Interactions, Writing Intensive.

HONS-250 Thought and the Natural Sciences

A history and philosophy of science course with a laboratory, focusing on science as a human activity. Through an examination of methods, explanations, limitations and applications of science, the student is given sufficient background to be able to recognize attributes of true science, pseudoscience and technology. In addition, the course introduces the

student to the complexity of ethical, political and sociological issues that are the products of science and technology. The laboratory component of the course will include field trips and experiments to reinforce the student's concept of how scientific information is obtained and utilized. Although examples from biology, chemistry, earth and environmental sciences, and physics are used to illustrate the nature of science and how it changes, this course is not designed as an introduction to those disciplines. Rather, it is a general science course that attempts to demonstrate some trends in science and how a scientist works. Prerequisite: Sophomore standing. 4 SH. CC: Interdisciplinary, Scientific Explanations, Team Intensive, Writing Intensive.

HONS-290 Sophomore Essay/Science Project/Visual Presentation

Students research and write about a subject of their choice, under the guidance of a faculty sponsor. The project should address an area of interest articulated by the student emerging from a semester of research and reflection. Students use this project to develop and integrate knowledge gained in previous academic work or they elect to investigate new subjects. HONS-290 is convened by the Honors Program Director or Associate Director and one of the university's professional librarians who provides support for student projects. Students must enroll in HONS-290 and complete the project either in the fall or spring term of their sophomore year in order to remain members of the Honors Program. 2 SH. CC: Writing Intensive.

HONS-400 Senior Capstone Seminar

This course serves as the capstone course for the university Honors Program. Students will be asked to reflect on their experience as a Susquehanna University scholar and create their own legacy to the Honors Program. Students are expected to explore their futures as Susquehanna University alumni, both on an intellectual and personal level. The Honors Colloquium course highlights our students' work and contributions to the Susquehanna University community. Students are expected to share scholarly expertise, engage in critical thinking and conduct a project that impacts the Susquehanna University campus community in a way that is both positive and uniquely reflective of the Honors Program. 2 SH. Capstone.

INTERNATIONAL STUDIES

Faculty

Andrea M. Lopez, Ph.D., Associate Professor of Political Science, director

International Studies Major. International studies is an interdisciplinary major that combines several fields of study to develop the knowledge and skills to approach challenges and devise responses through a multifaceted and holistic methodology. While there are several distinct focus areas, the common link in the international studies education is the global perspective used to address social, cultural, economic, political and scientific issues and the interdisciplinary approach to tackling large-scale subjects of concern that cross national boundaries.

Off-Campus Study Opportunities. Students majoring in international studies are required to participate in an off-campus international experience, and those who minor in the program are strongly encouraged to do so. Whether domestic or abroad, programs appropriate for international studies students include but are not limited to those that expose participants to conflict resolution, international organizations, sustainable development, public health and diplomatic work in the transnational arena. In recent years, international studies students have traveled to countries such as the United Kingdom, Senegal, India, Jordan, France, Australia, Tanzania, Germany, Turkey, Austria, Japan, Costa Rica, The Gambia and China. Others have done their off-campus internationally focused educational experience domestically. Washington semester programs and United Nations programs in New York offer opportunities for international studies students to integrate study of international issues with internships.

Internships. Because it is critical to gaining professional opportunities and placement post graduation, students are strongly encouraged to pursue internships in the wide field of international studies. International studies majors have interned while abroad in France, Austria, Senegal, India, Britain and other locations. Others have interned domestically in the field. The program adviser works with students to identify internship opportunities.

Learning goals:

- Students will possess factual knowledge and in-depth understanding of focus area.
- Students will be able to compare diverse theories, apply theories to individual cases, critique their own work, frame research questions and critically read scholarly work.
- Students will develop strong research skills.
- Students will understand global diversity of populations and societies, as well as the political, social and economic effects of those differences.
- Based on their international experiences, students will understand the breadth of human interactions, and that problems often elicit complex, conflicting and ambiguous responses.

Requirements for the International Studies Major. International studies majors must complete a minimum of 46-48 semester hours of approved coursework in the major, all with grades of C- or better and an overall average of at least 2.00 in courses for the major. No more than 16 semester hours in the major may be taken at the 100 level, and at least 14 semester hours must be taken at or above the 300 level. No more than eight semester hours may be double-counted between the international studies major and any other major or minor. All majors must take INTD-201 International Studies Theory and Practice.

All international studies majors must complete the 202 level of a relevant foreign language.

All majors must take a capstone course in a relevant department. Some departments, such as anthropology/sociology, history and political science, require the research methods preparation courses the year before the capstone. The preparation courses may also have prerequisites that should be taken in advance of the methods course. Students should begin planning their capstone path during their senior year.

Students in the major must engage in an off-campus, internationally focused educational experience, preferably consisting of a semester or year abroad. Shorter-term experiences, such as focus programs offered by Susquehanna University or an internship with an international-based organization, also qualify when approved by the adviser.

All majors maintain a cumulative portfolio of their academic work in international studies. Materials in the portfolio include research papers, essays or other assignments representative of the student's work; a resume; and other relevant

materials evidencing the student's academic performance and growth. The portfolio is to be updated each semester in accordance with program requirements.

Honors. To graduate with honors, international studies majors must do the following:

- Maintain a minimum GPA of 3.50 in the program and 3.25 overall,
- Request admission to the program at the beginning of the senior seminar/capstone course, and
- Complete and publicly present an honors-quality project in the spring of their senior year.

Focus Areas. Students choose one of seven focus areas for the international studies major: European studies, Asian studies, developing world studies, diplomacy, comparative cultural studies, sustainable development, and international trade and development. Course requirements vary, depending on the focus area.

46-48 European Studies, Asian Studies or Developing World Studies

(Developing World Studies includes courses related to Latin America, Africa or the Middle East. Students are encouraged to focus on one of the three regions.)

4 INTD-201 International Studies Theory and Practice

4 POLI-121 Comparative Government and Politics

8 Relevant history (two courses)

4 Relevant upper-level political science course(s) with substantial content on relevant region

4 Relevant religious studies/philosophy

8 Relevant literature/art/film (two courses)

12 Relevant electives (three courses)

2-4 Senior seminar/capstone

Completion of 202 level of applicable language. European studies: French, Spanish, German; other languages with approval. Asian studies: Chinese, French; other languages with approval. Developing world studies: Spanish for Latin American focus; French for African focus; other languages with approval.

46-48 Diplomacy

4 INTD-201 International Studies Theory and Practice

4 POLI-131 World Affairs

or POLI-133 World Affairs: Statecraft

4 POLI-121 Comparative Government and Politics

8 Non-U.S. history (two courses)

4 Non-U.S. literature

4 Upper-level international relations

4 Religious studies (excluding courses limited to religion in United States)

4 Economics

8 Relevant electives (two courses)

2-4 Senior seminar/capstone

Completion of 202 level of modern foreign language

46-48 Comparative Cultural Studies

4	INTD-201 International Studies Theory and Practice
4	Introductory anthropology
4	ENGL-250 World Literature, or ENGL/JWST-255 Jewish Literature or ENGL-240 Literary Themes (when specific topic has been approved)
4	Non-U.S. upper-level anthropology
8	Non-U.S. literature or art history (two courses)
4	RELI-105 World Religions
4	Additional religious studies or philosophy
4	Non-U.S. history
8	Relevant electives (two courses)
2-4	Senior seminar/Capstone

Completion of 202 level of foreign language

50-52 Sustainable Development

4	INTD-201 International Studies Theory and Practice
4	POLI-131 World Affairs
or	POLI-133 World Affairs: Statecraft
4	Choose from: ECOL-100 or EENV-113
4	Choose from: EENV-101, EENV-102, EENV-103, EENV-105 or ECOL-100
4	Choose from: EENV-220, EENV-213, EENV-242, ENST-335, EENV-360 or ENST-301
4	Relevant upper-level ecology or earth and environmental science
4	ECON-201 Principles of Macroeconomics
4	ECON-202 Principles of Microeconomics
4	Choose from: ECON-338, ECON-335 or POLI-333
4	One upper-level, non-U.S.-based course in political science, sociology or anthropology
8	Relevant electives (two courses)
2-4	Senior seminar/capstone

Completion of 202 level of modern foreign language

46-48 International Trade and Development

4	INTD-201 International Studies Theory and Practice
4	POLI-131 World Affairs
or	POLI-133 World Affairs: Statecraft
4	ECON-201 Principles of Macroeconomics
4	ECON-202 Principles of Microeconomics
4	ECON-338 International Political Economy
or	POLI-333 Development, Globalization and Society
4	History of any non-U.S. region

8 Upper-level economics/management (two courses)

4 One upper-level, non-U.S.-based course in political science, sociology or anthropology (Students should seek to focus on a particular region.)

8 Relevant electives (two courses)

2-4 Senior seminar/capstone

Completion of 202 level of modern foreign language

Minor in International Studies. International studies is a superb complement to a number of other majors. Students may choose to minor in international studies by completing 24 semester hours in a focus area. Only courses completed with a grade of C- or above may be counted toward the minor. No more than eight semester hours may be taken at the 100 level. No more than eight semester hours may double-count with another major or minor. It is strongly recommended that all students minoring in international studies take INTD-201 International Studies Theory and Practice.

24 European Studies, Asian Studies or Developing World Studies

(Developing world studies includes courses related to Latin America, Africa or the Middle East. Students are encouraged to focus on one of the three regions.)

8 Relevant history (two courses)

4 Political science, upper-level course on relevant region

4 Relevant religious studies/philosophy

4 Relevant literature/art/film

4 Relevant elective

24 Diplomacy

4 Non-U.S. history

4 Non-U.S. literature or religion

8 International relations (two courses)

4 Economics (macroeconomics encouraged)

4 Relevant elective

24 Comparative Cultural Studies

4 Introductory anthropology

4 Non-U.S. upper-level anthropology

4 Non-U.S. literature or art history

4 Religious studies or philosophy

4 Non-U.S. history

4 Relevant elective

24 Sustainable Development

4 EENV-101 Environmental Science

4 ECON-201 Principles of Macroeconomics

4 ECON-202 Principles of Microeconomics

4 ECON-338 International Political Economy

	or	POLI-333 Development, Globalization and Society
	4	Relevant upper-level ecology or earth and environmental science
	4	Relevant elective
24	International Trade and Development	
	4	ECON-201 Principles of Macroeconomics
	4	ECON-202 Principles of Microeconomics
	4	ECON-338 International Political Economy
	or	POLI-333 Development, Globalization and Society
	4	History of any non-U.S. region
	4	Upper-level international economics/management
	4	Relevant elective

International Studies Courses

INTD-201 International Studies Theory and Practice

This course provides an overview of theories and approaches common in the field of international studies. Students will grapple with what makes this field interdisciplinary and why that may prove critical in problem-solving on an international scale. Students are introduced to how and why the field draws from many different disciplines, such as economics, anthropology, health sciences, public planning, public policy, linguistics/language, history, political science, business and the arts. Students begin a portfolio that includes course work, a CV and an analysis of the interdisciplinary nature of international studies. Prerequisite: Sophomore standing. 4 SH. CC: Interdisciplinary.

JEWISH AND ISRAEL STUDIES

Faculty

Laurence D. Roth, Ph.D., Professor of English, director

The Jewish and Israel studies minor consists of 22 semester hours, including JWST-113 Introduction to Judaism, JWST-255 Jewish Literature, JWST-338 The Holocaust, eight semester hours selected from the other available Jewish & Israel studies courses listed below and two semester hours of independent study approved by the director.

The various departments that partner with the Jewish and Israel studies program may offer special topic and variable content courses of interest (such as Biblical Hebrew, Jewish and Israeli Cinema, etc.) that will be cross-listed as JWST-390 and that will satisfy the elective requirement of the minor. Check the yearly schedule of classes for more information.

Jewish and Israel Studies Courses

JWST-113 Introduction to Judaism

Examines Judaism as it has been defined and developed as a way of thought and a way of life. The course focuses on central religious concepts, holidays, life-cycle ceremonies and various forms of religious expression, including prayer and ritual, in order to help students understand what it means and has meant to be a Jew. Same as RELI-113. 4 SH. CC: Diversity.

JWST-115 Jewish Philosophy and Ethics

Explores issues and problems related to the philosophical and ethical literature of the Jews, from the Talmudic period through the present. Topics vary and may include classical Jewish texts, mysticism, continental and poststructural Jewish philosophy, morality and social practice, women and gender and Judaism in America. The course encourages students to recognize in Jewish texts reflections of Judaism that are diverse and, at times, antithetical to one another. Same as RELI-115. 4 SH. CC: Ethics.

JWST-201 The Hebrew Bible

An introduction to the texts of the Hebrew Bible, with concern for their sociohistorical contexts, literary forms and theological insights. Attention also to the variety of ways in which this literature has been and continues to be valued. Same as RELI-201. Prerequisites: Sophomore standing and one of the following: a course in religious studies, a course in English, a course in history, DIVS-100, WMST-100, or instructor's permission. 4 SH. CC: Diversity Intensive, Interdisciplinary, Writing Intensive.

JWST-207 Women in the Biblical Tradition

An extensive inquiry into women's stories and images in the Hebrew Bible, New Testament and related literature from the biblical period. Explores the range of roles played by women within biblical narratives, the variety of metaphorical/symbolic uses of femininity in biblical traditions, and legal and ethical precepts related to the status of women in the biblical period. Methods and approaches from the social sciences, history, literary studies and theology, as shaped by feminist theory, will serve as the main guides for this study. Same as WMST-207 and RELI-207. Prerequisites: Sophomore standing and one of the following: a course in religious studies, a course in women's studies, a course in English, a course in history, or DIVS-100. 4 SH. CC: Diversity Intensive, Interdisciplinary, Writing Intensive.

JWST-228 Middle East Politics and Society

This course examines the ways in which politics and society in the Middle East are shaped by historical and contemporary structures, processes and practices. The geographic and temporal focus of the course includes the Arab world, Iran, Turkey and Israel during the past century and a half, from the reforms of the late Ottoman Empire, through the years of European colonialism, to the emergence of post colonial states and their contemporary development. Same as POLI-228. 4 SH.

JWST-255 Jewish Literature

A variable topic survey, in English translation, of the texts, writers, histories and languages that describe Jewish literatures. The course is especially concerned with debates over definitions of "Jewish literature" (What makes Jewish literatures Jewish?), the significance of Jewish literary and cultural diversity, and Jewish literary navigations between diaspora and homeland, secularism and religiosity. Readings may include Hebrew and Israeli literature, Yiddish literature, Sephardic literature or Jewish literatures of Europe and the Americas. Same as ENGL-255. Prerequisite: Sophomore standing. 4 SH. CC: Diversity, Literary Expression.

JWST-302 Philosophy in the Wake of the Holocaust

This course examines the validity of certain traditional philosophical assumptions in the aftermath of the Nazi genocide. In this effort the class will read texts by scholars in a variety of fields who throw doubt on the moral value of rational thought, the teleological worldview, the Western conception of "human nature" and the legacy of the Enlightenment through an analysis of the Holocaust and other genocides in the 20th and 21st centuries. Same as PHIL-302. Prerequisite: Junior standing. 4 SH. CC: Ethics Intensive, Interdisciplinary.

JWST-312 History and Culture of Jewish Cuisines

Using anthropological approaches to the study of food, this course examines the meanings and uses of various Jewish cuisines as they developed in diverse regions and historical periods. We will consider the laws of kashrut and their modern interpretations, the social history of traditional Jewish foods, the literary development of Jewish cookbooks, and literary and cinematic representations of Jewish cuisines and dining. Underlying our study will be questions concerning how class, gender, faith, ethnicity, aesthetics and politics inform Jewish foodways. Because cooking and eating are frequently done in the company of others, much of our work will be collaborative. Same as ANTH-312. 4 SH. CC: Diversity, Team Intensive.

JWST-338 The Holocaust

Examines the origins, implementation and consequences of the Nazi program of mass murder over the course of the 20th century. Students study various primary and secondary sources of the Holocaust and consider the lasting impact of how we represent and remember those events. Same as HIST-338. Prerequisite: 100-level history course or instructor's permission. 4 SH.

JWST-390 Topics in Jewish and Israel Studies

Discussion, debate and evaluation of significant trends and phenomena in Jewish & Israel studies. Topics vary according to instructor preference and may include regional literatures and histories, Jewish languages, gender and identity issues, folklore, Jewish film, Jewish music, Sephardic studies, Zionism, Christian/Jewish relations, and black/Jewish relations. 4 SH.

JWST-500 Independent Study

Detailed exploration of literature or author(s) of a selected historical period; of a literary, historical or religious topic, problem or issue; or of creative arts related to Jewish and Israel studies. This course engages students in library or action research, research design or application, or creative work in the arts under a faculty member's direction, and it culminates the minor in Jewish and Israel studies. 2 SH.

LEADERSHIP

Faculty

Jeff Whitman, Ph.D., Professor of Philosophy, director

The leadership minor is designed to focus attention in a concentrated way on a key goal of a Susquehanna education: preparing students for a lifetime of leadership in a diverse and changing world. The minor allows students to explore the challenges faced by leaders, both today and in the future.

While pursuing the minor, students will examine the qualities needed to serve as ethically trustworthy and competent leaders in a wide variety of venues, such as business, government, community, and the non-profit sector. To complete the minor students are required to serve in at least one leadership position on campus (e.g. as a resident assistant, a member of the Student Government Association, president of a club, officer of a sorority/fraternity, captain of a sports team, participant in ROTC, etc.).

Minor in Leadership. Students minoring in leadership complete with grades of C- or higher 18 semester hours, including LSHP-502 Leadership Seminar and one course from each of the following areas:

Ethics

PHIL-122 Resolving Moral Conflicts

PHIL-125 Justice

PHIL-150 Race, Class and Ethics

RELI-102 Applied Biblical Ethics

RELI-107 Faiths and Values

Personal Interactions

COMM-191 Interpersonal Communication

COMM-192 Public Speaking

PSYC-101 Principles of Psychology

Group Dynamics

COMM-194 Intercultural Communication

COMM-221 Corporate Communications

COMM-491 Team Communications

PSYC-230 Social Psychology

PSYC-245 Personality

Issues in Leadership

COMM-201 Ethics and Leadership

COMM-321 Crisis Management

MGMT-360 Management and Organizational Behavior

PHIL-223 Business Ethics

POLI-131 World Affairs

POLI-133 World Affairs: Statecraft

POLI-325 Political Leadership

SOCI-102 Social Problems

Leadership Courses

LSHP-502 Leadership Seminar

The leadership seminar is the culminating course in the leadership minor. Students will explore the challenges faced by leaders both today and in the future. They will examine the qualities needed to serve as ethically trustworthy and competent leaders in a wide variety of venues, such as business, government, community, non-profit sector, etc. As part of this course students are required to complete a leadership practicum by serving in at least one leadership position on campus (e.g., as an RA, in SGA, president of a club, officer of a sorority/fraternity, captain of a sports team, participant in ROTC, etc.). Prerequisites: Completion of the four required courses for the leadership minor or completing the last of the required minor courses in the same semester that the student takes LSHP-502. 2 SH.

LEGAL STUDIES

Faculty

Michele A. DeMary, Ph.D., Associate Professor of Political Science, coordinator

The legal studies minor is not to be regarded as a prelaw program but is designed to be compatible with and complement various major programs, including those that remain traditional foundations for careers in law. Students planning a legal studies minor should declare their intention during their sophomore year to ensure that the required courses will fit into their program.

To complete the 24-semester-hour minor in legal studies, students must take the following courses: ACCT-210 Legal Environment, POLI-215 Law and Politics, and one of the following: SOCI-255 Crime and Justice, SOCI-350 Punishment and Society, or SOCI-405 Law and Society. Twelve additional semester hours must be selected from the following (at least one of these electives must be at the 300 or 400 level and not already counted toward one of the above requirements): ACCT-220 Introduction to Taxation; ACCT-310 Advanced Business Law; ANTH-311 Regulating Bodies; COMM-481 Media Law; ENST-335 Environmental Laws and Regulations; PHIL-125 Justice; PHIL-122 Resolving Moral Conflicts; POLI-334 International Organizations and Law; POLI-411 Constitutional Law; POLI-412 Civil Liberties; SOCI-255 Crime and Justice; SOCI-350 Punishment and Society; SOCI-331 Social Control and Deviance; SOCI-405 Law and Society; and LGST-505 Internship in Legal Studies. Other courses may count as electives with the approval of the legal studies coordinator. No more than six semester hours from the legal studies offerings may be counted toward major requirements. Students minoring in legal studies are urged to take additional courses in history, economics, sociology, political science and other related fields.

Further information may be secured from Associate Professor of Political Science Michele DeMary, coordinator of the legal studies program.

Learning Goals:

- A knowledge of the essential elements of the American civil and criminal legal system and of alternatives that have been developed, including both the players and the processes.
- An awareness that individuals have both rights and responsibilities within the American legal system.
- An awareness of the varied expectations that Americans hold of the legal system and an ability to assess the capability of the system to meet these expectations.
- A knowledge of the way in which at least three different disciplines view the legal system and an ability to integrate material from one discipline in a class of another discipline.
- An ability to understand and critique a complex argument, showing strong analytical reasoning abilities.

Legal Studies Courses

LGST-505 Internship in Legal Studies

Practical experience in a supervised work program in a legal setting. This may include work in a law office, the office of a district attorney or public defender, in a court program, or work for a judge. The student must obtain approval from the cooridinator of the legal studies program before beginning the internship. The faculty intern advisor will be chosen in consultation with the legal studies coordinator. To register for the internship, a student must be a declared legal studies minor, have junior or senior standing, and have completed at least two of the three required courses for the minor (ACCT-210, POLI-215, and either SOCI-255, SOCI-350, or SOCI-405). Only one internship may be counted toward the minor. 2 SH.

Other Legal Studies Courses

Information on the other legal studies classes may be found in the catalog under the respective department headings.

MANAGEMENT

Faculty

Ali H.M. Zadeh, Ph.D., Professor of Finance, department head

Marsha Kelliher, Dean SWSB/ Professor

Paul A. Dion, Ph.D., Associate Professor of Management

Christine Cooper Grace, Ph.D., Associate Professor of Management

Emma Fleck, Ph.D., Associate Professor of Marketing

Mark A. Heuer, Associate Professor of Management

Richard E. Orwig, Ph.D., Associate Professor of Management

Pat Polwitoon, Ph.D., Associate Professor of Finance

James J. Pomykalski, Ph.D., Associate Professor of Management

Peter Dadalt, Ph.D., Assistant Professor of Finance

Amir Bahman Radnejad, Ph.D., Assistant Professor of Management

Robert L. Williams, Jr, Assistant Professor of Marketing

Shan Yan, Assistant Professor Finance

Business Administration Studies

Requirements for the Majors offered by the Management Department. Students complete the business foundation courses and a major in business administration, finance, global management, luxury brand marketing and management, or marketing. No grade below C- will be accepted to fulfill major requirements or in any foundation course.

Business Foundation Courses for Majors in the Management Department

Year 1

4	ECON-201 Principles of Macroeconomics
4	ECON-202 Principles of Microeconomics
2	PRDV-100 Using Computers
4	MGMT-202 Business Statistics
or	MATH-108 Introduction to Statistics
or	MATH-109 Statistics for Social Sciences
or	MATH-180 Statistical Methods
or	PSYC-123 Statistics for the Behavioral Sciences

Year 2

4 INFS-174 Database Systems Analysis and Design

4 ACCT-200 Financial Accounting

4 ACCT-210 Legal Environment

4 MGMT-203 Quantitative Methods for Business and Economic Decisions

4 MGMT-280 Marketing

2 PRDV-105 Introduction to Professional Development

Year 3

4 ACCT-330 Cost Management

4 MGMT-340 Corporate Financial Management

4 MGMT-360 Management and Organizational Behavior

Year 4

4 INFS-472 Management Support Systems

4 MGMT-400 Business Policy and Strategy

Either 2 MGMT-404 Business and Social Responsibility

or 4 PHIL-223 Business Ethics

No grade below a C- will be accepted toward graduation for foundation courses; upon earning a grade below C- in a foundation course, the student must retake the course the next semester in which it is offered. The course descriptions listed later in the catalog identify prerequisites, and these suggest a certain degree of order in completing the foundation. In addition to the foundation, first-semester business students enroll in MGMT-102 Global Business Perspectives (four semester hours), which provides an introduction to liberal studies and college life, as well as an overview of business functional areas, career opportunities and the Sigmund Weis School curriculum. This course satisfies the Perspectives requirement of the Central Curriculum.

Business Administration

Business Administration Major. Students pursuing the business administration major will analyze the international environments in which businesses operate and will demonstrate the ability to apply important operations management methodologies to real-world scenarios.

4 MGMT-350 International Business

4 MGMT-390 Operations Management

And 12 semester hours of upper-division (300 or 400 level) Management Department courses

Finance

Finance Major. The finance major prepares students for positions in all areas of finance, including asset management, corporate financial management, commercial and investment banks in an international context, investment advisory services, mutual funds, brokerages, and insurance. The major includes an optional CFA track that provides in-depth coverage of key areas tested on the CFA Level I examination.

Students will be offered the opportunity to participate in the Susquehanna University Student Investment Program (SUSIP). SUSIP is a student-managed investment fund that focuses on sustainability investment.

The finance major requires completion of the business foundation and the following courses, as follows:

4 ACCT-300 Financial Statement Analysis

4 MGMT-342 Investment Analysis

4 MGMT-345 International Financial Management

And 8 semester hours selected from the following courses:

4 MGMT-344 Financial Institutions and Markets

4 MGMT-441 Advanced Corporate Financial Management

4 MGMT-442 Portfolio Management

4 MGMT-443 Equity Asset Analysis and Valuation

4 MGMT-445 Financial Modeling and Fixed Income Analysis

2-4 MGMT-446 Topics in Finance

2 ACCT-220 Introduction to Taxation

2-4 MGMT-503 Business Internship

Students planning careers in investments are encouraged to take the following CFA track. This track is designed to provide in-depth coverage of CFA Level I examination topics, including *CFA Institute Code of Ethics and Standards of Professional Conduct.*

4 MGMT-442 Portfolio Management

4 MGMT-443 Equity Asset Analysis and Valuation

4 MGMT-445 Financial Modeling and Fixed Income Analysis

Students participating in the Susquehanna University Student Investment Program (SUSIP) must enroll in MGMT-442 and MGMT-443.

Global Management

Global Management Major. Global management majors learn how to think globally about the business world. They also learn how to manage multinational businesses and turn local and national companies into international success stories. This major provides a broad background in international business and global management. It is intended for students who want to work for an international company or who are contemplating an M.B.A. in international business. By spending a semester studying abroad or interning abroad, students are able to experience what it is like to live in another country and/or what it is like to work in a foreign business environment.

The global management major requires completion of the business foundation, a semester abroad or an international internship, and the following coursework:

4 MGMT-345 International Financial Management

4 MGMT-350 International Business

2 MGMT-317 International Marketing

2 MGMT-466 Negotiations

8 semester hours chosen from the following:

4 ECON-335 Economic Development

4 ECON-338 International Political Economy

4 ECON-442 Emerging Market Economies

2 MGMT-351 Seminar in European Business Operations

4 POLI-334 International Organizations and Law

2-4 MGMT-503 Business Internship

Luxury Brand Marketing and Management

Luxury Brand Marketing and Management Major. From family businesses to international conglomerates, luxury goods and services provide global management challenges and opportunities. Luxury goods and services are rapidly expanding markets and include everything from athletic teams, sports cars, and resorts to the fashion and jewelry industries. Students in this major study the business models and unique marketing strategies that are often counter-intuitive but integral to the successful management and marketing of luxury brands. Students will develop an advanced awareness of consumer behavior and consumer relationship management and learn to apply effective strategic marketing techniques to this fiercely competitive market. The increasing focus on sustainability, the impact of today's international economy, and the unique legal issues involved in the luxury sector are key to understanding this sector of goods and services.

The goal of the luxury brand marketing and management major is to assist students with gaining the knowledge and skills to develop a global vision of the business, leadership, marketing, and managerial abilities to manage successfully a luxury brand.

The luxury brand marketing and management major requires completion of the business foundation and the following courses:

4 MGMT-216 Introduction to Luxury Brand Marketing and Management

4 MGMT-316 Luxury Brand Marketing

4 MGMT-382 Consumer Behavior

4 MGMT-416 Intellectual Property and the Luxury Industry

4 semester hours chosen from the following:

4 MGMT-318 Integrated Marketing Communications

4 MGMT-381 Marketing Research

2 MGMT-317 International Marketing

2 MGMT-486 Topics in Marketing

2 MGMT-485 Marketing Strategy and Management

2 MGMT-384 Retailing

2-4 MGMT-503 Business Internship

Marketing

Marketing Major. Marketing involves managing the interface between an organization and its customers by determining their needs and behaviors and delivering need-satisfying value to them while meeting the organization's goals. Marketing has a fundamental role in virtually all business decisions and in directing the efforts of customer-driven organizations. Marketing is essential not only to retailers, wholesalers and manufacturers, but also to attorneys, accountants, museums, hospitals, colleges, and performing arts and political action groups.

The marketing major requires completion of the business foundation and 20 semester hours as follows:

4 MGMT-381 Marketing Research

4 MGMT-382 Consumer Behavior

2 MGMT-485 Marketing Strategy and Management

2 MGMT-317 International Marketing

At least 8 semester hours chosen from the following:

4 MGMT-216 Introduction to Luxury Brand Marketing and Management

4 MGMT-316 Luxury Brand Marketing

4 MGMT-318 Integrated Marketing Communications

2 MGMT-384 Retailing

4 MGMT-416 Intellectual Property and the Luxury Industry

2 MGMT-486 Topics in Marketing

4 PSYC-230 Social Psychology

2-4 MGMT-503 Business Internship

Minor in Business Administration. The minor in business administration requires six to eight courses totaling at least 24 semester hours. To complete the minor, students must have a GPA of at least 2.00 and no grade below C- in courses chosen from the following:

4-8 ECON-105 Elements of Economics, or both ECON-201 Macroeconomics and ECON-202 Microeconomics

4 ACCT-200 Financial Accounting

4 MGMT-202 Business Statistics

or MATH-108 Introduction to Statistics

or MATH-109 Statistics for Social Sciences

or MATH-180 Statistical Methods

or PSYC-123 Statistics for the Behavioral Sciences

At least 12 semester hours from the following:

4 MGMT-280 Marketing

4 MGMT-390 Operations Management

4 MGMT-340 Corporate Financial Management

4 MGMT-360 Management and Organizational Behavior

Minor in Entrepreneurship and Innovation. Entrepreneurship is important to the overall economic future of our society, as well as being a leading area of interest to students. The creation of new products, services, jobs, business, and,

in fact, entire industries is more dependent upon entrepreneurship today than it ever has been in the past. The importance of entrepreneurship has become more widely acknowledged and understood, generating enormous opportunities for entrepreneurial thinking and considerable interest in the field by students and educators. To complete the minor students must have a GPA of at least 2.00 in the minor coursework and must complete the following courses with grades of C- or higher.

4 MGMT-330 Small Business and Entrepreneurship: Theory, Practice and Concept

4 MGMT-433 New Venture Start-up and Financing

4 MGMT-434 Entrepreneurial Experience

4 MGMT-435 Entrepreneurial Venture Strategy and Economic Growth

Minor in Finance. The minor in Finance requires 16 semester hours. To complete the minor, students must have a GPA of at least 2.00 in the minor coursework and no grade below a C- in courses chosen from the following:

4 MGMT-340 Corporate Financial Management

12 semester hours from the following:

4 MGMT-342 Investment Analysis

4 MGMT-344 Financial Institutions and Markets

4 MGMT-345 International Financial Management

4 MGMT-441 Advanced Corporate Financial Management

4 MGMT-442 Portfolio Management

4 MGMT-443 Equity Assets Analysis and Valuation

4 MGMT-445 Financial Modeling and Fixed Income Analysis

2-4 MGMT-446 Topics in Finance

Minor in Marketing. The minor in marketing requires 16 semester hours. To complete the minor, students must have a GPA of at least 2.00 in the minor coursework and no grade below a C- in courses chosen from the following:

4 MGMT-280 Marketing

12 semester hours from the following:

4 MGMT-216 Introduction to Luxury Brand Marketing and Management

4 MGMT-316 Luxury Brand Marketing

4 MGMT-318 Integrated Marketing Communications

4 MGMT-381 Marketing Research

4 MGMT-382 Consumer Behavior

4 MGMT-416 Intellectual Property and the Luxury Industry

2 MGMT-317 International Marketing

2 MGMT-384 Retailing

2 MGMT-485 Marketing Strategy and Management

2 MGMT-486 Topics in Marketing

Note: The minor is not available to students majoring in luxury brand marketing and management.

Management Courses

MGMT-102 Global Business Perspectives

An overview of business fundamentals, functional areas of business, business careers and opportunities provided by the Sigmund Weis School of Business. A case-based approach emphasizing teamwork and communication skills. A team presentation of case analyses to invited business executives is a key component and highlight of the course. 4 SH. CC: Oral Intensive, Perspectives, Team Intensive.

MGMT-105 Introduction to Professional Development

This course focuses on identifying and clarifying individual values, skills, interests and personality type to develop suitable career objectives, placing emphasis on the connections between career preparation, academic choices and co-curricular activities. Students learn how to construct a resume and cover letter and conduct an employment search. Primary theories used to teach career planning and development include trait and factor, developmental, learning and socioeconomic theories. 2 SH.

MGMT-202 Business Statistics

Principles and methods of data collection, presentation, analysis and interpretation for business decisions. Includes statistical description, probability theory and methods of inference; regression and correlation analysis; time-series analysis and index numbers; and chi-square. Introduces computer-based statistical packages. (Students may earn credit for only one of the introductory statistics courses offered by the management, mathematics or psychology departments.) 4 SH. CC: Analytical Thought.

MGMT-203 Quantitative Methods for Business and Economic Decisions

This business foundation course helps students to understand the concepts, techniques and applications of both deterministic and probabilistic mathematical/quantitative methods for strategic and operational business decisions. The course focuses on how applied mathematical/quantitative methods can be used to improve critical business and economic decisions for better and sustainable expected results. Discussion topics will include linear programming and optimization methods, decision models under certainty and risk, inventory models, waiting line and simulation methods, project scheduling and network analysis, and integral and differential calculus for economic and business applications. Prerequisite: MGMT-202 or equivalent statistics course. 4 SH.

MGMT-216 Introduction to Luxury Brand Marketing and Management

This course covers the history of luxury brands through the facets of luxury today. It explores how brand equity is created, pricing strategies, the distribution of luxury goods, and various business models for luxury goods. 4 SH.

MGMT-250 Introductory Topics in Business

An introductory course covering topics of current importance and interest in business. 2-4 SH.

MGMT-280 Marketing

The study of business activities planned and implemented to facilitate the exchange or transfer of products and services so that both parties benefit. Examines markets and segments, as well as product, price, promotion and channel variable decisions. Considers marketing in profit and nonprofit sectors and in the international setting. Prerequisite: Sophomore standing. 4 SH.

MGMT-290 Non Profit Management

This is an introductory survey of the nature and function of non-profit organization, including basic legal requirements affecting non-profits, theories and practices for establishing and managing non-profit organizations, designing and assessing operational structures for non-profit organizations, and strategies for inter-organizational relationships. 4 SH.

MGMT-316 Luxury Brand Marketing

In this course students explore communication strategies, developing brand equity, and luxury brand stretching. The course also covers global trends and innovative strategies for marketing luxury to emerging markets. In addition, it introduces students to the impact of digital technology and the concepts of luxury sustainability and social entrepreneurship. Prerequisite: MGMT-216. 4 SH.

MGMT-317 International Marketing

In this course students analyze world markets, including the perspectives of consumers throughout the world. Students will learn about the marketing management techniques required to meet the demands of world markets in a dynamic and ever-changing setting. Prerequisite: MGMT-280. 2 SH.

MGMT-318 Integrated Marketing Communications

Reflects the growing practice of effectively combining an organization's communication tools in a united effort for goal accomplishment. Topics include advertising, public relations, sales promotions, marketing, social media, e-commerce and sponsorships. Legal and ethical considerations are also discussed. Same as COMM-418. Prerequisite: Junior standing. 4 SH. Capstone. CC: Interdisciplinary.

MGMT-330 Small Business and Entrepreneurship: Theory, Practice and Concept

Emphasizes small-business operations and management and the theories and practice of entrepreneurship. Topics include developing a business plan, small-business finance and selected international examples. Students are engaged in a realistic simulation of a small business, from creating the business and running it day-to-day to potentially exiting the business in some way (sell, close, bankruptcy). 4 SH. CC: Oral Intensive, Team Intensive.

MGMT-340 Corporate Financial Management

Examines the theory and practice of corporate financial management. Topics include the financial environment, time value of money, bond and stock valuation, and the capital asset pricing model. Also covers analysis of financial statements, financial forecasting, capital budgeting, long-term financing decisions, the cost of capital, capital structure, dividend policy and working capital management. Prerequisites: Junior standing, introductory statistics course, ACCT-200, and either ECON-105 or both ECON-201 and ECON-202. 4 SH.

MGMT-342 Investment Analysis

Examines various investment vehicles within a risk and return framework. Topics include the structure and operation of markets, use of margin, short sales, stock market indexes, mutual funds, efficient market hypothesis, stock and bond valuation, duration, international investing, call and put options, futures contracts, real estate, and portfolio management. Uses a mutual fund study, a stock valuation exercise and a computer database to increase knowledge and experience in investment management. Prerequisite: MGMT-340. 4 SH.

MGMT-344 Financial Institutions and Markets

Focuses on the financial services industries and financial markets in the U.S. economy. Topics include the structure of the financial markets and the roles of the financial services industry and the federal government in these markets; the valuation of fixed-income securities; risk-return trade-offs in capital markets; hedging and the use of financial derivatives to manage interest rate risk, foreign exchange risk, credit risk and liquidity risk; asset-liability-liquidity management emphasizing GAP and duration analysis; and mergers and acquisitions. Prerequisite: MGMT-340. 4 SH.

MGMT-345 International Financial Management

Examines the theoretical and practical analysis of the financing and investment decisions of multinational firms operating in international financial markets. Topics include international asset valuation, international financing and investments, foreign currency, foreign exchange risk exposure and country risk management. Prerequisite: MGMT-340. 4 SH.

MGMT-350 International Business

A broad exposure to the turbulent, complex and expanding nature of business in the international environment. Considers the fundamental principles and practices of multinational enterprises with both text and case studies. Prerequisites: ECON-201, ECON-202 or instructor's permission. 4 SH.

MGMT-351 Seminar in European Business Operations

A study of business practice and operations in the U.K. and continental Europe. Offered in London, England, for business students in the Sigmund Weis School London Program. Emphasis is pragmatic and applications-oriented. The course features field trips to manufacturing facilities, distribution centers and financial institutions in the U.K. and on the

European continent. Class often features guest lecturers knowledgeable in specific fields of international business. Prerequisites: Junior standing or instructor's permission and participation in the London Program. 2 SH.

MGMT-360 Management and Organizational Behavior

Examines the theories, practices and processes of management and organizational behavior. Emphasizes applications of theory to practice and learning from experiential activities. Topics include motivation, values and ethics, interpersonal communication, group processes, conflict and negotiation, and leadership. Numerous exercises emphasize application of theories and processes to students' personal experiences. Prerequisites: Sophomore standing, an introductory statistics course and either ECON-105 or ECON-202 or instructor's permission. 4 SH. CC: Diversity Intensive.

MGMT-361 Human Resource Management

Examines the activities and practices conducted by a human resource management department, as well as the relationships among them. Topics include job analysis and design, human resource planning, recruitment and selection, training and development, performance appraisal, and compensation. Numerous exercises are used to emphasize application of human resource management concepts and methods to real-world scenarios. Prerequisite: MGMT-360 or instructor's permission. 4 SH.

MGMT-362 Employment Law

Explores legislation regulating wages, hours and other conditions of employment. Topics include federal laws that regulate wages and salaries, hours of work, equal employment opportunity, health and safety, and workplace justice. Students are required to apply concepts and techniques discussed in class within several assignments and/or exercises. Prerequisite: MGMT-361 or instructor's permission. 2 SH.

MGMT-369 Values, Ethics and the Good Life

Students are introduced to "The Encompassing," a model that depicts the complexity of being or becoming a fully functioning human being. The Encompassing model describes four modes of being (human), as well as ethical systems and leadership styles that correspond to each mode. Students will engage in class discussion, exercises and other learning activities that focus on their applying course material to their own personal lives. Prerequisite: Junior standing or instructor's permission. 4 SH. CC: Ethics

MGMT-381 Marketing Research

The course material parallels the marketing research process and follows the definition of a research problem, the design of an appropriate methodology and the collection of data. Data compilation and analysis and report preparation are covered in the data analysis portion of the course. The objective is to provide students with the analytical skills and practical experience that will allow them to perform market research. Prerequisites: an introductory statistics course and MGMT-280. 4 SH.

MGMT-382 Consumer Behavior

A survey of the contributions of the behavioral sciences to the understanding of buyer behavior. Emphasizes how marketers use theories regarding the consumer purchasing process to make decisions at both the strategic and tactical levels. Prerequisite: MGMT-280. 4 SH.

MGMT-384 Retailing

Marketing activities that involve the sale of goods and services to ultimate consumers for personal, family, household and small-business use. Focuses on store operations, distribution functions and nonstore retailing, including mail-order and the Internet. Prerequisite: MGMT-280. 2 SH.

MGMT-390 Operations Management

Introduces areas such as product and process development, capacity planning, inventory control, product scheduling, and quality control. Emphasizes the integration of strategic long-term and analytical short-term decisions and the integration of the operations function within the firm. Uses quantitative models, spreadsheet models and computer applications to provide a framework and support for the development of management decisions. Prerequisites: Junior standing, MGMT-203, ACCT-200, and either ECON-105 or ECON-202. 4 SH.

MGMT-400 Business Policy and Strategy

The capstone course for business seniors that integrates much of the knowledge they gain from earlier courses. Uses a case method approach to solve problems facing top management. Emphasizes the global environment and strategic management decisions. Covers finance, management, marketing, technology, geography, leadership and other factors in both domestic and international cases. Heavy emphasis on the development of analytical skills and both written and oral communications skills. Prerequisites: Senior standing and completion with a C- or better of MGMT-340 and MGMT-360. 4 SH. Capstone. CC: Oral Intensive, Writing Intensive.

MGMT-404 Business and Social Responsibility

Examines the concepts and applications of ethical and moral behavior that affect business decision making and result in socially responsible policies and actions. Uses actual cases and issues to demonstrate the need for social responsibility as an integral part of business strategies and implementation. Prerequisites: Senior standing and completion of all 300-level business requirements or instructor's permission. 2 SH.

MGMT-416 Intellectual Property and the Luxury Industry

Intellectual property is the foundation upon which the success of luxury brands are built. Valuable intellectual property is paramount to the growth and sustainability of brand value. This course covers protection of intellectual property domestically and globally, and it explores the interplay among trademark law, antitrust law, luxury goods, and copies of luxury goods. Prerequisite: ACCT-210. 4 SH.

MGMT-433 New Venture Start-up and Financing

This course deals with the strategic and operational issues of structuring the start-up of different types of new ventures. Beyond personal qualities, preparing viable business plans is vital for success in establishing new business ventures. Student teams will practically learn how to prepare a viable and appealing business plan for the type of venture they would like to start. They will learn the step-by-step processes of business plan preparation. The course will also cover the hows and whys of different options of financing for new ventures. At the end of the semester, students will attempt to secure financing from banks and other financing institutional capacities. 4 SH.

MGMT-434 Entrepreneurial Experience

Student teams create, manage and run an organization. They must appoint a management team, delegate jobs, hire personnel and manage finances in order to run the business. Students also study several cases that demonstrate different aspects of the entrepreneurial company. 4 SH.

MGMT-435 Entrepreneurial Venture Strategy and Economic Growth

This course inquires how successful entrepreneurs create economic wealth through innovation and great ideas. Core discussions will focus on the foundations of entrepreneurial paradigms and strategies that help entrepreneurial ventures to sustain competitiveness and enhance their contribution to economic growth and innovations. Students will learn and retain a demonstrable knowledge in entrepreneurial marketing paradigms, strategies and policies that are needed to manage successful entrepreneurial ventures. Moreover, course discussion topics will help students to understand the important role of entrepreneurship in achieving the better, the new, the breakthrough and the yet unchallenged innovation, creativity and opportunity. 4 SH.

MGMT-441 Advanced Corporate Financial Management

A brief review of MGMT-340 with additional depth in such topics as risk and return, cost of capital, capital structures theory and practice, capital budgeting, and financial statement analysis. Expands to cover topics such as lease financing and debt refinancing. Uses case studies to apply these concepts and theories. Prerequisite: MGMT-340. 4 SH.

MGMT-442 Portfolio Management

This course is designed to focus on the work of portfolio managers. Students will learn how to establish appropriate investment objectives, develop optimal portfolio strategies, estimate risk-return trade-offs, select investment managers and evaluate investment performance. Many of the latest quantitative approaches in portfolio formation and evaluation are discussed. This course will draw upon selected materials from the CFA professional designation curriculum. This class is one of the two courses that make up the "Susquehanna Student Investment Program, SUSIP." Prerequisite: MGMT-342. 4 SH.

MGMT-443 Equity Asset Analysis and Valuation

Examines various investment techniques using empirical analysis within the framework of modern portfolio theory. The course features a top-down fundamental analysis approach using both economic and industry financial data. Topics include macroeconomics, portfolio analysis, financial statement analysis, traditional investment theory, intrinsic security valuation, efficient market hypothesis, executive compensation, insider trading, and advanced technical writing and oral presentations. Prerequisite: MGMT-340. 4 SH.

MGMT-445 Financial Modeling and Fixed Income Analysis

This course focuses on securities that promise a fixed income stream. Topics include features of bonds, risk of bonds, yield spreads, duration, convexity, term structure, volatility of interest rates, and CDO's. Financial models are developed using Excel and focusing on extraction of financial data and converting it into models useful for financial decision-making. Prerequisites: MGMT-340 and MGMT-342. 4 SH.

MGMT-446 Topics in Finance

Topics of current importance and interest in finance. Prerequisites: MGMT-340. 2-4 SH.

MGMT-464 Compensation Structure Design

Explores the theory and practice of compensation structure design based on concepts of internal and external equity. Internal equity focuses on assessing the relative worth of different jobs in an organization through job evaluation. External equity involves assigning pay levels to different jobs in an organization based on data collected from wage and salary surveys of competitors. The topic of benefits is also addressed. Students are required to apply concepts and techniques in class within a group project that entails developing a compensation structure for a hypothetical company. Prerequisite: MGMT-361 or instructor's permission. 2 SH.

MGMT-465 Performance Management

Explores the theory and practice of performance appraisal and performance-based pay. Performance appraisal topics include appraisal instruments, sources of appraisal, increasing appraisal accuracy and conducting appraisal interviews. Performance-based pay topics include traditional merit pay, as well as incentive plans, gain sharing and profit sharing. Students are required to apply concepts and techniques discussed in class within several assignments and/or exercises. Prerequisite: MGMT-361 or instructor's permission. 2 SH.

MGMT-466 Negotiations

Develops skills in negotiation, joint decision making and joint problem solving through analysis of the negotiating process, frequent negotiation exercises, case analyses and interaction with professional negotiators. Prerequisite: Junior standing or instructor's permission. 2 SH.

MGMT-467 Topics in Management

Explores topics of current importance and interest in management. Prerequisites: Junior standing and MGMT-360 or instructor's permission. 2-4 SH.

MGMT-468 Women in Organizations

Examines the role of sex and gender in organizations. Special attention is given to topics relevant to women working in organizations, such as sex and gender differences in career/job preferences, advancement and pay, teamwork, leadership, sexuality in the workplace and work-family balance. Other topics addressed include hostile vs. benevolent sexism, as well as practices designed to increase diversity within organizations. Class is conducted in a seminar format. Prerequisite: Junior standing or permission of instructor. Same as WMST-380. 2 SH. CC: Diversity Intensive.

MGMT-485 Marketing Strategy and Management

A case method capstone course for the marketing emphasis, applying marketing functions to real-world situations. Integrates knowledge from previous courses in marketing, management, accounting and finance as applied to market planning. Prerequisites: MGMT-382 and MGMT-381. 2 SH.

MGMT-486 Topics in Marketing

In-depth focus on a marketing topic of current interest. Possible topics include marketing for service and nonprofit organizations, new product development and direct marketing. Prerequisite: MGMT-280. 2 SH.

MGMT-501 Independent Study

Individualized academic work for qualified students under faculty direction. Typically focused on topics not covered in regularly offered courses. Prerequisites: Senior standing and permission of faculty member and department head. 2-4 SH.

MGMT-502 Senior Research

An original research project under faculty direction. Prerequisites: Senior standing and permission of faculty member and department head. 2-4 SH.

MGMT-503 Business Internship

Full-time off-campus employment for junior or senior business students guided by host organization management supervisor and Sigmund Weis School faculty internship adviser. Requires collateral written analysis of the learning experience. Prerequisites: Permission of faculty supervisor and department head and a 2.00 GPA. S/U. 2-4 SH.

OFFP-SWSB SWSB London Program Planning

The goal of this course is to prepare study abroad students for a semester's study in the Sigmund Weis School of Business London Program. Many differences come into play: finances, physical health and safety, cultural expectations, and world affairs differ in relevance to the SU student studying on campus versus studying in London. This course will respond to the question of how to research, plan and prepare for a study abroad experience, as well as how to prepare to return home. 1 SH.

OFFR-SWSB SWSB London Program Reflection

This course completes the cross-cultural requirement for students in the Sigmund Weis School of Business London Program. Through short assignments, student presentations, a final paper and an opinion survey, students reflect on their learning in London coursework, company visits, consulting projects and more. 1 SH CC: Cross-Cultural Reflection.

Information Systems Courses

INFS-174 Database Systems Analysis and Design

This course deals primarily with the development of the approaches for the analysis, design, and development of database systems in today's business environment. Major emphasis is placed on the development of a series of models that culminate with the creation of a working database system. These models cover the entire system's development life cycle and are critical to ensure the development of an effective database solution. Prerequisites: Sophomore standing and PRDV-100 or COMM-101 and instructor's permission. 4 SH.

INFS-271 E-Business Applications Development

An introduction to the basics of client/server computing and Web-based system development. The course covers the concepts of networking, Web technologies, HTML (hyper-text markup language), client-side scripting (JavaScript), server-side scripting (PHP, ASP, and ISP), and structured query language (SQL) The course builds upon Database Systems Analysis and Design by linking an interactive Web design to a database. Prerequisite: INFS-174. 4 SH.

INFS-276 Simulation Models

Design, development and use of computer models for planning, allocation and scheduling in the manufacturing and service sectors. Uses queuing theory and statistical analysis to interpret results. Includes the use of Simul8 or some other special-purpose simulation language. Prerequisites: A statistics course such as MATH-108, MATH-180, MGMT-202, PSYC-123 or equivalent, and either PRDV-100 or COMM-101. 2 SH.

INFS-375 Database Programming

A practical course to teach database programming in SQL. Topics include relational database management systems fundamentals such as extended entity-relationship modeling, normalization and physical database file organization. Additional topics include database administration and data warehousing. Students develop a prototype database for an actual client. Prerequisites: CSCI-181, INFS-174 or CSCI-281. 4 SH.

INFS-472 Management Support Systems

This course provides a framework for managing the introduction, evaluation and assimilation of computer technology into organizations, focusing on information needs of middle and senior management. Case studies address management of information resources and selection of hardware and software. Prerequisites: INFS-174 and MGMT-203. 4 SH. CC: Team Intensive, Writing Intensive.

INFS-485 Artificial Intelligence

A brief summary of the tools, techniques and applications of artificial intelligence. Introduces problem solving and knowledge representation and selects topics from techniques for constructing models, robot design, language processing, computer vision, neural networks and expert systems. Same as CSCI-485. Prerequisites: CSCI-281, MATH-111 and either MATH-108 or MATH-180. 2 SH.

INFS-496 Topics in Information Systems

Topics of current importance and interest in information systems. Emphasizes readings from the current literature. Prerequisite: Instructor's permission. 2 or 4 SH.

INFS-501 Independent Study

Individualized academic work for qualified students under faculty direction. Usually studies special topics not covered in regularly offered courses. Prerequisites: Junior or senior standing and approval of instructor and department head. 2 -4 SH.

INFS-502 Independent Research

A research project culminating in a substantive paper on a selected topic or field in computer science or information systems by arrangement with an instructor. Prerequisites: Junior or senior standing and permission of computer science department head or information systems department head. 2-4 SH.

INFS-503 Information Systems Internship

On-the-job supervised experience in a corporate or nonprofit organization. Prerequisites: Permission of internship coordinator and acceptance by organization. 2-8 SH.

INFS-505 Capstone

This semester-long course serves as a capstone experience for information systems majors, as well as business students whose primary emphasis is information systems. Students will engage in projects that can benefit a university or community group. These projects will change each year based on requests and arrangements made through the faculty in the Department of Management. The projects largely will focus the students on the development of database solutions to solve business-related problems. Prerequisites: INFS-271 and senior standing. 2 SH. Capstone.

Sigmund Weis School of Business London Program Courses

INTD-133 British Theatre

Offered to students participating in the London Program of the Sigmund Weis School of Business, this course provides knowledge and exposure to the art of theatre performance by utilizing the rich offerings of the theatre and other fine arts resources in London and England.

INTD-134 British History/Culture London

Offered to students participating in the London Program of the Sigmund Weis School of Business, this course introduces students to the theories and principles of diversity by examining Great Britain as a case study in diversity. The course explores key aspects diversity in relation to, but not limited to, class, race, gender and sexuality. A key focus will be location-specific study of social and cultural diversity through student exploration of the role played by culture, ethnicity, class, race and gender in Britain's past and in its contemporary life. This will involve exploring the opportunities and challenges faced by individuals, businesses and non-profit organizations in their engagement with issues of equality and social justice. Students will learn about contemporary British culture and they will be able to compare that culture with that of the United States.

MATHEMATICS

Faculty

Edisanter Lo, Ph.D., Associate Professor of Mathematical Sciences, department head

Ken Brakke, Ph.D., Professor of Mathematical Sciences

Jeffrey A. Graham, Ph.D., Associate Professor of Mathematical Sciences

Toshiro Kubota, Ph.D., Associate Professor of Mathematical Sciences

Annika Kathryn Miller, Ph.D., Associate Professor of Math and Computer Science

Alex Wilce, Ph.D., Associate Professor of Mathematical Sciences

Lisa Schneider, Visiting Assistant Professor of Mathematical Science

Mathematics Studies

Learning Goals:

- The student attains a firm foundation of fundamental mathematical concepts, methods and language sufficient to support further academic work or a career in areas requiring mathematical understanding.
- The student attains knowledge and skills to undertake independent learning beyond formal study.
- The student applies mathematical skills and knowledge to solve problems and analyze new situations in mathematics and related areas.
- The student communicates mathematical ideas, both orally and in writing, with clarity and precision.

Requirements for the Major in Mathematics. Students complete the equivalent of 55 semester hours as described.

4	MATH-112 Calculus II
4	MATH-180 Statistical Methods
4	MATH-201 Linear Algebra
4	MATH-211 Multivariate Calculus
4	MATH-221 Discrete Structures
2	MATH-231 Foundations of Analysis
4	MATH-321 Abstract Algebra
4	MATH-353 Differential Equations
4	One 300-level or above mathematics course
8	Two 400-level mathematics courses
1-4	MATH-500 Senior Colloquium
4	CSCI-181 Principles of Computer Science
8	CSCI-281 Data Structures plus another 150-level or above computer science or information systems course, or PHYS-204 and 205 Introductory Physics I and II or DATA-301 Data Mining and DATA-401 Machine Learning

Secondary Teaching. Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American literature, at least 6 semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners: Theory and Instruction, EDUC-380 Instructional Design, EDUC-423 Methods of Curriculum, Instruction, and Assessment in Teaching Mathematics, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching package (EDUC-501, EDUC-502, EDUC-503, and EDUC-600).

In addition, secondary education mathematics students complete all of the usual requirements for the mathematics major. They must satisfy the "one 300-level or above mathematics course" requirement by taking MATH-331 Geometry.

Minor in Mathematics. The minor completes 24 semester hours of mathematics courses above the 108 level with grades of C- or better. Requirements include MATH-112 Calculus II, MATH-201 Linear Algebra and MATH-221 Discrete Structures, with at least four semester hours at the 300 level or above.

Interdisciplinary Options. Mathematics majors can easily complete a minor in another department. Areas such as accounting, business, computer science, biology, chemistry, physics or a foreign language are natural choices. The department also sponsors a business-related minor in actuarial science.

Highly motivated students whose interests cross traditional departmental lines may also consider a **self-designed major.** This option provides an integrated program of study from courses in several departments and is described in the majors and minors section.

Minor in Actuarial Science. Students minoring in actuarial science will typically have strong interests in mathematics and business. Students taking this minor complete with grades of C- or better the following courses: MATH-211 Multivariate Calculus, MATH-441 Mathematical Statistics, MATH-351 Numerical Computing, MATH-352 Numerical Analysis, MATH-355 Operations Research, ACCT-200 Financial Accounting, MGMT-340 Corporate Financial Management and either ECON-105 Elements of Economics or both ECON-201 Principles of Macroeconomics and ECON:202 Principles of Microeconomics. Because this is an interdisciplinary minor, at least 18 semester hours of the minor must not be credited toward the student's major.

Double Major/Minor in Computer Science and Mathematics. Because the computer science major already requires several mathematics courses, many computer science majors pick up a mathematics major or minor relatively easily. However, it is department policy that cross-listed elective courses (such as Operations Research) count in only one major or minor at a time.

Departmental Honors. The departmental honors program encourages and recognizes outstanding academic performance. To graduate with departmental honors, a mathematics major or computer science major must do the following:

- Have a minimum GPA of 3.50 in the department and 3.00 overall,
- Request admission to the program at the end of the junior year,
- Consult with a faculty adviser to design an honors-quality project and begin research as a first-semester senior taking MATH-503 Independent Research or CSCI-503/INFS-502 Independent Research,
- Complete the project during the second semester in MATH-500 Senior Colloquium or CSCI-500 Senior Colloquium, and
- Successfully pass an oral exam covering a selection of math courses.

Kappa Mu Epsilon. Students who meet national standards for membership are eligible to join this national undergraduate mathematics honorary society.

Capstone. The Capstone requirement may be satisfied by the four-semester-hour version of MATH-500 Senior Colloquium. Students need not fulfill the Capstone requirement in their major, but they usually do.

Mathematics Courses

MATH-099 College Mathematics Preparation

Topics may include sets, radicals, polynomials, factoring, inequalities, linear and quadratic equations, functions, exponents, and simple descriptive statistics. Intended for students not ready for college credit math; placement in this course is determined by the Department of Mathematics. Grade is S/U. 0 SH.

MATH-101 Precalculus Mathematics

Topics include algebra, functions, graphing, exponents, logarithms, exponential functions, trigonometry and solving word problems. Prerequisite: Based on placement results, some students may require a mathematics review course. 4 SH.

MATH-105 Introductory Topics

This is a two-semester-hour course meant to help education majors satisfy the Pennsylvania state requirement for six credits of college mathematics. Each course will cover a topic of the instructor's choice at an introductory level. Topics so far have included symmetry, counting, and math and music. This course does not count toward a math major or minor, and particular topics may overlap enough with other math courses to bar a student from taking both. Education majors will be given priority. Prerequisites: Usually none. 2 SH.

MATH-108 Introduction to Statistics

A basic introduction to data analysis, descriptive statistics, probability, Bayes' Theorem, distributions of random variables and topics in statistical inference. (Students may earn credit for only one of the introductory statistics courses offered by the departments of management, psychology or mathematics.) 4 SH. CC: Analytical Thought.

MATH-109 Statistics for Social Sciences

This course covers basic descriptive and inferential statistical techniques used in analyzing social science research data. The student becomes familiar with ways to organize and analyze data, communicate research results, translate statistical jargon into meaningful English, and understand basic theories underlying statistics, e.g., elementary probability theory. 4 SH. CC: Analytical Thought.

MATH-111 Calculus I

Differentiation and integration of polynomials, exponentials, logarithms and trigonometric functions rules of differentiation and applications. 4 SH. CC: Analytical Thought.

MATH-112 Calculus II

Techniques of integration, area, volume and arc length. Also includes improper integrals, L'Hopital's rule and power series. Prerequisite: MATH-111 Calculus I or equivalent. 4 SH. CC: Analytical Thought.

MATH-180 Statistical Methods

This course provides a broad overview of introductory statistical methods and data analysis. Topics include descriptive statistics, probability, probability distributions, statistical inferences on population means and population variances, multiple comparisons, categorical data, data analysis using linear regression and multiple regression, design of experiments, and analysis of variance. 4 SH. CC: Analytical Thought.

MATH-201 Linear Algebra

An elementary introduction to linear algebra. Topics include vectors, matrices, determinants, systems of linear equations, linear transformations, eigenvalues and eigenvectors. Also covers applications to computer graphics. Placement at MATH-111 Calculus I level or higher is strongly recommended. 4 SH. CC: Analytical Thought.

MATH-203 Math and Music

An exploration of the interplay of mathematics and music. Topics such as the Fourier theory of sound, consonance and dissonance scales, temperament, digital signal processing, sound synthesis, twelve tone music theory, and algorithmic composition will be covered in the course. Prerequisites: Sophomore standing and MATH-112 Calculus II. Some knowledge of music theory and computer programming would be helpful but is not required. 4 SH. CC: Interdisciplinary.

MATH-211 Multivariate Calculus

Calculus of several variables, partial derivatives, critical points, multiple integrals, gradient, curl, divergence, Green's Theorem and Stokes' Theorem. Prerequisites: MATH-112 Calculus II and MATH-201 Linear Algebra. 4 SH.

MATH-221 Discrete Structures

An elementary approach to fundamental algebraic concepts. Emphasizes logic, proof techniques, relations, functions, graphs, Boolean algebra and computer logic. Also stresses modular arithmetic, algebraic structures, counting principles, coding theory and finite state machines. Prerequisite: MATH-111 Calculus I. 4 SH. CC: Analytical Thought, Writing Intensive.

MATH-231 Foundations of Analysis

A rigorous study of the theoretical basis of single-variable differential and integral calculus: limits, continuity, differentiation and integration. Prerequisite: MATH-112 Calculus II and MATH-221 Discrete Structures. 2 SH.

MATH-235 Artificial Life

Science and mathematics describe natural phenomena so well that lines between real-world events and the corresponding theoretical-world events have become blurred. Can computer models simulate key characteristics of life, such as behavior, motivation, reproduction, adaptation, perception and even intelligence? Proponents of strong artificial life believe that computers will eventually serve not only to model life processes but will actually think and be alive. These contentions are compared and contrasted with an emphasis on the current status and future implications of strong artificial life. This course is meant to be accessible to both majors and nonmajors. Same as CSCI-235. Prerequisites: Sophomore standing and, to facilitate an elevated level of class discourse, completion of at least two of the following Central Curriculum requirements: Analytic Thought, Scientific Explanations or Ethics. 4 SH. CC: Ethics Intensive, Interdisciplinary.

MATH-321 Abstract Algebra

A more detailed study of algebraic structures. Introduces fundamental concepts of groups, rings and fields. Prerequisites: MATH-201 Linear Algebra and MATH-221 Discrete Structures. 4 SH. CC: Writing Intensive.

MATH-331 Geometry

A concentrated study of elementary geometry. Includes Euclidean and non-Euclidean geometries and selected topics such as symmetry, Penrose tilings, fractals, knots, mapmaking and the shape of the universe. Prerequisites: MATH-201 Linear Algebra and MATH-221 Discrete Structures. 4 SH.

MATH-351 Numerical Computing

An introduction to the computational techniques for solving mathematical problems. Topics include roots of nonlinear equations, interpolation, numerical differentiation and integration, and numerical solutions of differential equations. Same as CSCI-351. Prerequisite: MATH-111 Calculus I; MATH-112 Calculus II is suggested. 2 SH.

MATH-352 Numerical Analysis

A theoretical study of the standard numerical techniques for solving mathematical problems. Topics include roots of nonlinear equations, polynomial interpolation, solving systems of equations, numerical integration and numerical solutions of differential equations. Same as CSCI-352. Prerequisites: MATH-112 Calculus II, MATH-201 Linear Algebra and MATH-351 Numerical Computing. 2 SH.

MATH-353 Differential Equations

Introduces theory, basic solution methods, qualitative analysis and applications of ordinary differential equations. Prerequisites: Sophomore standing, MATH-112 Calculus II and MATH-201 Linear Algebra or instructor's permission. 4 SH.

MATH-355 Operations Research

Mathematical models and optimization techniques useful in decision making. Includes linear programming, game theory, integer programming, queuing theory, inventory theory, networks and reliability. Further topics, such as nonlinear programming and Markov chains, as time permits. Same as CSCI-355. Prerequisites: MATH-112 Calculus II, MATH-201 Linear Algebra, MATH-221 Discrete Structures, and either MATH-108 Introduction to Statistics or MATH-180 Statistical Methods or instructor's permission. 4 SH.

MATH-370 Cryptology and Number Theory

Cryptology is the study of hiding the meaning of messages. Cryptology is an interesting venue for the study of its mathematical underpinnings (number theory, matrix algebra, probability and statistics) and as an opportunity to implement techniques by means of computer programs. We consider monoalphabetic and polyalphabetic encryptions, public key cryptography, security, and anonymity. Same as CSCI-370. Prerequisite: MATH-221 Discrete Structures. 4 SH.

MATH-411 Real Analysis

A deeper look at the fundamentals of calculus. Real numbers, point set theory, limits and the theory of continuity, differentiation, and integration. Prerequisites: MATH-112 Calculus II and MATH-221 Discrete Structures. 4 SH.

MATH-415 Complex Analysis

Calculus using complex numbers. Includes power series, analytic functions, poles, residues, contour integrals and applications. Prerequisites: MATH-211 Multivariate Calculus and MATH-221 Discrete Structures. 4 SH.

MATH-441 Mathematical Statistics

A more detailed study of statistics. Topics include probability, multivariate distributions, Bayes' Theorem, statistical inference, estimation, decision theory, hypothesis testing, linear models and experimental design. Prerequisites: MATH-211 Multivariate Calculus and either MATH-108 Introduction to Statistics or MATH-180 Statistical Methods. 4 SH.

MATH-482 Theory of Computation

An introduction to the classical and contemporary theory of computation. Topics include the theory of automata and formal languages, computability by Turing machines and recursive functions, computational complexity, and possibly quantum computers. Same as CSCI-482. Prerequisites: MATH-221 Discrete Structures and CSCI-281 Data Structures. 2 SH.

MATH-500 Senior Colloquium

Experience in individual research and presentation of topics in mathematics. The one-semester-hour version culminates in a presentation to an audience of faculty and students. The two-semester-hour version also includes a paper. Prerequisite: Senior major or department permission. 1 or 4 SH. The 4 SH version satisfies the capstone requirement. CC: Oral Intensive for the 4-SH.

MATH-501 Topics in Mathematics

Subject depends on students' and instructor's interests. Possibilities include number theory, set theoretic foundations of mathematics, topology, graph theory, differential geometry and applied mathematics. Whether the course counts as a 400-level course for majors will be announced along with the course description. Prerequisite: Instructor's permission. 2 or 4 SH.

MATH-502 Independent Study

Individual work for capable students under faculty supervision. Scheduled courses are approved for independent study only under extraordinary circumstances. Whether the course counts as a 400-level course for majors will be decided on an individual basis. Prerequisite: Department approval and instructor's consent. 2 or 4 SH.

MATH-503 Independent Research

A research project leading to a substantive paper on a selected topic in mathematics. By arrangement with a department instructor. Prerequisites: Junior or senior standing and department permission. 2 or 4 SH.

MATH-599 Mathematics Internship

Full-time mathematics-related employment at an industrial firm or a public service organization. Prerequisites: Senior standing, appropriate mathematics background courses and department internship coordinator's permission. S/U grade. 2, 4 or 8 SH.

MODERN LANGUAGES

Faculty

Amanda S. Meixell, Ph.D., Associate Professor of Spanish, department head

Wanda L. Cordero-Ponce, Ph.D., Associate Professor of Spanish

Lynn E. Palermo, Ph.D., Associate Professor of French

Daryl M. Rodgers, Ph.D., Associate Professor of Italian

Megan L. Kelly, Ph.D., Assistant Professor of Spanish

Martina Kolb, Ph.D., Assistant Professor of German

Sylvia M. Grove, Visiting Assistant Professor of French

Kimberly Kaler, Lecturer in Spanish

Modern Language Fellows. A special feature of language study at Susquehanna is the opportunity for students to interact with visiting instructors from other countries. The fellows teach introductory language classes, act as teaching assistants in upper-level courses, and join students in weekly language tables and club activities.

Modern Language Studies

Learning Goals:

- Students will be able to communicate proficiently in the target language, using all major time frames (past, present and future).
- Students will be able to read and comprehend the main ideas of literary and cultural texts in the target language.
- Students will be able to write about a range of cultural and literary topics and issues in the target language, using all major time frames.
- Students will acquire and use factual information in the target language to gain critical insight into perspectives relating to the cultures in which their language of study is widely spoken.

Modern Language Major. Students with a major in French, German, Italian or Spanish complete at least 28 semester hours above the 201 level with grades of C- or better. Students placed at the 300 level complete 24 semester hours at the 300 and 400 levels with grades of C- or better. At least one course in the target language must be at the 400 level. The Independent Study (542) in all languages may also be counted toward the major and minor. French, Italian and German require one related history course. Spanish requires one course in Latin American history. All majors complete the capstone, which is composed of two elements: (1) a 400-level course in the language of study to be taken after completing a semester abroad, typically during senior year; and (2) a language proficiency evaluation (FRNC-599, GERM-599, ITAL-599, SPAN-599), which they must pass in their final semester. This second part of the capstone is evaluated on a satisfactory/unsatisfactory basis.

All of the modern language majors require one semester of study abroad in a country where the language of study is spoken. Most students majoring in a language also have a second major. Almost any other major on campus can be combined with language studies. After returning from a year or semester of study abroad, majors must take at least one regularly scheduled 300- or 400-level language course at Susquehanna before graduating.

For a major in French, students complete FRNC-202, FRNC-301 and FRNC-302, one course in French or European history, a semester abroad in a French-speaking country; and the capstone, which is composed of two elements: (1) a 400-level course typically taken during the senior year and (2) a language proficiency evaluation in their final semester.

For a major in German, students complete GERM-202 and 24 semester hours at the 300- and 400-level; one course in European history; a semester abroad in a German-speaking country; and the capstone, which is composed of two elements: (1) a 400-level course typically taken during the senior year and (2) a language proficiency evaluation in their final semester.

For a major in Italian, students complete ITAL-202 and 24 semester hours at the 300- and 400-level; one course in European history; a semester abroad in Italy; and the capstone, which is composed of two elements: (1) a 400-level course typically taken during the senior year and (2) a language proficiency evaluation in their final semester.

For a major in Spanish, students complete SPAN-202, SPAN-301, SPAN-302; a course in Latin American history; a semester abroad in a Spanish-speaking country; and the capstone, which is composed of two elements: (1) a 400-level course typically taken during the senior year and (2) a language proficiency evaluation in their final semester. Finally, majors complete one course in each of the three geographical areas where Spanish is most widely spoken: Spain, Spanish America and the United States.

Minor in French, German, Italian or Spanish. Students minoring in French, German, Italian or Spanish complete, with grades of C- or better, 16 semester hours above 201. Students placed at the 300 level complete 12 semester hours at the 300 level with grades of C- or better.

Minor in Applied Language Studies. Students with a minor in applied language studies typically have a minor or major in a foreign language and must have completed language coursework through FRNC-202, GERM-202, ITAL-202, or SPAN-202 (or the course equivalent thereof) to take courses in the program. The minor is comprised of LANG-300 Introduction to Applied Language Studies, LANG-504 Language and the Professions, and 16 additional semester hours chosen from the following courses: LANG-350 Introduction to Linguistics, LANG-360 Introduction to Second Language Acquisition, EDUC-350 English Language Learners: Theory and Instruction, PSYC-348 Psycholinguistics, COMM-194 Intercultural Communication, ANTH-162 Introduction to Anthropology, ANTH-152 Public Culture, FRNC-310 French/Francophone Literary and Cultural or Film Studies, FRNC-460 Seminar on French and Francophone Literature and Culture or Film (with title of 'French for Business' or 'Problems in French Translation'), SPAN-305 Spanish for the Service Professions and ITAL-311/461 Topics in Italian Language and Linguistics. Students pursuing the minor must complete all courses for the minor with a grade of C- or higher. Only four semester hours may be double-counted with the students' major or with another minor.

Teaching Certification. Susquehanna offers teaching certification in French, German, and Spanish, and students preparing for such certification must maintain a minimum 3.00 GPA in the major. Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American literature, at least 6 semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners, EDUC-380 Instructional Design, EDUC-422 Methods of Curriculum, Instruction, and Assessment in Teaching Foreign Languages, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching package (EDUC-501, EDUC-502, EDUC-503, and EDUC-600). In addition, students pursuing certification in French and German satisfy all of the usual requirements for those majors.

Departmental Honors. The departmental honors option recognizes outstanding work in a modern language. To graduate with honors, majoring students must do the following:

- Receive an invitation to enter the program in the senior year,

- Maintain a GPA of 3.50 in the department and 3.30 overall,
- Declare an honors adviser by the end of the first week of the fall/spring semester of the senior year,
- Develop and submit honors-quality senior research by April 15 (usually as part of a seminar, research or independent study course), and
- Present their papers for discussion with faculty or at Senior Scholars Day.

Work not meeting the standards for departmental honors may be applied to the regular major.

Placement. Scores received on pre-enrollment language-proficiency examinations and nationally recognized achievement tests help determine placement level or exemption without credit from the university's Central Curriculum language requirement. Students who score 4 or 5 on the National Advanced Placement examination receive the equivalent of four semester hours of course credit and are placed in a 300-level course in recognition of their accomplishment.

Language placement scores are valid for two years:

German 102 and Spanish 104
Students who do not complete the course in which they were placed within two years must retake the online language placement exam to determine their appropriate placement after the lapsed time. Contact April Ritter at rittera@susqu.edu.

Chinese, French and Italian 102
Students who do not complete the course in which they were placed within two years must contact the language coordinator to determine their appropriate placement after the lapsed time.

Language coordinators:

- Chinese: Amanda Meixell at meixell@susqu.edu
- French: Lynn Palermo at palermo@susqu.edu
- Italian: Daryl Rodgers at rodgers@susqu.edu

The Department of Modern Languages encourages students who exempt the foreign language Central Curriculum requirement to continue their language study by enrolling in the course into which they have been placed at the 201 level or above. Upon successful completion of that course with a grade of B- or above, such students will earn a total of eight semester hours of credit: four semester hours for the upper-level course and four semester hours of (ungraded) advanced study credit in recognition of their advanced achievement. This option is not available to students who are transferring equivalent language coursework from another college. Advanced study credit may not be used to satisfy the requirement for a major or minor program.

Modern Language Courses

Arabic

ARBC-101 Beginning Arabic I

Intended for students with no previous experience with the language. An introduction to speaking, reading, listening and writing in Arabic. Also explores aspects of Arab culture. 4 SH.

ARBC-102 Beginning Arabic II

Continuation of ARBC-101. An introduction to speaking, reading, listening and writing in Arabic. Also explores aspects of Arab culture. 4 SH. Prerequisite: ARBC-101 or equivalent department-approved proficiency. CC: Foreign Language.

Chinese

CHNS-101 Beginning Chinese I

Introduces students to short conversations in standard (Mandarin) Chinese while laying foundations for further studies of the language. Includes standard pronunciation, basic vocabulary and writing simple statements. Explores the systems of language and culture of the Chinese people. 4 SH.

CHNS-102 Beginning Chinese II

A continuation of CHNS-101. Introduces students to short conversations in standard (Mandarin) Chinese while laying foundations for further studies of the language. Includes standard pronunciation, basic vocabulary and writing simple statements. Explores the systems of language and culture of the Chinese people. 4 SH. Prerequisite: CHNS-101 or equivalent department-approved proficiency. CC: Foreign Language.

CHNS-201 Intermediate Chinese: Language and Culture

Review and expansion of elementary-level skills to intermediate level. Focus on developing skills needed to improve listening, speaking, reading and writing. Topics include culture and civilization with emphasis on current issues, comparisons to own cultures and interdisciplinary perspectives. Prerequisite: CHNS-102 or equivalent department-approved proficiency. 4 SH.

French

For a minor in French, students complete FRNC-202, FRNC-301, FRNC-302 and a 300-level topics course. For a major in French, students complete FRNC-202, FRNC-301 and FRNC-302, one course in French or European history, a semester abroad in a French-speaking country; and the capstone, which is composed of two elements: (1) a 400-level course typically taken during the senior year and (2) a language proficiency evaluation in their final semester.

FRNC-101 Beginning French I

Intended for both students who are new to the language and students with limited previous experience in the language who have placed into the first-semester level. Focuses on acquisition of core vocabulary and structures useful for completing conversational and writing tasks associated with daily life. Also, development of strategies for reading short, authentic texts in the target language. Includes study of cultural topics. 4 SH.

FRNC-102 Beginning French II

Continuation of Beginning French I with emphasis on development and application of speaking, listening, reading and writing skills. Individual and group projects center on cultural dimensions of France and the French-speaking world. Prerequisite: FRNC-101, placement by examination or equivalent department-approved proficiency. 4 SH. CC: Foreign Language

FRNC-201 Intermediate French I: Language and Culture

Expansion of elementary-level skills to intermediate level. Includes discussion of culture and civilization with an emphasis on current issues. Prerequisite: FRNC-102, placement by examination or equivalent department-approved proficiency. 4 SH.

FRNC-202 Intermediate French II: Language and Culture

The first course in the French major/minor, FRNC-202 focuses on broadening and deepening all skills: speaking, listening, reading and writing in preparation for study at the advanced level. Cultural study emphasizes the larger French-speaking world. Prerequisite: FRNC-201, placement by examination or department-approved proficiency. 4 SH CC: Diversity Intensive.

FRNC-301 Advanced Conversation and Phonetics

Focus on development of oral expression through role play, storytelling and discussion/debate of a variety of current issues in France and the larger Francophone world. Intensive work on pronunciation and intonation. Prerequisite: FRNC-202, placement by examination or equivalent department-approved proficiency. 4 SH. CC: Team Intensive.

FRNC-302 Advanced Composition and Grammar

Intensive focus on written expression, including study of language as a system. Includes extensive writing, using a process oriented approach. Development of critical thinking skills through analysis of literary texts, film, translation, etc. Prerequisite: FRNC-202 or department-approved proficiency. 4 SH.

FRNC-310 French/Francophone Literary and Cultural or Film Studies

Topics vary each semester. Students may take more than one 300-level topics course. Critical study of particular cultural and literary themes and topics related to France and the French-speaking world. Approach and projects will vary with course topics. Prerequisite: FRNC-301 or FRNC-302, or department-approved proficiency. 2-4 SH.

FRNC-320 French/Francophone Film Studies

Critical study of particular themes or topics related to cinema of the French-speaking world. Approach and projects will vary with course topics. Prerequisite: FRNC-301 or FRNC-302, or department-approved proficiency. 2-4 SH.

FRNC-460 Seminar on French and Francophone Literature and Culture or Film

Topics vary each semester. Students may take more than one 460 seminar. These seminars explore selected topics in depth and from the perspective of more than one discipline. Includes discussion of theory and research methods. Research project is a central component of this course. Prerequisite: Completion of semester study abroad. 4 SH. Capstone. CC: Interdisciplinary, Oral Intensive, Writing Intensive.

FRNC-501 Internship

Supervised employment in a foreign language environment. Prerequisite: Department permission. 4-8 SH.

FRNC-542 Independent Study

Prerequisites: 48 semester hours, a cumulative 3.00 or higher GPA and approval of supervising professor and course area department head. 1-4 SH.

FRNC-599 Senior Language Proficiency Evaluation

Noncredit. Required for all majoring students. Individually scheduled. Taken only in the student's final semester prior to graduation. Graded on a satisfactory/unsatisfactory basis.

FRNC-600 Practicum

1 SH.

German

For a minor in German, students complete GERM-202 and three 300-level courses. For a major, students complete GERM-202 and 24 credits at the 300- and 400-level; one course in European history; a semester abroad in a German-speaking country; and the capstone, which is composed of two elements: (1) a 400-level course typically taken during the senior year and (2) a language proficiency evaluation in their final semester.

GERM-101 Beginning German I

Intended both for students with previous experience in the language but who have not placed above the first-semester level and for students new to the language. Focuses on conversations to acquire a useful core vocabulary, reading

graded prose and writing brief sentences. Explores the systems of language, culture and civilization of German-speaking peoples. 4 SH.

GERM-102 Beginning German II

Continuation of German 101. Focuses on conversations to acquire a useful core vocabulary, reading graded prose and writing brief sentences. Explores the systems of language, culture and civilization of German-speaking peoples. Prerequisite: GERM-101 or equivalent department-approved proficiency. 4 SH. CC: Foreign Language.

GERM-201 Intermediate German I: Language and Culture

Review and expansion of elementary-level skills to intermediate level. Focus on developing skills needed to improve listening, speaking, reading and writing. Topics include culture and civilization with emphasis on current issues, comparisons to own cultures and interdisciplinary perspectives. Prerequisite: GERM-102, placement by examination or equivalent department-approved proficiency. 4 SH.

GERM-202 Intermediate German II: Language and Culture

Extensive review and expansion of elementary-level skills. Focus on improving all skills: listening, speaking, reading and writing. Also includes culture and civilization. Prerequisite: GERM-201, placement by examination or department-approved proficiency. 4 SH. CC: Diversity Intensive.

GERM-301 Advanced Conversation and Oral Expression

Language skill development, emphasizing formal speaking and short essay writing. Includes cultural and/or literary materials. Prerequisite: GERM-202 or equivalent department-approved proficiency. 4 SH.

GERM-302 Advanced German Grammar and Written Expression

Focus on written German (reading and writing), including systematic review of principal grammatical structures. Development of critical thought and expansion of vocabulary through analysis of original German, Austrian, and Swiss texts in various genres and media (including literary, journalistic, and scientific prose, features and documentaries). Enhancement of German composition skills. Designed for students with a functional command of the German language and an understanding of its basic grammatical structures. Prerequisites: GERM-202, or equivalent, department-approved proficiency. 4 SH.

GERM-310 Topics in German Studies

Critical study of particular topics and forms of Austrian, German, and Swiss literature, culture, and film. Themes and genres will vary according to the interest and expertise of the instructor. Lectures, discussions, and readings in German. Prerequisites: GERM-301 or GERM-302, or equivalent, department-approved proficiency. 4 SH.

GERM-460 Seminar in German Studies

Explores selected topics in depth. Research paper required. Prerequisite: A 300-level course or department-approved proficiency. 4 SH. Capstone. CC: Oral Intensive, Writing Intensive.

GERM-503 Internship

Supervised employment in an appropriate foreign language environment. Prerequisite: Department permission. 4-8 SH.

GERM-542 Independent Study

Prerequisites: 48 semester hours, a cumulative 3.00 or higher GPA and approval of supervising professor and course area department head. 1-4 SH. Counts toward the major or minor.

GERM-599 Senior Language Proficiency Evaluation

Noncredit. Required for all majoring students. Individually scheduled. Taken only in the student's final semester prior to graduation. Graded on a satisfactory/unsatisfactory basis.

GERM-600 Practicum

1 SH.

Italian

For a minor in Italian, students complete ITAL-202 and three 300-level courses. For a major, students complete ITAL-202 and 24 credits at the 300- and 400-level; one course in European history; a semester abroad in Italy; and the capstone, which is composed of two elements: (1) a 400-level course typically taken during the senior year and (2) a language proficiency evaluation in their final semester.

ITAL-101 Beginning Italian I

Intended both for students with previous experience in the language but who have not placed above the first-semester level and for students new to the language. Focuses on acquisition of core vocabulary and structures necessary for carrying out short conversations, reading graded prose and writing brief sentences associated with daily life. Also explores aspects of Italian civilization and culture. 4 SH.

ITAL-102 Beginning Italian II

Continuation of ITAL-101. Focuses on acquisition of core vocabulary and structures necessary for carrying out short conversations, reading graded prose and writing brief sentences associated with daily life. Also explores aspects of Italian civilization and culture. Prerequisite: ITAL-101 or equivalent department-approved placement. 4 SH. CC: Foreign Language.

ITAL-201 Intermediate Italian I: Language and Culture

Review and expansion of elementary-level skills to intermediate level. Focus on developing skills needed to improve: listening, speaking, reading and writing. Topics include culture and civilization with emphasis on current issues, comparisons to own cultures and interdisciplinary perspectives. Prerequisite: ITAL-102 or equivalent department-approved proficiency. 4 SH.

ITAL-202 Intermediate Italian II: Language and Culture

A content-based course focused on continued development of all four skills through a study of various aspects of Italian culture and civilization. Particular emphasis on reading and writing, building content-specific vocabulary, and reviewing principle grammatical structures. Prerequisite: ITAL-201 or equivalent department-approved proficiency. 4 SH.

ITAL-301 Advanced Conversation and Oral Expression

This course stresses the development of oral proficiency in all registers, from informal conversational settings to formal oral presentations. Culturally authentic materials found in written texts, film, oral interviews with native speakers and online resources will be used to develop proficiency in speaking and listening. Speaking will also be reinforced through a focus on pronunciation, frequent writing exercises and a review of problematic grammatical structures. Prerequisite: ITAL-202 or equivalent department-approved proficiency. 4 SH.

ITAL-302 Advanced Grammar and Written Expression

This course stresses the development of functional linguistic abilities through the contextualized study of the main grammatical structures of modern Italian. Focus is also given to expanding vocabulary and improving writing skills through exposure to a variety of authentic texts. This course is designed for the student who already has a functional command of the language and a grasp of the basic structures of Italian grammar. Prerequisite: ITAL-202 or equivalent department-approved proficiency. 4 SH.

ITAL-310 Topics in Italian Literature, Culture and Film

Critical study of particular topics related to Italian literature, culture and film. Themes will vary according to the interest and expertise of the instructor. Lectures, discussion and readings in Italian. Prerequisite: ITAL-301 or ITAL-302 or equivalent department-approved proficiency. 4 SH.

ITAL-311 Topics in Italian Language and Linguistics

In-depth study of particular topics related to Italian language and linguistics. Themes will vary according to the interest and expertise of the instructor. Lectures, discussions and readings in Italian. Prerequisite: ITAL-301 or ITAL-302 or equivalent department-approved proficiency. 4 SH.

ITAL-460 Seminar in Italian Literature, Culture and Film

Explores selected topics in Italian literature, culture and film in depth. Research paper required. Prerequisite: ITAL-301 or ITAL-302 or equivalent department-approved proficiency. 4 SH. Capstone. CC: Oral Intensive, Writing Intensive.

ITAL-461 Seminar in Italian Language and Linguistics

In-depth examination of selected topics in Italian language and linguistics. Research paper required. Prerequisite: ITAL-301 or ITAL-302 or equivalent department-approved proficiency. 4 SH. Capstone. CC: Oral Intensive, Writing Intensive.

ITAL-542 Independent Study

Prerequisites: 48 semester hours, a cumulative 3.00 or higher GPA, and approval of supervising instructor and course area department head. 1-4 SH. Counts toward the major or minor.

ITAL-599 Senior Language Proficiency Evaluation

Noncredit. Required for all majoring students. Individually scheduled. Taken only in the student's final semester prior to graduation. Graded on a satisfactory/unsatisfactory basis.

Spanish

Students minoring in Spanish complete SPAN-202, SPAN-301 and SPAN-302 plus another course at the 300 level. Students majoring in Spanish complete SPAN-202, SPAN-301, SPAN-302; a course in Latin American history; a semester abroad in a Spanish-speaking country; and the capstone, which is composed of two elements: (1) a 400-level course typically taken during the senior year and (2) a language proficiency evaluation in their final semester. Finally, majors complete one course in each of the three geographical areas where Spanish is most widely spoken: Spain, Spanish America and the United States.

SPAN-101 Beginning Spanish I

Intended for students with no previous experience in the language. An introduction to speaking, reading, listening and writing in Spanish. Skills-oriented, including grammatical structures, plus civilization and culture. SPAN-104 is the next level. 4 SH.

SPAN-103 Introduction to College Spanish I

Intended for students with previous experience in the language who have not placed above the first-year level. An introduction to speaking, reading, listening and writing in Spanish. Skills-oriented, including grammatical structures, plus civilization and culture. SPAN-104 is the next level. 4 SH.

SPAN-104 Introduction to College Spanish II

Continuation of SPAN-103 and SPAN-101. Further development of speaking, reading, writing, listening and cultural skills at the introductory level. Prerequisite: SPAN-101, SPAN-103 or placement by examination or equivalent department-approved proficiency. The next level is SPAN-201. 4 SH. CC: Foreign Language

SPAN-105 Super Spanish

Intended for students with previous experience in the language but who have not placed above the first-year level. Two semesters normally covered in SPAN-103-104 are covered in one summer session of SPAN-105. Through a variety of activities, the course focuses on further development of speaking, reading, writing and listening skills, along with any necessary review to prepare students to continue with language at the 200 level. The next level is SPAN-201. 4 SH. CC: Foreign Language

SPAN-201 Intermediate Spanish I: Language and Culture

Review and expansion of elementary-level language and cultural skills to the intermediate level. Prerequisite: SPAN-104, SPAN-105, placement by examination or equivalent department-approved proficiency. 4 SH.

SPAN-202 Intermediate Spanish II: Language and Culture

A continuation of SPAN-201 and the first course for the minor and major, this course focuses on grammar structures not covered in 201 and further develops students' language and cultural skills at the intermediate level in preparation for 300-level coursework. Topics of current interest in the Hispanic world form the basis of course activities. Prerequisite: SPAN-201 or equivalent department-approved proficiency. 4 SH.

SPAN-301 Advanced Conversation and Oral Expression

Develops communicative abilities at the advanced level along with knowledge of the Hispanic world. Emphasis on building oral proficiency. Prerequisite: SPAN-202 or equivalent department-approved proficiency. Required for the major. 4 SH.

SPAN-302 Grammar and Composition

Reinforces the fundamental grammar studied previously and introduces more advanced structures. Emphasis on development of writing skills. Prerequisite: SPAN-202 or equivalent department-approved proficiency. Required for the major. 4 SH.

SPAN-305 Spanish for the Service Professions

Emphasizes language skills for professionals in education, health care, personnel or welfare. Readings from sociological, cultural and technical sources and interviews in and out of class with native speakers. Includes a service-learning component, which requires substantial student interaction with Spanish-speaking individuals outside of class. Prerequisite: SPAN-302 or equivalent department-approved proficiency. 4 SH.

SPAN-310 Topics in Hispanic Culture

In-depth study of a selected topic of interest for both majors and minors. Prerequisites: SPAN-301 and 302 or equivalent department-approved proficiency. 2-4 SH.

SPAN-350 Introduction to Hispanic Literature

Reading and discussion of selected texts. Includes historical and cultural contexts, literary terminology, and critical theory. Prerequisites: SPAN-301 and 302 or equivalent department-approved proficiency. 4 SH.

SPAN-401 Advanced Spanish Language

Linguistic analysis of fundamental grammatical structures of Spanish. Frequent oral and written reports. Prerequisite: Junior or senior standing or equivalent department-approved proficiency. 4 SH. CC: Oral Intensive, Writing Intensive.

SPAN-445 Seminar in Peninsular Spanish Studies

In-depth study of a selected topic of interest for majors. Research paper required. Prerequisite: Senior standing or equivalent department-approved proficiency. 4 SH. Capstone. CC: Oral Intensive, Writing Intensive.

SPAN-447 Seminar in Hispanic-American Studies

In-depth study of a selected topic of interest for majors. Hispanic-American encompasses both Spanish America and Hispanic cultures in the United States. Prerequisite: Senior standing or equivalent department-approved proficiency. 4 SH. Capstone. CC: Oral Intensive, Writing Intensive.

SPAN-503 Internship

Supervised employment in an appropriate foreign language environment. Prerequisite: Department permission. 4-8 SH.

SPAN-542 Independent Study

Prerequisites: 48 semester hours, a cumulative 3.00 or higher GPA, and approval of supervising instructor and course area department head. 1-4 SH. Counts toward the major or minor.

SPAN-599 Senior Language Proficiency Evaluation

Noncredit. Required for all majoring students. Individually scheduled. Taken only in the student's final semester prior to graduation. Graded on a satisfactory/unsatisfactory basis.

SPAN-600 Practicum

1 SH.

Courses Taught in English

LANG-210 Crossing Cultures through Literature

As the reflective component of the cross-cultural requirement, this course explores notions of cultural interpretation and difference through study of literary texts in English translation. By comparing multiple English translations of a single text, students reflect on ethnocentric assumptions with respect to their own cultural filter and its influence on their interpretation of the cultures in which they were immersed. Finally, students consider the responsibilities inherent in translating their own experience to others. Same as OFFR-210. Prerequisite: Successful completion of a semester-long study program or instructor approval. 4 SH. CC: Cross-Cultural Reflection, Ethics Intensive.

LANG-300 Introduction to Applied Language Studies

This course is designed to provide an introduction to the field of applied language studies, often referred to as applied linguistics. In particular, this course is an introduction to the study of language as applied to real-world problems in specific situations in which people use and learn languages, e.g., language learning and teaching, intercultural communication, bilingualism and multilingualism, language policy and planning, language, power, and politics to name a few. The course explores such questions as how do people acquire a language that is not their own and how does this affect their social and cultural identity? What is the role of computer-assisted language learning in the language classroom? How are the issues of bilingual and multilingual education addressed at both the educational and political level. Prerequisite: Sophomore standing and completion of language study through the 202 level or equivalent placement. 4 SH. Interdisciplinary.

LANG-350 Introduction to Linguistics

This course is an introduction to the science of linguistics and its subcomponents, including syntax, semantics, morphology, phonetics, phonology, historical linguistics, and sociolinguistics. It is designed specifically for those completing a minor in applied language studies, but the course is open to others interested in this field of inquiry. Prerequisite: Completion of language study through the 202 level or equivalent placement. 4 SH.

LANG-360 Introduction to Second Language Acquisition

This course is designed as an introduction to how first and, in particular, second languages are learned. Students will contrast how first and second language acquisition differ from one another and begin to fathom the cognitive differences

between child and adult language learning. Students will gain an understanding of the historical development of language acquisition theories and how they have led to modern hypotheses on language learning. Theories will be approached from both learning and pedagogical perspectives, with the hope that students will be able to utilize what they learn to analyze and ameliorate both their ability to learn and teach a second/additional language. Prerequisite: Completion of language study through the 202 level or equivalent placement. 4 SH.

LANG-503 Classroom Assistant

An opportunity for students to collaborate with a professor by assisting in one of the language courses offered through the Modern Languages Department to gain insight into language learning and teaching. Expectations and responsibilities will vary depending on the course in question, the needs of the professor and the goals of the student. Generally, they will include attendance and participation in the class in which the student is assisting and regular meetings with the supervising instructor. This course may be taken multiple times for credit. Prerequisites: A minimum of one semester abroad in a program in which all coursework is done in the target language; approval by the supervising instructor. 1-2 SH.

LANG-504 Language and the Professions

Supervised employment in an appropriate foreign language environment. Prerequisite: Department permission. 2 SH.

MUSEUM STUDIES

Faculty

John J. Bodinger de Uriarte, Associate Professor of Anthropology, director

The minor in museum studies is designed for students interested in creating a foundation for future graduate work in museum studies or a career in museums and other public exhibitionary spaces, in conjunction with a major or minor in an academic field most often associated with museums, such as anthropology, art, art history, education, history, English, publishing and editing, business administration, or one of the natural sciences. The minor draws on its component strengths to offer students experience in both the museological (the study of museums as a site for critical study/reflection on the act(s) of representation) and the museographical (the practical study of museum practices, such as the doing of exhibitions in all of their aspects) facets of museum studies. Students pursuing the museum studies minor will complete an internship in a museum. This component includes opportunities with the Lore Degenstein Gallery on campus, local museums and historical houses, or other museums, exhibitionary spaces, archives, and state and national parks with public exhibition or commemorative spaces. Internship possibilities will be reviewed and approved by the program's director, in consultation with the Museum Studies Advisory Board, chosen from faculty in the art history, history, and anthropology programs.

Minor in Museum Studies. Students must complete 20 semester hours of coursework, which includes ANTH-237 Museums and Anthropology, MSUM-400 Museum Studies Internship, MSUM-500 Directed Research and Exhibition Project, and 8 semester hours chosen from the following: ANTH-322 Visual Anthropology: Imagining the Other, ARTH-211 Survey of Non-Western Art, ARTH-412 Contemporary Art, HIST-300 History Methods, and a pre-approved course from a GO Long program. Students must receive a minimum grade of C in all courses credited toward the program.

Museum Studies Courses

MSUM-400 Museum Studies Internship

The internship for museum studies is designed for students who wish to develop and apply skills related to the museum and public exhibition-related professions (for example, a museum-related, non-profit agency or government office, a museum publication or periodical, a position related to museum or library conservation, exhibition sites in state or national parks, or other similar institutions). Students will gain experience in real work situations and will work under the supervision of a professional in his or her chosen field. Overseeing faculty and their departments offer help in locating and applying for appropriate internships, but students are also encouraged to propose and develop their own positions, subject to approval by the director of museum studies. 2 - 4 SH.

MSUM-500 Final Research and Exhibition Project

MSUM-500 structures the completion of an exhibitionary project at an approved campus venue. The format of the course depends on individual consultation with the instructor on all aspects of the exhibition: planning, design, problem-solving and creativity, accessibility (both physical and intellectual), interpretation, and evaluation. Completion of the project includes written documents, a set of concept drawings, other support materials necessary to communicate project ideas effectively, and the installation of the exhibit. 4 SH.

MUSIC

Faculty

David S. Steinau, D.M.A., Associate Professor of Music, department head

Patrick A. Long, D.M.A., Professor of Music

Joshua Davis, D.M.A., Associate Professor of Music

Eric L. Hinton, Ph.D., Associate Professor of Music/Director of Bands

Marcos Krieger, D.M.A., Associate Professor of Music

Gail B. Levinsky, D.Mus., Associate Professor of Music

Valerie G. Martin, D.M.A., Associate Provost and School of Arts & Sciences Dean, Associate Professor of Music

Naomi Niskala, D.M.A., Associate Professor of Music

Julia Brasher Thorn, Associate Professor of Music

Jennifer Sacher Wiley, D.M.A., Associate Professor of Music

Gregory Grabowski, Assistant Professor of Music

Jason Douglas Vodicka, Assistant Professor of Music

Ilya Blinov, Lecturer in Music

Music Studies

Learning Goals:

- Performance–Students integrate technical skills and knowledge to be able to complete a successful performance in a particular area of concentration.
- Aural skills and analysis.
- Music history–Students can place music in historical, cultural and stylistic contexts.
- Composition and improvisation.
- Technology–Students identify and employ appropriate technology applicable to their area of specialization.
- Synthesis–Students integrate their music studies through a means appropriate to their curriculum.

Music Opportunities for Non-Music Majors. The department provides a variety of music opportunities for all students, regardless of their majors and career goals. Nonmajors may take upper-level music courses with permission of the instructor. The department also welcomes nonmajors in performing groups and private study upon a successful audition or permission from the instructor.

Music Education

Bachelor of Music in Music Education. Susquehanna University believes that educators need to demonstrate professional knowledge and skills in the following four domains of teaching: (1) preparation and planning, (2) instruction and assessment, (3) creating a classroom environment of respect and rapport, and (4) professional

responsibility. Collaborative programs between the university and area schools afford a variety of opportunities to develop and demonstrate professional knowledge and teaching skills. Candidates in the Bachelor of Music in music education degree complete the university Central Curriculum requirements plus the following courses with a minimum GPA of 3.00. Piano and organ concentrates must choose to follow the vocal emphasis or instrumental emphasis requirements. The major lesson is in piano or organ, with the major ensemble corresponding to the emphasis selected. Regardless of the emphasis selected, all piano and organ concentrates are required to take MUSC-039 Voice Class.

Application to the Teacher Education Program. Students seeking admission to Susquehanna University's teacher education program must meet requirements of both the teacher education program and the Pennsylvania Department of Education and formally apply to the university's Department of Education. Application forms are available in the university's Department of Education office. Acceptance into the program is determined by the teacher education program. The Department of Education reserves the right to determine eligibility on a case-by-case basis. Students may apply for admission to the teacher education program as early as the spring semester of their sophomore year. Students must apply and be admitted no later than the second semester of their junior year.

Requirements for admission to the teacher education program include the following:

- Completion of at least 48 semester hours of coursework, including:
    - Three semester hours of English composition
    - Three semester hours of English/American literature
    - Six semester hours of college-level mathematics;
- A cumulative GPA of 3.00 and successful completion of basic skills examinations;
- Completion of one 40-hour externship (see below), with completed forms returned to the Career Development Center;
- Current Act 24, 34, 114 and Act 151 clearances, TB test results, and completion of Mandated Reporter Training;
- Two letters of reference from university faculty; and
- Submission of a completed Department of Education application form.

Students who have not been formally admitted into the teacher education program may not take more than 12 semester hours of education courses (including music education courses) without written permission from the coordinator of music education. Transfer students who wish to enter the program are evaluated on an individual basis by the coordinator of music education in consultation with the music education committee and the head of the department.

The Department of Music faculty, in consultation with the head of the Department of Education, reserves the right to make a judgment on the suitability of students for professional teaching practice. Practicum students and student teachers must follow the policies of the host school district. Practicum students and student teachers will be removed from a school site by a building administrator who gives as reason, therefore, one of the following: unsatisfactory teaching performance; immorality; incompetence; intemperance; cruelty; persistent negligence in the performance of duties; willful neglect of duties; physical or mental disability as documented by competent medical evidence, which after reasonable accommodation of such disability as required by law substantially interferes with the student teacher's ability to perform essential functions of student teaching; conviction of a felony or misdemeanor; or persistent and willful violation of or failure to comply with the school laws of this commonwealth, including official directives and established policy of the board of directors. A student asked to leave a school site will be assigned a grade by the faculty based on the work completed and evaluations from the host district.

Each course below must be completed with a minimum grade of C-.

12 Music Literature

2	MUSC-152 Survey of World Music
4	MUSC-245 The Music of the Medieval, Renaissance and Baroque Eras
4	MUSC-250 The Music of the Classic and Romantic Eras
2	MUSC-350 20th-Century Music

16 Music Theory

- 2 MUSC-161 Theory I: Diatonic Harmony
- 2 MUSC-162 Theory II: Chromatic Harmony
- 2 MUSC-163 Ear Training I
- 2 MUSC-164 Ear Training II
- 2 MUSC-261 Theory III: Advanced Tonal Harmony
- 2 MUSC-262 Theory IV: Form and Analysis
- 2 MUSC-263 Ear Training III
- 2 MUSC-363 Theory V: Modality, Set Theory and Serialism

38 Education

- 4 EDUC-250 Educational Psychology
- 4 EDUC-350 English Language Learners: Theory and Instruction
- 2 MUED-200 Historical and Philosophical Foundations of Public School Education and Music Education
- 2 MUED-339 Public School Music I: Foundation, Standards and Curriculum
- 2 MUED-340 Public School Music II: Assessment, Inclusion and Practicum
- 2 MUED-345 Instrumental Music Education Methods and Practicum
- 2 MUED-351 Choral Music Education Methods and Practicum
- 4 MUED-355 Music for Exceptional Children
- 0* MUED-400:01 Student Teaching
- 4* MUED-400:02 Classroom Performance
- 4* MUED-400:03 Classroom Management
- 4* MUED-400:04 Preparation and Planning
- 2* MUED-405 Student Teaching Seminar
- 2 MUED-406 Organization and Administration of Public School Music

(*indicates capstone)

4 Conducting

- 2 MUSC-369 Beginning Conducting
- 2 MUSC-371 Instrumental Conducting (instrumental emphasis)
- 2 MUSC-372 Choral Conducting (vocal emphasis)

31-34 Applied Music and Other Courses

(Vocal emphasis 31 SH; Instrumental emphasis 34 SH)

- 14 Major Lesson (seven semesters)
- 1 MUSC-034 Piano Class I (not required of keyboard concentrates)
- 1 MUSC-035 Piano Class II (not required of keyboard concentrates)
- 1 MUSC-037 Piano Class III
- 1 MUSC-038 Piano Technique (for piano concentrates only)

1 MUSC-039 Voice Class (instrumental and keyboard concentrates)

1 MUED-040 Brass Class I

1 MUED-041 Woodwind Class I

1 MUED-042 String Class I

1 MUED-043 Percussion Class

1 MUED-046 Brass Class II (instrumental emphasis)

1 MUED-047 Woodwind Class II (instrumental emphasis)

1 MUED-048 String Class II (instrumental emphasis)

2-3 MUSC-066 Collaborative Piano (keyboard concentrates only) (third semester for keyboard concentrates who are exempt from MUSC-037)

1 MUSC-077 Training Ensemble

1 MUSC-084 Diction I (vocal emphasis)

7 Large Ensemble (seven semesters)

0 MUSC-503 Half Recital

0 MUSC-555 Forum (seven semesters)

Performance

Bachelor of Music in Performance. Music students who desire a specialized emphasis in performance may choose this degree option. Accepted majors possess superior skill in the given performance area and demonstrate that skill at forums and recitals. Students who complete this program typically continue study at the graduate level and/or teach in a private studio. Candidates complete the university Central Curriculum requirements plus the following courses with a minimum grade average of C (2.00 GPA). Each course below must be completed with a minimum grade of C-.

12 Music Literature

2 MUSC-152 Survey of World Music

4 MUSC-245 The Music of the Medieval, Renaissance and Baroque Eras

4 MUSC-250 The Music of the Classic and Romantic Eras

2 MUSC-350 20th-Century Music

16 Music Theory

2 MUSC-161 Theory I: Diatonic Harmony

2 MUSC-162 Theory II: Chromatic Harmony

2 MUSC-163 Ear Training I

2 MUSC-164 Ear Training II

2 MUSC-261 Theory III: Advanced Tonal Harmony

2 MUSC-262 Theory IV: Form and Analysis

2 MUSC-263 Ear Training III

2 MUSC-363 Theory V: Modality, Set Theory and Serialism

2 Conducting

- 2 MUSC-369 Beginning Conducting

18 Applied Music

- 16 Major Lesson (eight semesters)
- 0 MUSC-503 Half Recital
- 2 MUSC-500 Full Recital (capstone)
- 0 MUSC-555 Forum (eight semesters)

12 Specialized Courses

- 2 MUSC-361 Counterpoint
- 2 MUSC-399 Pedagogy (appropriate to applied area)
- 2 MUSC-450 Topics in Music Literature (appropriate to applied area)
- 6 Selected Topics to be chosen from:
  - 1 MUSC-079 Improvisation (a total of 2 semester hours of Improvisation may be applied toward the Specialized Courses requirement)
  - 2 MUSC-370 Orchestration
  - 2 MUSC-372 Choral Conducting
  - 2 MUSC-371 Instrumental Conducting
  - 4 PHIL-235 Aesthetics

Plus the following courses determined by student's specialization and prescribed by the major adviser:

15 Other Courses, Vocal Concentrates

- 1 MUSC-034 Piano Class I
- 1 MUSC-035 Piano Class II
- 1 MUSC-037 Piano Class III
- 1 MUSC-084 Diction I
- 1 MUSC-085 Diction II
- 8 Large Ensemble (eight semesters)
- 2 Medium/Small Ensemble

12-13 Other Courses, Keyboard Concentrates

- 1 MUSC-037 Piano Class III (if exempt, MUSC-066 is required)
- 5 Collaborative/Medium/Small Ensemble
- 4 Large Ensemble (four semesters)
- 2 Applied Secondary Keyboard
- 1 MUSC-038 Piano Technique (piano concentrates only)

15 Other Courses, Instrumental Concentrates

- 1 MUSC-034 Piano Class I
- 1 MUSC-035 Piano Class II

1 MUSC-037 Piano Class III

8 Large Ensemble (eight semesters)

4 Medium/Small Ensemble

Composition

Bachelor of Music in Composition. Music students who desire a specialized emphasis in composing original works may choose this degree option. Accepted majors must possess skill in a standard performance area and also demonstrate potential as composers through a portfolio of notated works. Students explore a wide variety of musical styles with an emphasis on understanding compositional techniques that may be less familiar to them, such as those of 20th-century art music. Students who complete this program typically pursue graduate study leading toward professional activities as a composer, arranger or teacher. Candidates complete the university Central Curriculum requirements plus the following courses with a minimum grade average of C. Each course below must be completed with a minimum grade of C-.

12 Music Literature

- 2 MUSC-152 Survey of World Music
- 4 MUSC-245 The Music of the Medieval, Renaissance and Baroque Eras
- 4 MUSC-250 The Music of the Classic and Romantic Eras
- 2 MUSC-350 20th-Century Music

20 Music Theory

- 2 MUSC-161 Theory I: Diatonic Harmony
- 2 MUSC-162 Theory II: Chromatic Harmony
- 2 MUSC-163 Ear Training I
- 2 MUSC-164 Ear Training II
- 2 MUSC-261 Theory III: Advanced Tonal Harmony
- 2 MUSC-262 Theory IV: Form and Analysis
- 2 MUSC-263 Ear Training III
- 2 MUSC-363 Theory V: Modality, Set Theory and Serialism
- 2 MUSC-361 Counterpoint
- 2 MUSC-370 Orchestration

5-6 Skills

- 2 MUSC-369 Beginning Conducting
- 1 MUSC-034 Piano Class I (instrumental/vocal concentrates)
- 1 MUSC-035 Piano Class II (instrumental/vocal concentrates)
- 1 MUSC-037 Piano Class III
- 2 MUSC-066 Collaborative Piano (keyboard concentrates; third semester for keyboard concentrates who are exempt from MUSC-037)
- 1 MUSC-038 Piano Technique (piano concentrates only)

36 Applied Music

- 10 Composition lesson (may be a combination of one- and two-credit lessons)
- 10 Applied lesson in one studio area (minimum of six semesters)
- 2 MUSC-500 Full Composition Recital (capstone)
- 0 Forum (eight semesters)
- 6 Large Ensemble (six semesters)
- 8 Music Elective (other than applied study and ensembles and 4 SH chosen from MUSC-355, MUSC-356, MUSC-367 or MUSC-368)

Bachelor of Arts in Music

Bachelor of Arts in Music. Students interested in combining a solid foundation in music with the opportunity to pursue in-depth study in another area may choose this degree. The Bachelor of Arts capstone may be an independent study project in music or a department-approved recital. (MUSC-506 Independent Study for two semester hours is always used for Bachelor of Arts capstone registration). Students who are double majors may elect a capstone in the other major in place of or in addition to the music capstone. Students complete university Central Curriculum requirements plus the following courses with a minimum GPA of 2.00. Each course below must be completed with a minimum grade of C-.

12 Music Literature

- 2 MUSC-152 Survey of World Music
- 4 MUSC-245 The Music of the Medieval, Renaissance and Baroque Eras
- 4 MUSC-250 The Music of the Classic and Romantic Eras
- 2 MUSC-350 20th-Century Music

8 Music Theory

- 2 MUSC-161 Theory I: Diatonic Harmony
- 2 MUSC-162 Theory II: Chromatic Harmony
- 2 MUSC-163 Ear Training I
- 2 MUSC-164 Ear Training II

15 Applied Music (instrumental and vocal concentrates)

- 6 Major Lesson (six semesters of half-hour lessons)
- 1 MUSC-034 Piano Class I
- 1 MUSC-035 Piano Class II
- 0 MUSC-555 Forum (six semesters)
- 6 Large Ensemble (six semesters)

16 Applied Music (keyboard concentrates)

- 6 Major Lesson (six semester of half-hour lessons)
- 0-1 MUSC-037 Piano Class III
- 1 MUSC-038 Piano Technique (for piano concentrates only)
- 2-3 MUSC-066 Collaborative Piano (third semester for keyboard concentrates who place out of MUSC-037)

0 MUSC-555 Forum (six semesters)

4 Large Ensemble

2 Collaborative/Medium/Small Ensemble (keyboard concentrates)

7-10 Other Courses

4 Any music course other than lessons or ensembles

0-2 MUSC-506 Independent Study in Music (if capstone requirement is fulfilled in music; otherwise no independent study required)

3-4 Any two of the following:

2 MUSC-261 Theory III: Advanced Tonal Harmony

2 MUSC-262 Theory IV: Form and Analysis

2 MUSC-263 Ear Training III

1 MUSC-037 Piano Class III (not for keyboard concentrates)

4 Course(s) Outside Music

Any course(s) with the THEA, ARTG, ARTH or ARTS prefixes or PHIL-235 Aesthetics

Minors in Music. The Department of Music offers three minors: the minor in music theory/literature, the minor in music performance and the minor in music technology.

Minor in Music Theory/Literature. Before declaring a minor in music theory/literature, a student must pass the musicianship and written theory diagnostic tests, which can be arranged by contacting the department head. Note that approval of this minor does not guarantee a place in required music classes. Students must complete with a grade of C- or better 20 semester hours of coursework: either MUSC-152 Survey of World Music or MUSC-101 Introduction to Music; MUSC-161 Theory I; MUSC-162 Theory II; MUSC-163 Ear Training I; and 10 or 12 semester hours of music electives from 200-level courses or higher chosen with the guidance of a member of the Department of Music. Elective credit in applied music and performing groups is limited to two semester hours of applied study and two semester hours of performing groups.

Minor in Music Performance. Before declaring a minor in music performance, a student must gain admittance to a performance studio. This is accomplished by contacting the department head to schedule an audition. In addition, the student must pass the musicianship and written theory diagnostic tests before gaining admission to the minor. Note that approval of this minor does not guarantee a place in required music classes. Students must complete with a grade of C- or better 18-20 semester hours of coursework (depending on whether the student takes MUSC-152 or MUSC-101): either MUSC-152 Survey of World Music or MUSC-101 Introduction to Music; MUSC-161 Theory I; MUSC-163 Ear Training I; four semesters of half-hour applied lessons; four semesters of a performance ensemble; and four semester hours chosen from MUSC-102 A Study of Jazz and MUSC-245 The Music of the Medieval, Renaissance and Baroque Eras.

Minor in Music Technology. Before declaring a minor in music technology, a student must obtain approval of the music technology adviser. Note that approval of this minor does not guarantee a place in the required music classes. Students must complete with a grade of C- or better 20 semester hours of coursework: MUSC-355 Audio Engineering Fundamentals; MUSC-356 Music Production in the Recording Studio; MUSC-367 Computer Music Composition; MUSC-368 Computer Music Performance; and four semester hours in an internship or music electives.

Music Courses

Applied Music Lessons. Lessons carry one or two semester hours of credit. Students earn credit of one semester hour for a weekly half-hour lesson. Bachelor of Arts majors take a one-semester-hour lesson on their major instrument. Music

education majors and performance majors take a weekly one-hour lesson on their major instrument and receive two semester hours of credit.

A fee is charged per semester for individual lessons that are not stated specifically as curricular requirements (nonmajors or extra lessons for majors). Such lessons are contingent upon faculty availability within the normal teaching load.

MUSC-001 Brass Lesson

Development of good tonal quality, technical facility, and interpretation of solo and chamber literature. 1 SH.

MUSC-002 Brass Lesson

Development of good tonal quality, technical facility, and interpretation of solo and chamber literature. 2 SH.

MUSC-003 Organ Lesson

Emphasizes acquisition of a sound technique. Includes standard recital literature and worship service literature chosen to meet individual needs. 1 SH.

MUSC-004 Organ Lesson

Emphasizes acquisition of a sound technique. Includes standard recital literature and worship service literature chosen to meet individual needs. 2 SH.

MUSC-005 Piano Lesson

The study of Western concert music for the piano. 1 SH.

MUSC-006 Piano Lesson

The study of Western concert music for the piano. 2 SH.

MUSC-007 String Lesson

Development of tone and technical facility and mastery of solo literature. 1 SH.

MUSC-008 String Lesson

Development of tone and technical facility and mastery of solo literature. 2 SH.

MUSC-009 Voice Lesson

Focuses on teaching the student to sing freely and musically. Develops breath control and resonance, range quality and clear diction through exercises and selected vocal literature. 1 SH.

MUSC-010 Voice Lesson

Focuses on teaching the student to sing freely and musically. Develops breath control and resonance, range quality and clear diction through exercises and selected vocal literature. 2 SH.

MUSC-011 Woodwind Lesson

Development of good tonal quality, technical facility, and interpretation of solo and chamber literature. 1 SH.

MUSC-012 Woodwind Lesson

Development of good tonal quality, technical facility, and interpretation of solo and chamber literature. 2 SH.

MUSC-013 Percussion Lesson

Development of technical facility on all areas of percussion: timpani, drum set, mallets, auxiliary percussion, ethnic percussion and snare drum. Includes interpretation and musical training, emphasizing well-rounded ability. 1 SH.

MUSC-014 Percussion Lesson

Development of technical facility on all areas of percussion: timpani, drum set, mallets, auxiliary percussion, ethnic percussion and snare drum. Includes interpretation and musical training, emphasizing well-rounded ability. 2 SH.

MUSC-015 Harpsichord Lesson

Emphasizes acquisition of a sound technique. Includes standard literature selected to meet individual needs and continuo playing. 1 SH.

MUSC-016 Harpsichord Lesson

Emphasizes acquisition of a sound technique. Includes standard literature selected to meet individual needs and continuo playing. 2 SH.

MUSC-017 Guitar Lesson

Private instruction in classical and jazz guitar. Includes extensive exploration of basic musical repertoire, such as Pujol, Guiliani, Carcassi and Sor and the works of other jazz composers; scales, arpeggios, triads, and other technical matters. Investigates folk, popular and electric guitar techniques. 1 SH.

MUSC-018 Guitar Lesson

Private instruction in classical and jazz guitar. Includes extensive exploration of basic musical repertoire,such as Pujol, Guiliani, Carcassi and Sor and the works of other jazz composers; scales, arpeggios, triads, and other technical matters. Investigates folk, popular and electric guitar techniques. 2 SH.

MUSC-023 Composition Lesson

Private instruction in crafting and notating musical works. Prerequisite: Permission of instructor. 1 SH.

MUSC-024 Composition Lesson

Private instruction in crafting and notating musical works. Prerequisite: Permission of instructor. 2 SH.

Applied Music Courses

MUSC-034 Piano Class I

A functional approach for beginning students. Emphasis on harmonization, transposition, development of technique, sight reading and improvisation. Non-music majors are able to enroll in this course only if there are spaces available after all of the music majors have been accommodated. 1 SH.

MUSC-035 Piano Class II

Continued emphasis on harmonization, transposition, development of technique, sight reading and improvisation. Non-music majors are able to enroll in this course only if there are spaces available after all of the music majors have been accommodated. Prerequisite: C- or better in MUSC-034 or appropriate placement. 1 SH.

MUSC-037 Piano Class III

A functional approach for intermediate-level and advanced students. Further emphasis on harmonization, transposition, development of technique, sight reading and improvisation. Non-music majors are able to enroll in this course only if there are spaces available after all of the music majors have been accommodated. Prerequisite: C- or better in MUSC-035 or appropriate placement by department. 1 SH.

MUSC-038 Piano Technique

An in-depth look at piano technique through the analysis and discussion of physical movements that can either implement or prohibit good technique and the analysis of the basic building blocks of piano playing. Emphasis on preventing injury, learning how to expend minimal energy in playing and the creation of good tone. Open to piano majors; secondary pianists by instructor consent. 1 SH. Offered every other year.

MUSC-039 Voice Class

Vocal instruction to improve individual singing ability and to teach vocal pedagogical skills. 1 SH.

MUSC-077 Training Ensemble

A practicum in which students perform on a broad range of band and orchestral instruments and in choral ensembles. 1 SH.

MUSC-500 Full Recital

Public recital performance for credit. Prerequisite: Approval by music faculty on recommendation of major teacher. 2 SH. Capstone.

MUSC-503 Half Recital

Public recital performance. Prerequisite: Approval by music faculty on recommendation of major teacher. 0 SH.

MUSC-555 Forum

Solo and ensemble performance in a semi-formal setting. Includes programs by visiting organizations, guest artists and lecturers. 0 SH.

Ensembles

MUSC-066 Collaborative Piano

Designed to instruct pianists in the essential aspects of performing chamber music and accompaniments. Prerequisite: Instructor's permission. May be repeated. 1 SH.

MUSC-072 Symphonic Band

A select instrumental performing group that rehearses and performs the finest traditional and contemporary repertoire for the medium. 1 SH.

MUSC-073 Stadium Band

An instrumental performing group that rehearses and performs during the football season only. 1 SH.

MUSC-074 Orchestra

A performing ensemble specializing in standard symphonic repertoire, concerti, opera and oratorio. 1 SH.

MUSC-075 Fall Musical Orchestra

Accompanies the annual student musical production. Fall semester only. 1 SH.

MUSC-076 Small Ensemble

Chamber music of various styles and periods studied and performed in smaller string, woodwind, brass and percussion ensembles, including piano and organ. 1 SH.

MUSC-078 Jazz Ensemble

The rehearsal and performance of 20th-century and modern music reflecting jazz, rock and world music influences. Emphasizes individual student involvement through improvisation. 1 SH.

MUSC-082 University Choir

A major performing ensemble dedicated to high standards of choral performance. A training laboratory, the choir also explores extensive choral literature and techniques of developing choral singing for future music educators. In addition to campus and area concerts, the group tours regularly. Auditions are held each August and are open to any student. 1 SH.

MUSC-083 University Chorale

A mixed-voice campus-centered ensemble, the University Chorale rehearses and performs a wide variety of sacred and secular choral literature in campus and area concerts. Auditions are held each August and are open to any student. 1 SH.

MUSC-086 University Chamber Singers

This ensemble provides singers with a more intimate choral setting while exploring diverse repertoire appropriate for chamber performance. Auditions are held each fall and are open to any member of the University Choir. 1 SH.

MUSC-089 Opera Studio

An ensemble emphasizing the rehearsal and performance of opera and musical theatre. 1 SH.

Music Theory, Composition and Musicianship

MUSC-161 Theory I: Diatonic Harmony

A study of 18th- and 19th-century harmonic practice, including intervals, scales and diatonic triads in all positions. Analysis of standard literature. Prerequisite: Department-approved proficiency. 2 SH.

MUSC-162 Theory II: Chromatic Harmony

Continuation of Theory I: Diatonic Harmony, including diatonic seventh chords in all inversions and modulation. Analysis of standard literature. Prerequisite: C- or better in MUSC-161. 2 SH.

MUSC-163 Ear Training I

Prepared and sight singing of simple diatonic melodies in the major and minor modes. Includes simple rhythmic and melodic dictation. Prerequisite: Department-approved proficiency. 2 SH.

MUSC-164 Ear Training II

Continuation of Ear Training I, including chromaticism and modulation. Includes two-part and four-part dictation. Prerequisite: C- or better in MUSC-163. 2 SH.

MUSC-261 Theory III: Advanced Tonal Harmony

Continuation of Theory II: diatonic harmony, including advanced modulation and chromaticism. Prerequisite: C- or better in MUSC-162. 2 SH. CC: Team Intensive.

MUSC-262 Theory IV: Form and Analysis

The examination of music through analysis of design and tonal structure. Includes counterpoint and some unique forms. Prerequisite: C- or better in MUSC-261. 2 SH. CC: Team Intensive.

MUSC-263 Ear Training III

Advanced sight singing and dictation in all diatonic modes, including two-part and four-part dictation. Prerequisite: C- or better in MUSC-164. 2 SH.

MUSC-361 Counterpoint

The analysis and writing of two- and three-voice counterpoint in 16th-century style, with an introduction to the contrapuntal techniques of the Baroque period. Prerequisite: MUSC-261. 2 SH. Offered every other year.

MUSC-363 Theory V: Modality, Set Theory and Serialism

The examination of representative styles of 20th-century music using descriptive analysis, set theory and serial analysis. Prerequisite: C- or better in MUSC-262. 2 SH.

MUSC-370 Orchestration

Technical aspects of composing or arranging music for instrumental ensembles of varying size and ability. 2 SH. Offered every other year.

Music History

MUSC-101 Introduction to Music

Development of appreciation and understanding for music, its underlying elements, and aspects of style and historical setting. Not open to music majors. 4 SH. CC: Artistic Expression.

MUSC-130 Rock Music and Society

Rock music from its origins to the present. Emphasizes stylistic developments and its relationship to society. 4 SH. CC: Artistic Expression.

MUSC-152 Survey of World Music

An introduction to concepts of musical style from historical and global perspectives. World music and contemporary musics will inform this overview of musical genres and practices. Special attention will be given to issues of cultural diversity that arise through the study of non-Western musics. Students will explore and develop learning strategies for approaching this material and college-level work in general. Prerequisite: Must be an accepted music major or minor or have instructor's permission. 2 SH. CC: Diversity Intensive.

MUSC-245 The Music of the Medieval, Renaissance and Baroque Eras

Music history and literature from the beginning of Western civilization until 1750. Prerequisite: Sophomore standing, MUSC-101 or MUSC-152, and MUSC-161. 4 SH. CC: Historical Perspectives, Interdisciplinary, Oral Intensive.

MUSC-250 The Music of the Classic and Romantic Eras

Music history and literature from 1750 until 1900. Prerequisite: MUSC-245. 4 SH. CC: Artistic Expression, Writing Intensive.

MUSC-350 20th-Century Music

Music history and literature from 1900 until the present. Prerequisite: Ability to read music. 2 SH. CC: Diversity Intensive.

MUSC-450 Topics in Music Literature

Various topics in music literature, including piano, voice, organ, string, brass, percussion and woodwind literature. 2 SH. Offered at least once annually with rotating topics.

Music Education Courses

MUED-040 Brass Class I

Basic knowledge of playing and teaching the band and orchestra instruments to prepare for instrumental teaching in the public schools. Includes historical development, literature, performance techniques and pedagogy. Music majors only. 1 SH.

MUED-041 Woodwind Class I

Basic knowledge of playing and teaching the band and orchestra instruments to prepare for instrumental teaching in the public schools. Includes historical development, literature, performance techniques and pedagogy. Music majors only. 1 SH.

MUED-042 String Class I

Basic knowledge of playing and teaching the band and orchestra instruments to prepare for instrumental teaching in the public schools. Includes historical development, literature, performance techniques and pedagogy. Music majors only. 1 SH.

MUED-043 Percussion Class

Basic knowledge of playing and teaching the band and orchestra instruments to prepare for instrumental teaching in the public schools. Includes historical development, literature, performance techniques and pedagogy. Music majors only. 1 SH.

MUED-046 Brass Class II

Basic knowledge of playing and teaching the band and orchestra instruments to prepare for instrumental teaching in the public schools. Includes historical development, literature, performance techniques and pedagogy. Music majors only. 1 SH.

MUED-047 Woodwind Class II

Basic knowledge of playing and teaching the band and orchestra instruments to prepare for instrumental teaching in the public schools. Includes historical development, literature, performance techniques and pedagogy. Music majors only. 1 SH.

MUED-048 String Class II

Basic knowledge of playing and teaching the band and orchestra instruments to prepare for instrumental teaching in the public schools. Includes historical development, literature, performance techniques and pedagogy. Music majors only. 1 SH.

MUED-200 Historical and Philosophical Foundations of Public School Education and Music Education

An overview of the role of education and particularly music education in American society, as well as the historical, cultural and philosophical forces that have influenced public schooling. Incorporates topics related to current educational policy and practice, along with classroom observations at elementary and secondary levels of instruction. 2 SH.

MUED-339 Public School Music I: Foundation, Standards and Curriculum

Designed to develop competencies and to promote thoughtful analysis for general music in the public schools. Emphasis will be placed on the foundations of teaching, curriculum development, standards-based instruction and pedagogical knowledge of the various approaches to teaching music in PreK through 12th grade. Prerequisites: Junior standing, MUED-200, and general music piano proficiency requirements. 2 SH.

MUED-340 Public School Music II: Assessment, Inclusion and Practicum

Designed to continue to develop competencies and to promote thoughtful analysis for general music in the public schools. Emphasis will be placed on general music assessment, inclusion and differentiation strategies. Prerequisite: MUED-339. 2 SH.

MUED-345 Instrumental Music Education Methods and Practicum

Instructional methods and materials for teaching instrumental music at all levels. Dual registration in MUSC-077. 2 SH.

MUED-351 Choral Music Education Methods and Practicum

Emphasizes teaching craft, curriculum development and choral/vocal techniques for successfully educating public school children in the choral art. Public school observations and practica required. 2 SH.

MUED-355 Music for Exceptional Children

Designed to develop curricular, theoretical, ethical, legal and pedagogical competencies for teaching music to exceptional children, taking into account music and special education objectives, child development, and learning styles and the facilitation of mainstreaming, inclusion, IEPs, and least-restrictive environments. Prerequisites: MUED-339 and MUED-340. 4 SH. CC: Ethics Intensive, Interdisciplinary.

MUED-400 Student Teaching

Full-time, supervised teaching in public school music classrooms. Course credit represents preparation and planning, classroom performance, and classroom management. Students may not register for ensembles or lessons during the semester in which they student teach. Prerequisites: Successful completion of all first-year-, sophomore- and junior-level music education courses; music education coordinator's permission; and acceptance into the education program. 12 SH. Capstone.

MUED-405 Student Teaching Seminar

The course is required to be taken during the student teaching semester and is part of the culminating experience in the music education degree program. From a practitioner's perspective, this course "emphasizes thorough insight into issues relevant to public school music teaching, reflection on current teaching trends, and methodology and development of skills for future teaching and professionalism." This course fulfills portions of the Pennsylvania Department of Education (PDE) requirements for professionalism. 2 SH.

MUED-406 Organization and Administration of Public School Music

Covers the essential elements of organization and administration of elementary and secondary school music programs. 2 SH.

Music Technology

MUSC-355 Audio Engineering Fundamentals

An in-depth study of fundamentals of sound. Topics covered include wiring and electronics, as well as ear training and the building blocks of the modern recording studio. 4 SH. Offered every other year.

MUSC-356 Music Production in the Recording Studio

An introduction to techniques and practices employed by music producers in the recording studio. Issues of session organization, recording techniques, mixing and mastering techniques, and musical aesthetics will be explored. 4 SH. Offered every other year.

MUSC-367 Computer Music Composition

A survey of the electronic music hardware and software available in the computer music studio. The techniques used by both popular and classical electronic composers will be studied. Students will create original works of music or sound art using non-real-time processes. 4 SH. Offered every other year.

MUSC-368 Computer Music Performance

The study of real-time, interactive techniques for electronic music and, to a lesser extent, video. Students will become familiar with the MAX/MSP/JITTER object-oriented programming language, as well as the collection of midi controllers in the SU computer music studio. Student work will result in a final concert. Prerequisite: Sophomore standing. 4 SH. CC: Interdisciplinary. Offered every other year.

Conducting

MUSC-369 Beginning Conducting

Designed to introduce students to the technique of conducting and to develop their ability to lead an ensemble with confidence. Prerequisites: MUSC-035, MUSC-162 and MUSC-164. 2 SH.

MUSC-371 Instrumental Conducting

Study of advanced gestural technique as applied to instrumental rehearsal and performance. Additional attention given to rehearsal techniques, score study, performance practice and philosophical thought with regard to the art and craft of conducting. Prerequisite: MUSC-369. 2 SH.

MUSC-372 Choral Conducting

Designed to provide students with a thorough understanding of choral conducting and rehearsal techniques. Prerequisite: MUSC-369. 2 SH.

Church Music

MUSC-215 Music in Christian Rituals

Examines the theological and musicological aspects of artistic contributions to Christian worship as recognized in varied cultural settings. Same as RELI-215. Prerequisite: Junior standing. 4 SH. CC: Artistic Expression, Diversity Intensive, Interdisciplinary. Offered every three years.

MUSC-353 The Practice of Church Music

A practical course designed to introduce the student to the work of the church musician as planner, administrator, leader and resource person. Incorporates the examination of material for use with soloists, instrumentalists, handbells and choral groups of all ages and in various denominations. 3 SH. Offered every three years.

Jazz Studies

MUSC-079 Improvisation

Exploration and development of improvisation through listening, analysis and performance skills practice. Prerequisites: Ability to read music, vocal or instrumental proficiency, both at a level commensurate with admission to a university ensemble. May be repeated for credit. 1 SH.

MUSC-102 A Study of Jazz

Historical overview of the development and evolution of jazz styles through listening, analysis and performance. Open to all music majors and nonmajors. 4 SH. CC: Artistic Expression, Diversity Intensive.

Music Seminars

MUSC-084 Diction I

Introduces the international phonetic alphabet and the principles of making phonetic transcriptions of Italian, French and German texts. Basic pronunciation skills are also practiced. 1 SH.

MUSC-085 Diction II

An extension of the principles introduced in Diction I, with particular emphasis on singing in foreign languages and in English. Prerequisite: MUSC-084 or instructor's permission. 1 SH. Offered every three years.

MUSC-270 Topics in Music

Examines selected topics which are not covered in the regular curriculum but which are of interest to faculty and students. 1 - 4 SH.

MUSC-275 Intro to Arts Leadership

This course offers a foundational understanding of the challenges and skills relevant to performing arts leadership. Topics will include the establishment and functioning of arts organizations, organizational structures, arts managers, governing board dynamics, marketing and audience development, philanthropy and fundraising, basics of hiring and personnel relative to the arts, and strategies for successful arts programming. 4 SH.

MUSC-399 Pedagogy

Examines materials and methodology in the various areas and levels of applied studio teaching. 2 SH. Offered at least once annually with rotating topics.

MUSC-501 Independent Study in Music

In-depth study of a selected topic under faculty guidance. Includes a research paper or presentation or performance for students and faculty. Prerequisites: Securing a faculty sponsor, approval of topic by a music faculty committee, and junior or senior standing. May be repeated for credit. 2-4 SH.

MUSC-504 Internship

Supervised work experience in fields such as recording, music merchandising, church music, music therapy, instrument repair and concert management. Prerequisites: Department head's permission and a 2.75 or higher GPA. 0-12 SH.

MUSC-506 Independent Study in Music

In-depth study of a selected topic under faculty guidance. Includes a research paper or presentation or performance for students and faculty. Prerequisites: Securing a faculty sponsor, approval of topic by a music faculty committee, and junior or senior standing. May be repeated for credit. 2 SH. Capstone.

INTD-250 Japan Seminar

This course offers an insight into Japan's unique culture and society through a survey of its history from ancient to modern times, its political and social transformations, its religious history, the development of its language, literature and art forms, and its absorption and transformation of outside cultures and ideas. This course is a prerequisite for the A Window to Japan GO short program. 2 SH.

NEUROSCIENCE

Faculty

Margaret T. Peeler, Ph.D., Professor of Biology, co-director

Tom Martin, Ph.D., Professor of Psychology, co-director

Neuroscience Studies

The B.S. degree in neuroscience requires 61 semester hours in biology, chemistry, and psychology, with grades of C- or better in the required major courses. The program involves 37 semester hours of required major courses that serve as the major's foundation, providing students with an understanding of the disciplines that come together to make up the field of neuroscience. In addition, the 64 semester hour total includes 12 semester hours of chemistry courses. Another 12 semester hours of upper-division electives are taken, which must include at least one course with a laboratory component. The neuroscience major capstone represents a full academic year of extended experimental investigation in collaboration with a faculty mentor. Neuroscience students will be able to complete many of their Central Curriculum requirements within the major.

37 Required Major Courses

- 4 NEUR-101 Introduction to Neuroscience
- 4 NEUR-510 Neuroscience Student Research I
- 4 NEUR-511 Neuroscience Student Research II
- 4 BIOL-102 Cell Biology and Genetics
- 4 BIOL-455 Functional Neuroanatomy
- 4 PSYC-101 Principles of Psychology
- 4 PSYC-123 Statistics for the Behavioral Sciences
- 4 PSYC-223 Research Methods in Psychology
- 4 PSYC-342 Behavioral Neuroscience
- 1 PSYC-360 Laboratory in Behavioral Neuroscience

12 Cognate Chemistry Courses

- 4 General Chemistry I - choose from: CHEM-101, CHEM-103 or CHEM-111
- 4 General Chemistry II - choose from: CHEM-102, CHEM-104 or CHEM-112
- 4 CHEM-221 Organic Chemistry I

12 Advanced Electives (at least one elective must include a laboratory component)

- 4 BIOL-300 and BIOL-301 Developmental Biology and lab
- 4 BIOL-302 and BIOL-303 Comparative Vertebrate Anatomy and lab
- 4 BIOL-306 and BIOL-307 Cell Biology and lab
- 4 BIOL-310 and BIOL-311 Animal Physiology and lab
- 4 BIOL-316 and BIOL-317 Molecular Biology and lab
- 4 BIOL-320 and BIOL-321 Exercise and Extreme Physiology and lab
- 4 BIOL-324 and BIOL-325 Animal Behavior and lab

4 BIOL-400 and BIOL-401 Immunology and lab

4 BIOL-440 and BIOL-441 Behavioral Neuroendocrinology and lab

4 CHEM-302 Medicinal Chemistry

4 BIOL-424/CHEM-424 and BIOL-429/CHEM-429 The Biochemistry of Metabolism and lab

4 BIOL-422/CHEM-422 and BIOL-423/CHEM-423 The Biochemistry of Nucleic Acid and lab

4 BIOL-426/CHEM-426 and BIOL-427/CHEM-427 The Biochemistry of Proteins and Enzymes and lab

4 CSCI-235 Artificial Life

4 HLCR-302 Human Physiology

4 NEUR-500 Topics in Neuroscience

4 PSYC-320 Abnormal Psychology

4 PSYC-340 Cognitive Psychology

4 PSYC-344 Learning Processes

4 PSYC-346 Sensation and Perception

4 PSYC-348 Psycholinguistics

1 PSYC-361 Laboratory in Cognitive Psychology

1 PSYC-362 Laboratory in Learning Processes

1 PSYC-363 Laboratory in Sensation and Perception

Honors in Neuroscience. The departmental honors program encourages and recognizes outstanding performance in neuroscience. To graduate with honors in neuroscience, students must do the following:

- Complete all of the requirements for the major, and
- Have an overall cumulative GPA of 3.25 and a neuroscience GPA of 3.50

Neuroscience Courses

NEUR-101 Introduction to Neuroscience

This course introduces students to the interdisciplinary field of neuroscience: the study of the neural basis of complex behavioral and cognitive phenomena. Topics include the structure and function of the nervous system, basic neurophysiology, development, memory and attention, sensory systems, psychopathology, and the impact of neuroscience research on society. This course includes a laboratory component where students will be actively engaged in the process of scientific inquiry. 4 SH. CC: Scientific Explorations.

NEUR-500 Topics in Neuroscience

Varying topics reflecting student and instructor interest. Possible topics could include developmental neurobiology and diseases of the brain. Prerequisites: NEUR-101, PSYC-101, and BIOL-102 or instructor permission. Variable credit

NEUR-510 Neuroscience Student Research I

Neuroscience Student Research I introduces students to methods and techniques of neuroscience research in the context of a collaborative research project. Prerequisite: Senior standing in neuroscience or instructor's permission. 4 SH. Capstone.

NEUR-511 Neuroscience Student Research II

Collaborative research with an emphasis on presentation of data and explanation of results. Prerequisite: NEUR-510 or instructor's permission. 4 SH. CC: Oral Intensive, Writing Intensive.

PHILOSOPHY

Faculty

Coleen Patricia Zoller, Ph.D., Associate Professor of Philosophy, department head

Jeff Whitman, Ph.D., Professor of Philosophy

Lissa Skitolsky, Ph.D., Associate Professor of Philosophy

Colleen K. Flewelling, Ph.D., Director of Institutional Research and Assistant Provost, Assistant Professor of Philosophy

George Adams, Ph.D., Visiting Assistant Professor of Philosophy

Philosophy Studies

Learning Goals:

- Read texts/arguments in a reflective and critical manner.
- Write in a coherent and persuasive manner.
- Understand and apply logical thinking skills in evaluating arguments.
- Be literate with respect to ancient and modern Western philosophical thought concerning ethics, metaphysics and epistemology.

Requirements for the Major in Philosophy. Philosophy majors complete, with a grade of C- or better, at least 36 hours in philosophy. In order to graduate with a philosophy major, students must have a minimum GPA of 2.00 in their philosophy courses. To ensure that students acquire adequate breadth and depth, they consult with a major adviser to select a balance of upper- and lower-level courses. Requirements include PHIL-241 Ancient Philosophy, PHIL-243 Modern Philosophy, PHIL-245 19th- and 20th-century Philosophy, PHIL-213 Symbolic Logic, at least one course in ethics (may be a Central Curriculum ethics course but must have a PHIL prefix), and one 300-level course.

Minor in Philosophy. The philosophy minor completes, with a grade of C- or better, at least 20 semester hours in philosophy. Students consult with a minor adviser to select courses and are expected to take a balance of upper- and lower-level courses.

Honors. The honors program in philosophy encourages and commends outstanding academic work. To graduate with departmental honors in philosophy, students must do the following:

- Complete requirements for the major,
- Have a cumulative GPA of at least 3.00 overall and at least 3.50 in philosophy, and
- Perform outstanding academic work in at least one course of directed readings and research in philosophy.

Capstone Requirement. Students majoring in philosophy are expected to take the senior capstone requirement in the appropriate subject. A student with a double major may fulfill the university capstone requirement in a major outside of this department. Any student who elects to fulfill the capstone requirement in this manner must complete the philosophy major by successful completion of an additional four-semester-hour course, or the equivalent, in the relevant subject. Any student wishing to qualify for philosophy departmental honors must fulfill the appropriate capstone as provided by the philosophy department in addition to any capstone requirements imposed in a second major.

The course description for the departmental capstone states that it is "to serve [students] as a culmination of all their studies, allowing them to address a particular topic, issue or thinker in philosophy through the lens of their total undergraduate education." Philosophy majors are encouraged to develop capstone projects that also draw on knowledge and strengths they have acquired in declared minors. Primary oversight of such projects will rest with the

appropriate faculty supervisor in philosophy, although students will also be expected to work with an appropriate adviser from their minor area(s) of study.

Philosophy Courses

PHIL-101 Problems in Philosophy

An introduction to philosophy and philosophical problems. Emphasizes standards and ideals of morality and truth. 4 SH. CC: Ethics.

PHIL-105 Philosophy of Love and Desire

An introduction to philosophy, this course examines theories of love, desire and friendship from ancient, medieval, modern, and 19th- and 20th-century philosophers. 4 SH. CC: Ethics.

PHIL-115 Social Justice Leadership

This course is designed to introduce students to a number of theoretical frameworks in the fields of philosophy, leadership and social justice. Using multiculturalism and social justice as guideposts, the course will help student leaders understand diversity using the central tenets of mentoring, leadership and agency. Through these theories, the concepts of oppression, activism and advocacy will be investigated. 2 SH.

PHIL-122 Resolving Moral Conflicts

Investigates problems involved in moral decision making, providing students with a better understanding of what it means to be a good individual, a good family member and a good citizen of the nation and world. 4 SH. CC: Ethics.

PHIL-125 Justice

This introductory course is a philosophical inquiry into the idea of justice. Rather than focusing on personal morality, we will investigate issues of public policy. How ought we, through our laws and institutions, distribute the benefits and burdens of society, income and wealth, duties and rights, powers and opportunities, offices and honors? Philosophical writings, as well as practical issues that illustrate competing theories of justice, will be investigated. 4 SH. CC: Ethics.

PHIL-130 Philosophy and Hip-Hop

This course provides an introduction to moral theory through examining the content of socially conscious rap songs in relation to traditional philosophical assumptions about the good life, the nature of justice, and the pursuit of wisdom. This course also provides an introduction to the field of critical race theory through examining how several rap songs express ideas or theories that are now prominent in the field. 4 SH. CC: Diversity, Ethics.

PHIL-150 Race, Class and Ethics

Examines ethical theory and practice in connection with the relevant social and political philosophy, focusing on the philosophical issues that arise in everyday life. 4 SH. CC: Ethics, Diversity Intensive.

PHIL-210 Philosophy of Religion

Focus on classical and contemporary writings to determine the credibility of religious faiths and beliefs. Same as RELI-210. 2 SH.

PHIL-211 Existentialism

An intensive study of the themes and ideas that inform different existentialist texts. This course also examines the historical context for the emergence of this contemporary school of thought. Prerequisite: Sophomore standing. 4 SH. CC: Ethics Intensive, Interdisciplinary.

PHIL-212 Feminist Philosophy

An examination of the various forms of feminist philosophy (e.g., liberal feminism, radical feminism, existential feminism, Marxist/socialist feminism, psychoanalytic feminism, postmodern feminism, eco-feminism, and multicultural and global feminism). Emphasizes how feminism differs from common (mis)understandings of it. Some attention is also given to various women in professional philosophy. Same as WMST-200. Prerequisite: One course in philosophy or one course in women's studies or completion of the Diversity Central Curriculum requirement or instructor's permission. 4 SH. CC: Diversity.

PHIL-213 Symbolic Logic

Examines basic procedures for determining the validity or invalidity of deductive arguments. Emphasizes standard notations, principles and methods used in modern symbolic logic. Also covers aspects of set theory. 4 SH. CC: Analytical Thought.

PHIL-221 Applied Ethics

Examines a variety of practical ethical issues and problems using the tools of philosophical analysis and moral theory. Subject area for course changes on a rotating basis and includes ethics of war and peace and environmental ethics. 2-4 SH. CC: Ethics Intensive.

PHIL-222 Advanced Ethical Theory

Principal theories of moral value and duty in the history of Western thought, as well as in contemporary philosophy. Readings may include works from such thinkers as Plato, Aristotle, Kant, Mill, Schopenhauer, Nietzsche, Held, Korsgaard, Hursthouse, Hooks, Bordo, de Waal, MacIntyre, Blackburn and Lear. Prerequisite: One course in philosophy or instructor's permission. 4 SH. CC: Ethics.

PHIL-223 Business Ethics

A systematic and philosophically informed consideration of some typical moral problems faced by individuals in a business setting, and a philosophical examination of some common moral criticisms of the American business system. 4 SH. CC: Ethics Intensive.

PHIL-224 Bioethics

Examines the major ethical controversies in medicine, subjecting them to close philosophical analysis. Subjects addressed include the patient/doctor relationship, informed voluntary consent, beginning and end of life issues, abortion, reproductive rights, genetic therapies and cloning, human subject medical experimentation, and health care resource allocation. 4 SH. CC: Ethics Intensive.

PHIL-225 Just War Theory

Examines from a philosophical perspective the ethical issues raised by the Just War Tradition. Subjects addressed include pacifism, realism, the criteria for starting and conducting a just war, international law, terrorism, humanitarian interventions, and the moral responsibility for war and war crimes. 4 SH. CC: Ethics Intensive.

PHIL-235 Aesthetics

Examines artistic and aesthetic values reflected in both past and present philosophies of art and beauty. Readings may include selections from Plato, Aristotle, Hume, Kant and Tolstoy, as well as 20th-century philosophers and artists. 4 SH. CC: Artistic Expression.

PHIL-240 Being Awesome At Life

This course offers a cross-cultural examination of the pursuit of a good human life, and how one learns to live better. In other words, it is about the theory and practice of being awesome at life. We focus on ethical dispositions (skills, habits and virtues) as critical features of ethics, explored through texts from various religious and philosophical figures in

English translation, as well film and other media. Prerequisite: Junior standing. Previous experience in philosophy or religious studies is helpful, but not required. 4 SH. CC: Ethics, Team Intensive.

PHIL-241 Ancient Philosophy

The origins of Western philosophical thought in ancient Greece and Rome. Emphasizes Plato and Aristotle and the Stoics. 4 SH. CC: Ethics Intensive.

PHIL-243 Modern Philosophy

Focuses on the ideas of European and British philosophers from Descartes through Kant. 4 SH. CC: Writing Intensive.

PHIL-245 19th- and 20th- century Philosophy

This course is a study of works by noted philosophers in the 19th and 20th centuries that represent the dominant movements that arose in response to the critique of idealism and metaphysics, such as existentialism, phenomenology, psychoanalytic theory, analytic philosophy and postmodern philosophy. 4 SH. CC: Oral Intensive.

PHIL-255 Philosophy and the City: Plato's Republic and HBO's The Wire

This course examines HBO's *The Wire* in comparison with Plato's Republic. Both the Republic and *The Wire* concern life in a city and which factors foster justice and which foster injustice. These texts raise philosophical questions, such as: What is justice? Who should rule? What are the obligations of rulers? How should children be educated? Who is best suited to protect the city, and how should they be educated for this important job? How should desire be managed in society? Our task is, first, to work to understand the philosophizing being done in both these texts and, second, to philosophize on our own about the topics raised by both texts. 4 SH. CC: Diversity, Ethics Intensive.

PHIL-301 Plato Seminar

An intensive study of the works of Plato. Topics vary and may include Plato's theory of education, Plato and the Greek literary tradition, Plato's Republic, the role of the body in Plato's epistemology, and dialectic and dramatic dialogue. Prerequisite: PHIL-241 or instructor's permission. 4 SH.

PHIL-302 Philosophy in the Wake of the Holocaust

This course examines the validity of certain traditional philosophical assumptions in the aftermath of the Nazi genocide. In this effort the class will read texts by scholars in a variety of fields who throw doubt on the moral value of rational thought, the teleological worldview, the Western conception of "human nature," and the legacy of the Enlightenment through an analysis of the Holocaust and other genocides in the 20th and 21st centuries. Same as JWST-302. Prerequisite: Junior standing. 4 SH. CC: Ethics Intensive, Interdisciplinary.

PHIL-305 Topics in Philosophy

Examines selected topics in philosophy, depending on student and instructor interest. Course may be repeated for credit if topic is different. 2-4 SH.

PHIL-310 Philosophy of Science

Investigates the logic of the scientific method, the history of scientific thought and the philosophical underpinnings of modern science. Focuses on developing an understanding of the nature, origins and growth of modern science and the application of scientific knowledge to human affairs. Prerequisites: One course in philosophy and junior standing. 4 SH. CC: Interdisciplinary.

PHIL-312 Theories of Knowledge and Reality

Do we have knowledge of the world around us, the so-called external, objective world? Are there any objective truths about the world for us to discover? If there are, how do we come to have knowledge of these truths? These and other related questions of epistemology constitute the subject matter of this course. 4 SH.

PHIL-500 Directed Reading and Research

Study of a specific topic in the field for qualified students in consultation with the department. 2-4 SH. Capstone.

PHYSICS

Faculty

Samya Bano Zain, Ph.D., Associate Professor of Physics, department head

Carl Edward Faust, Assistant Professor Physics

Massooma Pirbhai, Assistant Professor of Physics

Physics Studies

Learning Goals:

- Students will demonstrate analytic thinking in physics.
- Students will develop effective communication skills in physics.

Requirements for the Major in Physics. Susquehanna offers both Bachelor of Arts and Bachelor of Science programs in physics. The department strongly recommends the Bachelor of Science program for students interested in graduate school or industrial employment. Majors can pursue an interdisciplinary interest, such as biophysics, by carefully choosing electives. The Bachelor of Arts is a good choice for students preparing to teach secondary school.

The Bachelor of Science degree requires the following courses completed with grades of C- or better:

32	semester hours in physics, including PHYS-204-205 and PHYS-301-302
20	semester hours in mathematics (all courses from MATH-111 Calculus I up to and including MATH-353 Differential Equations)
12	4 semester hours from CHEM-101, CHEM-103, or CHEM-111, and 8 additional hours in approved biology, chemistry, earth and environmental sciences, mathematics, or computer science courses

The Bachelor of Arts degree requires the following courses completed with grades of C- or better:

32	semester hours in physics, including PHYS-204-205 and PHYS-301-302
16	semester hours in mathematics courses consisting of MATH-111 Calculus I, MATH-112 Calculus II, MATH-201 Linear Algebra and MATH-211 Multivariable Calculus
12	4 semester hours from CHEM-101, CHEM-103, or CHEM-111, and 8 additional hours in approved biology, chemistry, earth and environmental sciences, mathematics, or computer science courses

Minor in Physics. Students consult with their major adviser and a physics faculty member to design minor programs. The minor requires with grades of C- or better 18 semester hours in physics, including PHYS-204-205. Suggested additional courses for computer science majors are PHYS-101 and PHYS-303. Suggestions for mathematics majors are PHYS-301-302 and PHYS-401.

Honors. The departmental honors program recognizes superior work in the physics courses. To enter the program, majors must do the following:

- Write a request to the department one month before senior registration,
- Maintain a cumulative 3.00 GPA and a 3.25 GPA in physics, and
- Demonstrate scholarly work in the field by completing at least four semester hours of PHYS-550 Research Physics or PHYS-500 Independent Study.

Teaching Certification. Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American literature, at least 6 semester hours of mathematics coursework (or other courses which

satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners: Theory and Instruction, EDUC-380 Instructional Design, EDUC-424 Methods of Curriculum, Instruction, and Assessment in Teaching Science, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching package (EDUC-501, EDUC-502, EDUC-503, and EDUC-600).

In addition, secondary education physics students complete all of the usual requirements for the physics major.

Summer Research. The department encourages physics students to apply for summer research grants. Recent students have been accepted at the University of Alaska, The Pennsylvania State University and Brookhaven National Laboratory. Academic year internship and research opportunities are also valuable, but more difficult to arrange.

Physics Courses

PHYS-100 Introductory Astronomy

A general overview of astronomy, covering ancient and modern views of the solar system and beyond, out to the farthest reaches of the observable universe. The course focuses on building a basic understanding of the physical laws that dictate celestial motions and the processes behind the birth, evolution, and death of objects within the universe, as well as the universe itself. It is a primary goal to demonstrate how the scientific method works and how science builds a testable, coherent understanding of natural phenomena. Includes a laboratory component where students gain hands-on experience and are actively engaged in the process of scientific inquiry. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Scientific Explanations.

PHYS-101 Introduction to Digital and Analog Electronics

The fundamental principles of digital and analog electronics are introduced, while emphasizing applications. Guided laboratory investigations are designed to develop an understanding of common electronic devices, as well as scientific instrumentation. 4 SH. 3 lecture hours, 3 laboratory hours.

PHYS-105 Independent Thought and Explorations in Physics

This course serves as an introduction to how physics developed in the last couple of centuries. The objective of this course is to give the foundations for understanding the cornerstones of physics and a general understanding of the concepts of science. The students will learn how to approach physics problems without a provided outline, and they will be expected to find their own solutions to the assigned problems with subtle but available guidance. The instructors will be on hand for help but will not provide direct solutions to the posed problems. The students will need to work actively and independently at the material. However, they will be working in teams of two or three people, where collaboration between team members is encouraged. All resources will be provided for the students to successfully complete the assigned task. The posed questions will be common experiences in physics that people generally deal with every day but don't really understand the concepts behind and, in most cases, don't even know that they were issues 200 years ago. There are no prerequisites to this course, just the interest to find out about the world in which we live. 4 SH. CC: Scientific Explanations.

PHYS-108 Physics of Music

A study of the acoustics of music. Explores the fundamental scientific principles underlying the physical aspects of music-what music is, how music is produced, how we hear it and how it is transmitted to a listener. Prerequisites: Familiarity with basic music terminology, music performance experience, a fascination with music or instructor's permission. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Scientific Explanations.

PHYS-204 Introductory Physics I

Introduces the macroscopic phenomena of the physical universe. Applies concepts of force, work, energy and momentum to waves, fluids and thermodynamics. Laboratory stresses methods of acquiring data, computer data

processing and analyzing the causes of errors. Each year, two sections of this course are offered: PHYS-204:L uses high school algebra and trigonometry as the language; PHYS-204:C uses algebra, trigonometry and calculus as the language. Prerequisite: MATH-111 recommended but not required. 4 SH. 5 lecture hours, 3 laboratory hours. CC: Team Intensive (calculus-based section only), Scientific Explanations.

PHYS-205 Introductory Physics II

Continuation of PHYS-204. Introduces and applies the concept of a field to gravitation, electricity, magnetism, circuits, optics and the atom. Laboratory stresses electronic data acquisition and independent discovery of physical principles. Each year, two sections of this course are offered: PHYS-205:L uses high school algebra and trigonometry as the language; PHYS-205:C uses algebra, trigonometry and calculus as the language. Prerequisites: PHYS-204 and MATH-111 (recommended but not required). 4 SH. 5 lecture hours, 3 laboratory hours.

PHYS-301 Newtonian Mechanics

Studies particle and rigid body motion in two and three dimensions. Uses vectors and differential equations. Introduces Lagrangian and Hamiltonian approaches to mechanics. 4 SH. 3 lecture hours, 3 laboratory hours.

PHYS-302 Electric and Magnetic Fields

Studies the concepts of fields. Uses mathematics of multivariable functions and vectors. Covers Maxwell's equations and their use in describing electric and magnetic waves. 4 SH. 3 lecture hours, 3 laboratory hours.

PHYS-303 Solid State Physics

Introduces the physics of crystalline materials. Discusses lattice dynamics, electron behavior in metals, semiconductors, and dielectric and magnetic properties. Laboratory builds on concepts introduced in analog electronics. Studies computer-to-instrument interfacing, emphasizing signal processing, measurement and control of external processing. Prerequisites: PHYS-101 and PHYS-205. 4 SH. 3 lecture hours, 3 laboratory hours.

PHYS-304 Classical and Modern Optics

Geometrical optics, including reflection, refraction, thick and thin lenses, stops, mirrors, aberrations, and ray tracing. Covers physical optics, including interference, diffraction, polarization and optical activity. Discusses quantum optics as they apply to lasers, holography and magneto/electro-optics. 4 SH. 3 lecture hours, 3 laboratory hours.

PHYS-305 Topics in Physics

Selected topics not covered in other courses. May include statistical mechanics, nuclear physics, heat and thermodynamics, material science, and planetary astronomy. 4 SH. 3 lecture hours, 3 laboratory hours.

PHYS-306 Modern Physics

This course serves as an introduction to the physics discovered near the beginning of the 20th century and beyond. Topics include special relativity, the wave nature of matter, the particle nature of light, the Bohr atom, non-relativistic quantum mechanics, the hydrogen atom, molecular structure, nuclear structure and nuclear applications. Additional topics may be covered depending on professor/student interests. A number of seminal experiments are performed and studied, which aids in putting the introduced ideas into both scientific and historical context. Prerequisites: MATH-112 and PHYS-205. 4 SH. 3 lecture hours, 3 laboratory hours. CC: Oral Intensive, Writing Intensive.

PHYS-401 Electromagnetic and Mechanical Waves

Optical, mechanical and electromagnetic wave phenomena in one, two and three dimensions. Covers free space, fluids and solids. Begins with Maxwell's equations. 4 SH. 3 lecture hours, 3 laboratory hours.

PHYS-402 Quantum Mechanics

Covers history of quantum mechanics leading to the Bohr Atom. Also focuses on mathematical treatment of quantum mechanics fundamentals. Includes Schrodinger formulation, approximation methods, symmetry and angular momentum. Covers applications to simple atoms and molecules. 2 SH. 3 lecture hours, 3 laboratory hours.

PHYS-404 Thermodynamics and Statistical Methods

This course covers the laws of thermodynamics, thermodynamic functions, heat engines, kinetic theory, and the statistical mechanics of classical and quantum-mechanical systems. Prerequisites: PHYS-204-205 and PHYS-306. 4 SH. 3 lecture hours, 3 laboratory hours.

PHYS-500 Independent Study

In-depth focus on a selected topic of student interest. Variable semester hours.

PHYS-530 Physics Internship

Work for government agency or industry under supervision of a physicist or engineer. Variable semester hours.

PHYS-550 Physics Research

Individual or group research in experimental or theoretical physics under the direction of a principal investigator. Prerequisites: Permission of adviser and principal investigator. To meet the capstone requirement, a minimum of two semester hours is required. Variable semester hours. Capstone.

POLITICAL SCIENCE

Faculty

Michele Ann DeMary, Ph.D., Associate Professor of Political Science, department head

Andrea M. Lopez, Ph.D., Associate Professor of Political Science

Nicholas J. Clark, Ph.D., Assistant Professor of Political Science

Rolfe D. Peterson, Ph.D., Assistant Professor of Political Science

Political Science Studies

Learning goals:

- Factual information: American politics
- Factual information: World/international politics
- Factual information: Comparative politics
- Factual information: Political thought/philosophy
- Communication skills: Written, oral and listening
- Diversity issues: U.S./global diversity of population and societies
- Diversity issues: Relationship between politics and differences
- Diversity issues: Criticize views of categories of diversity/portray others' perceptions/views

Requirements for the Major in Political Science. Majors take 44 semester hours in political science, all with grades of C- or better and at least a 2.00 political science GPA. Twenty-four semester hours of electives are selected with faculty adviser guidance (these may include two hours of internship credit); 16 of these semester hours must be at the 300 level or higher.

4	POLI-111 American Government and Politics
4	POLI-121 Comparative Government and Politics
4	POLI-131 World Affairs
or	POLI-133 World Affairs: Statecraft
4	POLI-205 Research Methods
24	24 hours of electives selected with faculty adviser guidance (may include two hours of internship credit); 16 of these semester hours must be at the 300 level or higher.
4	POLI-501 Senior Seminar

The department also recommends additional courses in other areas, depending upon career goals. Frequent choices include business, communications, economics, earth and environmental sciences, foreign language, history, and sociology.

Secondary Teaching Certification. Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American literature, at least 6 semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350

English Language Learners: Theory and Instruction, EDUC-380 Instructional Design, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching package (EDUC-501, EDUC-502, EDUC-503, and EDUC-600).

Political science secondary education students complete the regular political science major with one change in the requirements: rather than taking 24 semester hours of departmental electives, secondary education students take 20 semester hours of departmental electives. In addition to taking the courses listed above, secondary education political science students must complete certification in either social studies or citizenship. The requirements for certification in social studies are EDUC-425 Methods of Curriculum Instruction and Assessment in Teaching Social Studies, SOCI-101 Principles of Sociology, ANTH-162 Introduction to Anthropology, ECON-105 Elements of Economics, PSYC-101 Principles of Psychology, HIST-322 Pennsylvania History or HIST-324 Pennsylvania's Pasts and Their Publics, 1 course in U. S. history (HIST-111, HIST-112 or HIST-115), 1 course in European history (HIST-131 or HIST-132), and 1 course in non-Western history (HIST-151, HIST-152, HIST-171, HIST-172, HIST-180, or HIST-181). The requirements for certification in citizenship are EDUC-427 Methods of Curriculum, Instruction, and Assessment in Teaching Citizenship, ANTH-162 Introduction to Anthropology, ECON-105 Elements of Economics, HIST-322 Pennsylvania History or HIST-324 Pennsylvania's Pasts and Their Publics, 1 course in U. S. history (HIST-111, HIST-112 or HIST-115), 1 course in European history (HIST-131 or HIST-132), and 1 course in non-Western history (HIST-151, HIST-152, HIST-171, HIST-172, HIST-180, or HIST-181).

Minor in Political Science. A political science minor complements many other majors. The minor requires 24 semester hours with grades of C- or better and at least a 2.00 GPA in the minor. Required courses include POLI-111, POLI-121, and either POLI-131 or POLI-133. At least four of the 24 hours must be at the 300 level or above.

Minor in International Relations. International relations is the study of interactions among countries. It explores countries' foreign policy, interstate trade, cooperation and war. An international relations minor is a strong complement to a number of fields, particularly for students who wish to pursue international study or business. Students may not attain an international relations minor if they have a political science major or minor. The minor requires 24 semester hours with grades of C- or better and at least a 2.00 GPA in the minor. Required courses include POLI-121 Comparative Government and Politics, POLI-131 World Affairs or POLI-133 World Affairs: Statecraft, and 12 semester hours from the following courses: POLI-321 European Union; POLI-331 American Foreign Policy; POLI-333 Development, Globalization and Society; POLI-334 International Organizations and Law; POLI-335 War and Politics; POLI-338 International Political Economy; or other approved courses. Students must also take one other four-semester-hour comparative politics course.

Interdisciplinary Options. Political science majors can easily complete a minor in other departments. Others opt to take a second major. Many choose a related field, such as a foreign language, economics, sociology or business. A legal studies minor is a popular choice for those considering a career in the law. International studies, also an interdisciplinary program, is another common option as a minor or second major.

Honors. The departmental honors program encourages and commends outstanding academic work in political science. To graduate with departmental honors, political science majors must do the following:

- Maintain a minimum GPA of 3.50 in the department and 3.25 overall,
- Request admission to the program at the beginning of their senior seminar, and
- Complete and publicly present and defend an honors-quality project in their senior year

Pi Sigma Alpha. Students who satisfy membership requirements may be invited to join the campus chapter of this national honor society in political science.

Political Science Courses
American Government and Politics

POLI-111 American Government and Politics

An introductory course covering the major institutions and processes of American government and politics, with a focus on the Constitution, mass political behavior, and the decision-making of elected officials. 4 SH. CC: Oral Intensive, Social Interactions.

POLI-211 Women and U.S. Politics

An introductory examination of the role of women in the U.S. political system. The course includes a theoretical and historical view of the development of women's political activity in the United States, as well as a contemporary look at women as activists, voters and candidates. Current issues are incorporated as appropriate. Same as WMST-211. Prerequisite: Sophomore standing. 4 SH. CC: Diversity Intensive, Interdisciplinary, Team Intensive.

POLI-212 Introduction to Public Policy

"Laws are like sausages, it is better not to see them being made", a quote often attributed to Prince Otto von Bismarck. Against this advice, this course focuses on understanding how laws are made. We will examine the policy-making process in the United States and, to a lesser extent, in other countries. Who sets the agenda adopted by politicians and policy-makers? What role(s) are played by private actors in the policy-making process? What factors help or hinder the process of implementing policies? Students will consider all of these questions and focus in depth on a number of current policy debates, including immigration policy, environmental policy, and education policy. This course is intended to provide students with an understanding of the theories explaining how policies are shaped by the political process and a familiarity with the practical tools used by policy-makers to develop and enforce the rules, policies, and laws that we all must follow. 4 SH. CC: Ethics Intensive.

POLI-310 Public Opinion and Political Psychology

This course examines the psychological dimensions of politics, with a particular focus on how citizens make sense of their political surroundings and how their understandings of the political world are linked to their political beliefs and behaviors. Topics include the effects of personality, the role of emotion and reason, the nature of mass decision-making, and the impact of the media on other sources of information. Prerequisite: Sophomore standing. POLI-111 is recommended but not required. 4 SH. CC: Interdisciplinary.

POLI-312 Elections and Voting Behavior

This course examines two main questions about political behavior in the American public: why do people participate in politics and why do they vote the way they do? Emphasizes the diverse nature of the American electorate and how decisions are shaped by geographic and demographic factors. Also discusses normative issues associated with voting rights, political knowledge in the electorate, and polarization in American politics. There are no prerequisites for this course, but POLI-111 is recommended. 4 SH. CC: Diversity Intensive.

POLI-314 Diversity in American Politics

Studies the many shapes of diversity found in the United States and how this diversity impacts the American political system. Analyzes how different groups have been denied or granted access to the political system and the success or failure of these groups in affecting the political system as voters, candidates and office holders, and in bringing new principles, values and practices into American politics. The theoretical challenges presented by the general concept of diversity will also be examined. There are no prerequisites for this course; however, POLI-111 is recommended. 4 SH. CC: Diversity Intensive.

POLI-316 The American Presidency

An exploration of the power of the American presidency as it has developed over time. Studies presidential authority, the limitations on presidential power and the presidency's impact on public policy in the United States. Explores the interplay between individual presidents and the institution of the presidency. Topics covered include the presidential selection process and the relationship between the president and the Congress, "the bureaucracy" and the courts. There are no prerequisites; however, POLI-111 is recommended. 4 SH. CC: Writing Intensive.

POLI-317 The U. S. Congress

Examines the U. S. Congress as an institution, its responsiveness to public opinion, its relations with other branches of government, and its impact on public policy. Topics include congressional elections, the quality of representation, the internal working of the House and Senate, and the comparison of Congress with state legislatures. There are no prerequisites for this course, but POLI-111 is recommended. 4 SH.

POLI-319 State and Local Government and Politics

Study and analysis of state and local government in the U.S. political system. Examines the influence of intergovernmental relations on these political systems and the "how, why and so what" of governmental operation. Compares the different ways state and local governments operate in 50 states and thousands of local governments, with an emphasis on the role of Pennsylvania and other states of particular interest to students. Contemporary policy issues are incorporated. 4 SH.

POLI-341 American Political Thought

Examines writings of representative political thinkers and movements from colonial through contemporary America. Stresses debates over relevant issues, such as religious freedom, the constitutional system, civil rights for minorities and women, and the role of government in the economy. 4 SH.

Public Law

POLI-215 Law and Politics

Examines the law and the legal system in the United States, assessing the possibilities and limitations of the law. Studies the political basis of the law and critiques of the American legal system. Discusses the major players in the legal system, including lawyers, judges and juries. Course culminates with a mock trial. 4 SH. CC: Team Intensive.

POLI-411 Constitutional Law

Examines the U.S. Supreme Court with an emphasis on its major decisions in questions of judicial review, federalism, separation of powers, interstate commerce, state police powers and substantive due process. Emphasizes the court's political role and judicial decision making. Prerequisite: Junior standing. POLI-111 is recommended. 4 SH. CC: Interdisciplinary, Writing Intensive.

POLI-412 Civil Liberties

Examines significant Supreme Court decisions concerning the protection of liberty and equality. Topics covered include freedom of speech and press, church-state relations, right to privacy, criminal procedure, and racial and gender discrimination. Prerequisite: Junior or senior standing. POLI-111 is recommended. 4 SH. CC: Writing Intensive.

Comparative Politics

POLI-121 Comparative Government and Politics

Surveys the political systems, ideologies and socioeconomic policies and issues in various countries and regions of the world. 4 SH. CC: Diversity, Social Interactions.

POLI-224 Government and Politics of Europe

Comparative study of contemporary government, politics, problems and policies in Europe, with a special focus on Western Europe, though some attention is given to countries in Central and Eastern Europe. 4 SH. CC: Social Interactions.

POLI-226 Soviet and Russian Politics

Looks at Russian and Soviet politics and foreign policy. The Soviet Union is examined, with particular emphasis on the policies of Gorbachev and the 1991 disintegration of the U.S.S.R. The post-Soviet period is also studied, especially the

challenges of democratization and of moving toward a market economy. While primary attention is paid to the situation in Russia, issues in the other former Soviet republics and Eastern Europe are also discussed. Same as HIST-226. 4 SH.

POLI-228 Middle East Politics and Society

This course examines the ways in which politics and society in the Middle East are shaped by historical and contemporary structures, processes and practices. The geographic and temporal focus of the course includes the Arab world, Iran, Turkey and Israel during the past century and a half, from the reforms of the late Ottoman Empire, through the years of European colonialism, to the emergence of postcolonial states and their contemporary development. Same as JWST-228. Prerequisities: Sophomore standing. 4 SH. CC: Historical Perspective, Diversity Intensive, Interdisciplinary.

POLI-321 European Union

Examines the post-World War II development, institutional structure and policies of the European Union and its predecessors in the movement toward European integration, with a special emphasis on the current situation. Same as HIST-321. 4 SH.

POLI-323 Comparative Foreign Policy

This course introduces the academic study of foreign policy analysis in comparative perspective. Foreign policy analysis explores every level of foreign policy decision making. Foreign policy is influenced by a multitude of factors: psychologies of individuals involved, a state's characteristics (historical experience, political culture, foreign policy bureaucracy, political opposition, interest groups and public opinion), as well as the international environment. Based on this conceptual and theoretical background, this course reviews foreign policies of many different (types of) countries: among others, Russia, China, Brazil, and Turkey. There are no prerequisites, but POLI-131 or POLI-133 or INTD-201 is recommended. 4 SH. CC: Social Interactions, Writing Intensive.

POLI-324 Issues in Comparative Politics

This course focuses on topics relevant to the study of politics and governance outside of the United States. Such topics include the origins, development and current state of party systems in modern democratic governments; the comparison of different modes of political behavior (including public opinion, elections and voting, and protest) in advanced industrial democracies; an examination of how economic policies (including social welfare policies) are developed and implemented under different political systems; and the complex relationship between national identity and the legitimacy of the state. This course is intended to provide students interested in Comparative Politics with a deeper understanding of some of the current lines of inquiry in that field. The course may be repeated for credit if the subtitle (and therefore the course content) is changed. There are no prerequisites, however POLI-121 is recommended. 4 SH. CC: Social Interactions.

POLI-337 Protest in the Middle East

This course is theoretically based on the social mobilization literature and geographically concerns the Middle East. Concisely, the class seeks an answer to the question: Why do masses mobilize? Class meetings explore such themes as mobilization, repression, protest, as well as democratic deficit, economic deprivation in the Middle East. Case studies include but are not limited to the 1979 Iranian Revolution, the Palestinian Intifadas, and various mobilization events during the "Arab Spring." There are no prerequisites, but POLI-228 is recommended. 4 SH.

International Politics and Foreign Policy

POLI-131 World Affairs

Examines state behavior in the international system in light of countries' abilities and limitations. Causes of state action, leaders' decision making and the role of power are discussed. Explores why states go to war, the role of the United Nations, the benefits and costs of free trade, and the effects of the environmental and human rights movements. Case studies and current events are used to illustrate theories and provide a framework for discussion. A student may not receive credit for both POLI-131 and POLI-133. 4 SH. CC: Social Interactions.

POLI-133 World Affairs: Statecraft

Taught in a Team Intensive format, this course examines state behavior in the international system in light of countries' abilities and limitations. Causes of state action, leaders' decision making and the role of power are discussed. Explores why states go to war, the role of the United Nations, the benefits and costs of free trade, and the effects of the environmental and human rights movements. Case studies and current events are used to illustrate theories and provide a framework for discussion. A student may not receive credit for both POLI-131 and POLI-133. 4 SH. CC: Social Interactions, Team Intensive.

POLI-325 Political Leadership

This course focuses on political leaders' influence on the actions and policies of institutions they govern at the national/federal level. The class primarily explores the psychological dimensions of politics in political leaders and as such serves as a basic introduction to political psychology. The course surveys historical and contemporary approaches to studying political leaders, and places an emphasis on the relationship between leaders' personalities, leadership styles, beliefs, psychological disorders on the one hand and decision making (in particular, in foreign policy) on the other. Case studies assess political leaders from around the world: American presidents, British prime ministers, Israeli leaders, and Iranian presidents. Prerequisite: Sophomore standing. Recommended: POLI-111 or POLI-131 or POLI-133 or PSYC-101. 4 SH. CC: Interdisciplinary.

POLI-331 American Foreign Policy

Studies the formation and implementation of U.S. foreign policy. Focuses on both the role of the United States in the post-World War II era and current foreign and security policy issues. 4 SH.

POLI-333 Development, Globalization and Society

A study of the relationship between economic development paradigms, institutions and groups in society. The course focuses on international economic relationships, world order, and the resultant social and political conflict. More specifically, this course examines how global economic development policy since the 1960s has influenced relations between states, major institutions, organizations and social groupings in both the developed and the developing world. Same as SOCI-333. Prerequisite: Junior standing and either SOCI-101 or ANTH-162. 4 SH. CC: Interdisciplinary.

POLI-334 International Organizations and Law

A study of the ways of managing the issues that arise from increasing interdependence among nation-states. The course explores the consequences of the growth of international organizations and the proliferation of treaties in areas of security; economics; the environment; and political, social and human rights. Primary attention is devoted to international governmental organizations, especially the United Nations and the World Court, but international nongovernmental organizations (e.g., Amnesty International and Greenpeace) are also considered. There are no prerequisites; however, POLI-131 or POLI-133 is recommended. 4 SH.

POLI-335 War and Politics

Analyzes issues of war and conflict in the international system, largely from a theoretical perspective. Students examine the questions of why states go to war, how wars can be prevented, how states fight wars and how such conflicts end. Case studies of wars, including World War II and the current wars in Iraq and Afghanistan, will be studied. Arms control, terrorism and peacekeeping are also discussed. There are no prerequisites; however, POLI-131 or POLI-133 is recommended. 4 SH. CC: Team Intensive.

POLI-338 International Political Economy

Examines issues of political interaction with economic forces at the national, international and global levels. Topics studied include economic systems, international trade and finance, the European Union, NAFTA, CAFTA, OPEC, multinational corporations, economic development, poverty, inequality, and global environmental issues. Same as ECON-338. Prerequisites: Sophomore standing; ECON-201 or ECON-105 or instructor's permission. 4 SH. CC: Interdisciplinary.

Political Science Seminars, Independent Studies and Internships

POLI-202 Topics in Government and Politics

Examines selected topics or problems in American government or comparative government, international politics or political thought. May be repeated for credit if topic is different. 2 or 4 SH.

POLI-205 Research Methods

Introduces students to the social science research process and common techniques of quantitative and qualitative data analysis. Topics include the development of theory, measurement, data collection and analysis, and research ethics. Requirements include compiling a literature review and using statistical software to conduct data analysis. 4 SH. CC: Ethics Intensive.

POLI-300 Seminar

Detailed research and in-depth discussion on a selected topic. Prerequisites: Junior or senior standing and instructor's permission. May be repeated for credit. 2 or 4 SH.

POLI-348 Issues in Democracy

This course examines questions related to the effectiveness and efficacy of democratic forms of governance in serving the people. Who should have a role in decision-making? Are most democratic citizens equipped to participate in decision-making? How can democratic institutions facilitate the participation of large and complex groups of people in geographically large and populous countries? In considering such questions, this course looks to both ancient and modern democratic theorists and analyses politics in both the ancient and post-modern worlds. The course may consider debates surrounding the formation of the Athenian Assembly in Ancient Greece or whether democratic accountability is achievable in international and supranational organizations such as the United Nations and the European Union. The course relies heavily on historical and political simulations, such as those that are part of the Reacting to the Past series. The course is intended to invest students in democratic processes by asking them to consider fundamental questions about democracy while acting as democratic citizens. The course may be repeated for credit if the subtitle (and therefore the course content) is changed. There are no prerequisites. 4 SH. CC: Oral Intensive, Team Intensive.

POLI-501 Senior Seminar

A capstone course for political science majors. Students research, write and present a senior thesis on an approved topic and participate actively in discussions. Required for all senior majors. Prerequisites: Senior standing and the completion of required portfolio elements. 4 SH. Capstone. CC: Writing Intensive, Oral Intensive.
Portfolio. Timely completion of the required portfolio elements is a precondition for enrolling in POLI-501, the Senior Seminar capstone course.

POLI-502 Directed Reading

Readings, essays and tutorials on a selected political science topic. Prerequisites: Junior or senior standing and permission and arrangement with a department instructor. May be repeated for credit. 2 or 4 SH.

POLI-503 Independent Research

A major research project on a selected political science topic. Prerequisites: Junior or senior standing and permission and arrangement with a department instructor. May be repeated for credit. 2 or 4 SH.

POLI-505 Internship in Government and Politics

Practical experience in a supervised work program. May be for a local, state or federal government agency, legislative body, political party, legal office, or other organization with substantial government-related responsibilities. Only two internship credits may apply to the major requirements. Prerequisites: Junior or senior standing and department's permission. 2 or 4 SH.

PSYCHOLOGY

Faculty

Tom A. Martin, Ph.D., Professor of Psychology

Kathleen Bailey, Ph.D., Associate Professor of Psychology

James Briggs, Ph.D., Associate Professor of Psychology

M. L. Klotz, Ph.D., Associate Professor of Psychology

Gretchen Sue Lovas, Ph.D., Associate Professor of Psychology

Jennifer Asmuth, Ph.D., Assistant Professor of Psychology

Samuel Day, Ph.D., Assistant Professor of Psychology

Helen Kiso, Ph.D., Assistant Professor of Psychology

Erin Smith, Assistant Professor of Psychology

Erin L. Goedegebuure, Visiting Lecturer in Psychology

Psychological Science Studies

Learning Goals:

- Students will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings and historical trends in psychology.
- Students will understand and apply basic research methods in psychology, including research design, analysis and interpretation.
- Students will respect and use critical thinking, skeptical inquiry and, when possible, the scientific approach to solve problems related to behavior and mental processes.
- Students will be able to apply psychological principles to personal, social and organizational issues.
- Students will be able to weigh evidence, tolerate ambiguity, act ethically and reflect the values that are the underpinnings of psychology as a discipline.
- Students will be able to communicate effectively in a variety of formats.

Requirements for the Bachelor of Arts Degree. The department offers Bachelor of Arts and Bachelor of Science degree programs. Majors pursuing the Bachelor of Arts complete 41 semester hours in psychology with a grade of C- or better and with at least a 2.00 psychology GPA. Students complete the following required courses from each of five content areas:

12 Psychology Core (all are required)

PSYC-101 Principles of Psychology

PSYC-223 Research Methods in Psychology

PSYC-421 Directed Research

4 Developmental Psychology (choose **one** of the following):

PSYC-238 Developmental Psychology: Conception Through Childhood

PSYC-239 Developmental Psychology: Adolescence

PSYC-240 Developmental Psychology: Adulthood

4 Interpersonal and Intrapersonal Psychology (choose **one** of the following):

PSYC-230 Social Psychology

PSYC-245 Personality

PSYC-320 Abnormal Psychology

8 Fundamental Paradigms in Psychology (choose **two** of the following):

PSYC-340 Cognitive Psychology

PSYC-342 Behavioral Neuroscience

PSYC-344 Learning Processes

PSYC-346 Sensation and Perception

1 Laboratory Proficiency (choose **one** of the following):

PSYC-360 Laboratory in Behavioral Neuroscience

PSYC-361 Laboratory in Cognitive Psychology

PSYC-362 Laboratory in Learning Processes

PSYC-363 Laboratory in Sensation and Perception

12 Psychology Electives

12 hours of electives selected with faculty adviser guidance

Majors must also complete a comprehensive psychology examination during the junior or senior year. Questions cover courses in the psychology core, developmental psychology, interpersonal and intrapersonal psychology, and fundamental paradigms in psychology content areas but not courses in the laboratory proficiency area. Students have up to four opportunities to take the comprehensive examination; only the highest score is recorded on the transcript. Performance on the comprehensive examination is reported on the transcript as high pass, pass or fail.

The department also recommends additional courses in other areas, depending on specific career goals. Frequent choices are biology, health care studies, sociology, anthropology, philosophy, business, prelaw and communications.

Additional Requirements for the Bachelor of Science Degree. Candidates for the Bachelor of Science degree will complete all requirements for the Bachelor of Arts in psychology. Bachelor of Science candidates also complete two additional courses (at least one of which must be selected from outside the psychology department) from among the following four options:

- A course (together with its corresponding lab) from the natural sciences (biology, chemistry, ecology, earth and environmental sciences, health care studies, or physics) that does not fulfill the student's Scientific Explanations requirement[1]
- Any four-semester-hour math course numbered 111 or higher (except statistics) that does not fulfill the student's Analytic Thought requirement[1]
- A third course from the fundamental paradigms content area of the psychology major[2]
- PSYC-323 Advanced Research Design and Analysis[2]

1 A student may take two of these courses to meet their B.S. course requirements

2 This course may also be counted as a psychology B.A. elective

Secondary Teaching Certification. Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American literature, at least 6 semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners: Theory and Instruction, EDUC-380 Instructional Design, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching package (EDUC-501, EDUC-502, EDUC-503, and EDUC-600).

In addition to completing the psychology major and the courses listed above, secondary education psychology students must complete certification in social studies. The requirements for certification in social studies are EDUC-425 Methods of Curriculum Instruction and Assessment in Teaching Social Studies, SOCI-101 Principles of Sociology, ANTH-162 Introduction to Anthropology, ECON-105 Elements of Economics, POLI-111 American Government and Politics, POLI-121 Comparative Government and Politics, HIST-322 Pennsylvania History or HIST-324 Pennsylvania's Pasts and Their Publics, 1 course in U. S. history (HIST-111, HIST-112 or HIST-115), 1 course in European history (HIST-131 or HIST-132), and 1 course in non-Western history (HIST-151, HIST-152, HIST-171, HIST-172, HIST-180, or HIST-181).

Minor in Psychology. The minor is designed to acquaint students with important areas in the field while offering flexible options based on their career goals. Students consult with a psychology department adviser to select minor courses. The minor requires 24 semester hours in psychology with a grade of C- or better and a minimum 2.0 grade point average in their psychology classes. Required courses include PSYC-101 Principles of Psychology, 12 semester hours at the 200 level (only one of which may be from the developmental psychology sequence), and eight semester hours in courses numbered 300 or above. Psychology laboratory courses may be applied to the minor. Substitution of 300-level courses for 200-level courses is possible with permission of the minor adviser. Students may not apply the following courses to the minor: PSYC-123 Statistics for the Behavioral Sciences; PSYC-421 Directed Research; PSYC-505 Research Apprenticeship; PSYC-525, 526 Independent Research; and PSYC-527, 528 Practicum.

Honors in Psychology. Award of departmental honors recognizes outstanding performance and dedication in the psychology major. To graduate with honors in psychology, students must do the following:

- Complete all the requirements for either the B.A. or B.S. in psychology.
- Have an overall cumulative GPA of 3.25 and a psychology GPA of 3.50,
- Score at least 80 percent on the comprehensive examination,
- Complete PSYC-525 Independent Research for two or more semester hours, and
- Present their independent research in an approved public forum.

Psi Chi. Students who meet the requisite standards will be invited to join the international psychology honor society.

Psychology Courses

PSYC-101 Principles of Psychology

Introduces principles and theories of behavior. Topics include biopsychology, sensation and perception, learning and memory, and physical and behavioral development. Also covers personality theory and assessment, social and cultural influences on behavior, and behavior pathology and treatment. 4 SH. CC: Social Interactions.

PSYC-123 Statistics for the Behavioral Sciences

Methods in collecting, organizing, summarizing, analyzing and interpreting numerical data. Topics include organizing data in table and graph formats; measures of central tendency, dispersion, relative standing and correlation; probability; and hypothesis testing. Students may earn credit for only one of the introductory statistics courses offered by the departments of management, psychology and mathematical sciences. 4 SH. CC: Analytical Thought.

PSYC-201 Topics in Psychology

Examines selected topics in psychology, depending on student and instructor interest. Course may be repeated for credit if topic is different. 2-4 SH.

PSYC-223 Research Methods in Psychology

Basic research methods. Covers naturalistic observation, surveys and experimental and quasi-experimental designs. Lecture and lab. Prerequisites: Sophomore standing, PSYC-101 and either PSYC-123 or MATH-180. 4 SH. CC: Writing Intensive.

PSYC-230 Social Psychology

The study of how individuals are influenced by social interactions. Examines social phenomena, such as attitude change, conformity, impression formation, stereotyping, aggression and helping. Emphasizes scientific methods and results, explanatory theories and application to practical problems. Prerequisite: PSYC-101. 4 SH.

PSYC-232 Environmental Psychology

The study of how people interact with the environment, both natural and built. Topics covered include environmental perception and cognition; worldviews and attitudes toward nature; impact of environmental factors, such as weather, on behavior and mood; reactions to natural and technological disasters; personal space, territoriality and crowding; and psychological factors in urban planning and in residential, educational and commercial design. Prerequisite: PSYC-101. 4 SH.

PSYC-238 Developmental Psychology: Conception Through Childhood

Human development during infancy and childhood. Emphasizes development and behavioral changes in the biological, cognitive and social cognitive domains. Includes physical, cognitive, emotional, language, moral, social and self-concept development. Examines culture as a context for development and behavior. Requires 12 hours of field experience. Prerequisite: PSYC-101. 4 SH.

PSYC-239 Developmental Psychology: Adolescence

Human development through adolescence. Emphasizes development and behavioral changes in the biological, cognitive and social cognitive domains. Includes pubertal, intellectual, emotional, communicative, moral, social and identity development. Examines culture as a context for development and behavior. Prerequisite: PSYC-101. 4 SH.

PSYC-240 Developmental Psychology: Adulthood

Human development from the adult years through death. Emphasizes development and behavioral changes in the biological, cognitive and social cognitive domains. Includes physical and hormonal changes, intelligence, emotions, communication, career and retirement issues, family changes, relationships and marriage, and death and dying. Examines culture as a context for development and behavior. Prerequisite: PSYC-101. 4 SH.

PSYC-242 Health Psychology

Reviews important topics in this field from both the psychological and biomedical perspective. Topics covered include stress and its management, health-related decision making, chronic disease, and the involvement of psychosocial factors in medical care settings. Emphasis is placed on evaluating the impact of these areas upon everyday life and in clinical settings. Prerequisite: PSYC-101 and sophomore standing. 4 SH. CC: Interdisciplinary.

PSYC-243 Drugs, Society, and Behavior

Examines the physiological and psychological effects of a wide variety of legal and illegal drugs, as well as patterns of drug use. Includes behavioral, pharmacological and neurological points of view. Stresses factual and unbiased information, which is presented in a nonjudgmental fashion. 4 SH. CC: Team Intensive.

PSYC-245 Personality

Covers major theoretical perspectives on personality structure and development, with an emphasis on supporting research and practical applications. Prerequisite: PSYC-101. 4 SH.

PSYC-320 Abnormal Psychology

Examines the causes, symptoms and treatment of mental disorders. Also addresses theoretical perspectives, research methodology, the diagnostic process, assessment procedures and ethical issues associated with the field. Prerequisites: PSYC-101 and sophomore standing. 4 SH.

PSYC-322 Psychological Testing

Introduces the development, characteristics and use of psychological tests. Covers methods of constructing, administering and evaluating tests. Reviews tests of abilities, personality, interest and attitudes. Also explores technical problems and ethical issues common in psychological testing. Prerequisites: PSYC-101 and either PSYC-123 or MATH-180. 4 SH.

PSYC-323 Advanced Research Design and Analysis

Continues and expands topics introduced in PSYC-123 Statistics for the Behavioral Sciences. Emphasizes the design and analysis of multifactor experiments. Examines designs, including completely randomized, randomized block and split-plot factorial designs. Also covers Latin and Greco-Latin square designs and covariance designs. Prerequisites: PSYC-101, statistics, and PSYC-223. 4 SH.

PSYC-334 Psychology of Gender

Explores current theory and research in the development of gender and consequences of gender roles. Covers evolutionary, biological, psychoanalytic, cognitive, social learning and cross-cultural perspectives on gender, as well as approaches that seek to understand interactions among these influences. Same as WMST-334. Prerequisites: Junior standing and either PSYC-101 or SOCI-101. 4 SH. CC: Diversity, Writing Intensive.

PSYC-340 Cognitive Psychology

An examination of how the mind works through the mental processes underlying attention, perception, memory, language, reasoning and decision making, on both behavioral and physiological levels. Prerequisite: PSYC-101. 4 SH.

PSYC-342 Behavioral Neuroscience

Explores neurophysiological influences on behavior. Topics may include human communication, learning and memory, visual processing, ingestive behavior, sleep, emotion and stress, addiction, aggression, reproductive behavior, and neurological and neuropsychological disorders. Prerequisite: Sophomore standing and PSYC-101. 4 SH. CC: Interdisciplinary

PSYC-344 Learning Processes

Examines principle and theories of classical and instrumental conditioning, including the roles of contiguity and contingency, reinforcement, cognitive and behavioral models of classical conditioning and instrumental learning, and factors influencing learning. Prerequisite: PSYC-101. 4 SH.

PSYC-346 Sensation and Perception

Explores how individuals take in information from the environment and interpret it meaningfully. Focuses on the visual and auditory systems, but also covers olfaction, taste and touch. Covers the anatomy of human sensory systems and the neural and cognitive processes that turn sensations into perceptions of the world. Prerequisite: PSYC-101. 4 SH.

PSYC-348 Psycholinguistics

Examines how humans learn, represent, comprehend, and produce language. Focuses on research methodology, language acquisition, comprehension and production, neural representation of language, and language disorders. Prerequisites: PSYC-101 and sophomore standing or permission of the instructor. 4 SH. CC: Interdisciplinary.

PSYC-350 Psychology, Culture, and Ethnicity

A critical examination of the role of culture in human development and behavior. Explores (a) the universality and diversity of human biological, cognitive, social and emotional development and behavior within and across racial, ethnic and cultural groups; (b) the contexts in which multiple cultures intersect or interact with one another and the historical, institutional and personal factors that influence or regulate these interactions; and (c) the theoretical and

methodological approaches psychologists use to explore these issues. Prerequisites: Junior standing and either PSYC-101 or SOCI-101. 4 SH. CC: Diversity, Writing Intensive.

PSYC-360 Laboratory in Behavioral Neuroscience

Using behavioral neuroscience methods and procedures to investigate action potential dynamics, neuroanatomy, visual processing, learning and memory processes, and emotion regulation. Prerequisite: PSYC-342 to be taken concurrently or as a prerequisite. 1 SH.

PSYC-361 Laboratory in Cognitive Psychology

Investigates cognitive phenomena including attention, memory and problem solving using appropriate experimental methodology and techniques. Prerequisite: PSYC-340 to be taken concurrently or as a prerequisite. 1 SH.

PSYC-362 Laboratory in Learning Processes

This course provides an experience with the experimental methods employed in the study of learning. The course utilizes laboratory techniques to examine the principles and theories of classical and instrumental conditioning. Prerequisite: PSYC-344 to be taken concurrently or as a prerequisite. 1 SH.

PSYC-363 Laboratory in Sensation and Perception

Accompanies PSYC-346 Sensation and Perception. Provides direct experience with this topic area through participation in perception studies, collection and analysis of data, and reading and discussion of relevant source literature. Prerequisite: PSYC-346 to be taken concurrently or as a prerequisite. 1 SH.

PSYC-400 Advanced Topics in Psychology

Examines selected advanced topics in psychology, depending on student and instructor interest. Course may be repeated for credit if topic is different. Prerequisites: Any 200-level or higher psychology course and junior or senior standing. 2-4 SH.

PSYC-421 Directed Research

Student/faculty collaborative research in the student's area of interest. Introduces the methodologies and problems of doing original research in psychology. Lecture and lab. Prerequisites: PSYC-223 and instructor's permission. 4 SH. Capstone. CC: Writing Intensive, Team Intensive.

PSYC-450 Introduction to Counseling

An introduction to the counseling profession. Includes basic helping skills, selected intervention techniques, issues in counseling special client populations and professional ethics. Prerequisites: PSYC-320 and junior standing. 4 SH. CC: Ethics Intensive.

PSYC-500 Internship in Psychology

Practical experience in an approved supervised work setting. The student is responsible for arranging the internship and completing a learning contract with the faculty supervisor. May be repeated once for a maximum of six semester hours. 2-4 SH.

PSYC-505 Research Apprenticeship

Provides an opportunity to collaborate on a faculty research project as part of a close mentoring relationship where students learn advanced research methods and data management in a one-on-one setting. Involves a commitment of five hours per week per semester hour of course credit. Open only to students who meet criteria set by supervisor and only when positions are available. May be taken multiple times to a total of 4 semester hours. Prerequisite: Faculty supervisor's permission. 1-4 SH.

PSYC-510 Independent Study

Provides an opportunity to work individually with the instructor for focused reading, study and reflection about a particular topic area. Prerequisite: Instructor's permission. 1-4 SH.

PSYC-525 Independent Research

Students complete an individual research project in their area of interest working closely with a faculty supervisor. Prerequisites: PSYC-421, supervisor's permission. 2-4 SH.

PSYC-526 Independent Research

Students complete an individual research project in their area of interest working closely with a faculty supervisor. Prerequisites: PSYC-421, supervisor's permission. 2-4 SH.

PSYC-527 Practicum

Supervised field experience in student-selected applied settings. Includes related writing assignments. PSYC-527 and 528 may be taken consecutively or concurrently. Prerequisites: Junior or senior standing, PSYC-320, PSYC-450, minimum 2.80 GPA, and instructor's permission. 4 SH.

PSYC-528 Practicum

Supervised field experience in student-selected applied settings. Includes related writing assignments. PSYC-527 and 528 may be taken consecutively or concurrently. Prerequisites: Junior or senior standing, PSYC-320, PSYC-450, minimum 2.80 GPA, and instructor's permission. 4 SH.

PUBLIC POLICY

Michele Ann DeMary, Ph.D., Associate Professor of Political Science, director

Public policy is an interdisciplinary major that combines courses from a number of different disciplines so that students may obtain the knowledge necessary to analyze, explain, and contribute to the evolution of policies designed to serve the public. There are three different tracks in which students may focus: domestic policy, international/development policy or public administration, and non-profit management. These different tracks allow students to acquire the specialized expertise and skills required to work in different fields related to public policy and governance. Regardless of the track, the major is structured so that students develop the analytical and methodological skills necessary to identify the objectives behind different policies, understand the process by which policies are created, and evaluate the extent to which policies fulfill their objectives.

Internships. Relevant practical experience is invaluable to being able to understand and critically evaluate the policy process. Such experience is also essential for our graduates to compete for policy-related positions in the private or public sphere or for admission into a relevant graduate program. As such, students are required to find and secure an internship focused on an area of public policy or public administration relevant to their track and area(s) of interest. Students may apply to receive 2 - 4 semester hours of course credit for this internship. The program adviser works with students to identify and apply for relevant internships.

Learning goals:

- Students will develop the analytical and methodological tools necessary to study and explain the development and implementation of public policies.
- Students will be able to identify the objectives motivating different public policies and to evaluate critically the extent to which a policy fulfills its objectives.
- Students will possess factual knowledge relevant to a specific area of public policy (such as health care policy or development policy) and/or management of organizations focused on the policy process.
- Students will obtain practical experience relevant to the creation and/or evaluation of public policy.
- Students will frequently engage in discussion and debate related to current social, economic, cultural, and political issues, as well as possible solutions and strategies to address these issues.

Public Policy Major. Students must complete 44 semester hours – 24 semester hours in the Core Curriculum and 20 semester hours in one of the tracks below – all with grades of C- or higher.

24 Core Curriculum

- 4 American or comparative politics (POLI-111 American Government and Politics or POLI-121 Comparative Government and Politics)
- 4 Capstone (POLI-501 Senior Seminar, ANTH/SOCI-500 Seminar, or ECON-499 Applied Research Methods)
- 4 POLI-212 Introduction to Public Policy
- 4 ECON-201 Principles of Macroeconomics
- 4 ECON-202 Principles of Microeconomics
- 4 Methods Course: EENV-360 Geographic Information Systems, ECON-322 Introduction to Econometrics, ANTH/SOCI-235 Qualitative Research Methods, ANTH/SOCI-245 Quantitative Research Methods, or POLI-205 Research Methods
- 0-4 Experiential Learning Internship (arranged, uncredited, or students may choose to apply for an additional 2 - 4 semester hours beyond what is required for the major

Track 1: Domestic Policy (at least 8 semester hours from the initial list and at least 12 semester hours focused on a specific policy area)

4 POLI-300 Seminar when the topic is Interest Groups

4 POLI-215 Law and Politics

4 SOCI-315 Social Stratification in Contemporary Society

or SOCI-413 Race, Ethnicity and Minorities

4 ANTH-311 Regulating Bodies: Food, Sex, Drugs and the Economy

4 POLI-317 The U.S. Congress

4 POLI-319 State and Local Government and Politics

Education Policy

2 EDUC-389 Assessment

4 EDUC-250 Educational Psychology

2 EDUC-102 Historical and Philosophical Foundations of Education

2 EDUC-380 Instructional Design

2 EDUC-101 Introduction to Education and Society

4 ANTH-162 Introduction to Anthropology

Environment Policy

4 EENV-242 Climate and Global Change

4 EENV-105 Energy and the Environment

4 ENST-335 Environmental Laws and Regulations

4 EENV-101 Environmental Science

4 POLI-333 Development, Globalization and Society

4 RELI-235 Environmental Ethics

Health Care Policy

4 BIOL-157 The Biology of Women

2 HLCR-080 The Business of Health Care

4 ACCT-330 Cost Management

4 PSYC-242 Health Psychology

4 PSYC-243 Drugs, Society, and Behavior

4 PHIL-224 Bioethics

4 HLCR-370 Human Health and Disease

4 HIST-323 History of American Medicine

Some departments, most notably the Biology Department, offer topics-based seminars that may be relevant to these policy areas and which may be approved as counting toward the chosen track by the program director.

Track 2: International Policy/Development Policy (20 credits must be chosen from the following)

4 POLI-331 American Foreign Policy

4 POLI-323 Comparative Foreign Policy

4 POLI-333 Development, Globalization and Society

4 ECON-335 Economic Development

4 ECON-465 Global Financial Markets

or ECON-330 International Trade and Finance

4 POLI-334 International Organizations and Law

4 ECON-338 International Political Economy

Track 3: Public Administration/Non-Profit Management (20 credits must be chosen from the following)

4 ECON-311 Intermediate Macroeconomics

4 ACCT-210 Legal Environment

4 MGMT-360 Management and Organizational Behavior

4 ECON-332 Public Finance

4 SOCI-374 Social Work

2 PHIL-115 Social Justice Leadership

2-4 Choose from:

4 ACCT-330 Cost Management

2 ACCT-340 Governmental and Nonprofit Accounting

4 ECON-315 Managerial Economics

Minor in Public Policy. Students pursuing the public policy minor must complete 24 semester hours with a grade of C- or higher. The minor is comprised of POLI-212 Introduction to Public Policy, either ECON-201 Principles of Macroeconomics or ECON-202 Principles of Microeconomics, and 16 semester hours from a chosen track. No more than 8 semester hours for the minor may be taken at the 100 level, and at least 4 semester hours must be taken at the 300 level or higher. Only 4 semester hours may be double-counted with the student's major or with another minor.

RELIGIOUS STUDIES

Faculty

Karla G. Bohmbach, Ph.D., Professor of Religious Studies, department head

Jeffrey K. Mann, Ph.D., Associate Professor of Religious Studies

Thomas W. Martin, D.Phil., Associate Professor of Religious Studies

Matthew L. Duperon, Ph.D., Assistant Professor of Religious Studies

Religious Studies

The study of religion is fundamentally an interdisciplinary endeavor, involving a variety of intellectual approaches in the analysis of diverse expressions of religious phenomena and cultures around the world. Reflecting the methodological and substantive breadth of the field of religious studies, the religious studies major at Susquehanna University is designed to accomplish the following student learning goals:

Learning Goals:

- To develop the ability to critically analyze primary religious texts.
- To use various interpretative perspectives (literary, historical, theological, ideological, etc.) in deriving meaning from religious texts.
- To engage with at least one non-Western religious tradition in historical and geographical context.
- To think critically and cross-culturally about ethical questions in relationship to themselves, society and/or the world.
- To engage critically with issues and problems in contemporary societies as they relate to religious thought and/or practice.
- To conduct substantive research (finding, consulting and engaging both primary and secondary resources and making preliminary connections and conclusions from the same) and present this research in written form.
- To reflect upon and assess work in critical and constructive ways by applying concepts, theories and methods within academic and professional contexts.

Requirements for the Major in Religious Studies. Majors in religious studies complete at least 36 semester hours in the discipline with grades of C- or better. To ensure both breadth and depth of study, there is one compulsory course, and the remaining 32 semester hours must include at least one course from each of the four subject areas identified below. At least 20 of the 32 semester hours must be taken at the 200 level or higher. Topics courses and independent study courses may be given a subject area designation by the instructor in consultation with the department. The compulsory course does not count toward the subject area distribution requirement.

4 *Compulsory Course for the Religious Studies Major*

RELI-101 Introduction to Religious Studies

Subject Area Courses

16 Must include at least one course from each of the four subject areas from Primary Religious Texts, Ethics, Non-Western Religions and Contemporary issues in Religion

Electives Courses

16 Elective courses can be additional courses within the four subject areas or other courses identified below. At least 20 of the 32 semester hours taken to fulfill the subject area and elective requirements must be at the 200 level or above.

4 *Primary Religious Texts*

RELI-103 The New Testament

RELI-201 The Hebrew Bible

RELI-203 The Historical Jesus

RELI-207 Women in the Biblical Tradition

RELI-300 The Book of Revelation and Zombie Apocalypses

4 *Ethics*

RELI-102 Applied Biblical Ethics

RELI-107 Faiths and Values

RELI-115 Jewish Philosophy and Ethics

RELI-117 Introduction to Asian Religions

RELI-203 The Historical Jesus

RELI-208 Buddhism

RELI-235 Environmental Ethics

RELI-315 Being Awesome At Life

RELI-316 Daoism, Zen and Authenticity

RELI-318 Confucian Ethics

4 *Non-Western Religions*

RELI-105 World Religions

RELI-117 Introduction to Asian Religions

RELI-120 Introduction to Islam

RELI-208 Buddhism

RELI-225 Women in Religion

RELI-316 Daoism, Zen and Authenticity

RELI-318 Confucian Ethics

4 *Contemporary Issues in Religion*

RELI-102 Applied Biblical Ethics

RELI-107 Faiths and Values

RELI-208 Buddhism

RELI-220 Magic, Witchcraft and Religion

RELI-225 Women in Religion

RELI-235 Environmental Ethics

RELI-350 Science and Religion

RELI-360 Religious Fundamentalisms in the Modern World

Electives

RELI-113 Introduction to Judaism

RELI-209 The Bible and Archaeology

RELI-210 Philosophy of Religion

RELI-215 Music in Christian Rituals

RELI-309 Luther: Life and Thought

RELI-312 Church History: Early and Medieval

RELI-313 Church History: 1500 to the Present

RELI-500 Capstone

Minor in Religious Studies. Students minoring in religious studies complete 20 semester hours in the discipline with grades of C- or better. Students consult with an assigned minor adviser to select both upper- and lower-level courses. Of the five courses, at least two must be at the 200 level or above.

Honors. The honors program in religious studies encourages and commends outstanding academic work. To graduate with departmental honors in religious studies, students must do the following:

- Complete requirements for the major,
- Have a cumulative GPA of at least 3.00 overall and at least 3.50 in religious studies, and
- Perform outstanding academic work in religious studies capstone.

Capstone Requirement. Students majoring in religious studies are expected to take the senior capstone requirement in the appropriate subject. A student with a double major may fulfill the university capstone requirement in a major outside of this department. Any student who elects to fulfill the capstone requirement in this manner must complete the religious studies major by successful completion of an additional four-semester-hour course, or the equivalent, in the relevant subject. Any student wishing to qualify for religious studies departmental honors must fulfill the appropriate capstone as provided by the Religious Studies Department in addition to any capstone requirements imposed in a second major.

The course description for the departmental capstone states that it is "to serve [students] as a culmination of all their studies, allowing them to address a particular topic, issue or thinker in religious studies through the lens of their total undergraduate education." Religious studies majors are encouraged to develop capstone projects that also draw on knowledge and strengths they have acquired in declared minors. Primary oversight of such projects will rest with the appropriate faculty supervisor in religious studies, although students will also be expected to work with an appropriate adviser from their minor area(s) of study.

Religious Studies Courses

RELI-101 Introduction to Religious Studies

Explores the human phenomenon of religion via the interdisciplinary perspectives and methods of religious studies. Seeks to gain understanding of a wide range of cross-cultural human religious experiences, such as ritual, the sacred, the divine, religious community, religious ethical norms, mysticism, myth and doctrine. An emphasis on analysis of gender, power, privilege and justice in religion. Provides a foundation for understanding religious studies as a discipline. 4 SH CC: Diversity, Ethics.

RELI-102 Applied Biblical Ethics

Examines what contributions biblical texts can make to specific moral dilemmas in contemporary society, using the biblical traditions of the Old and New Testaments together with ethical theory and the Christian traditions of biblical interpretation. Specific problems vary, but at least six of the following areas are covered each time the course is offered:

economics and consumerism; personal vocation; environmentalism; recreation and entertainment; sexual issues; health care; violence and war; education and moral development; media; and racism. 4 SH. CC: Ethics, Team Intensive.

RELI-103 The New Testament

An introduction to those texts identified as Christian scripture. Particular focus on the social, historical and religious contexts that helped shape this literature and the ways in which these texts witness to the early history of Christianity. 4 SH. CC: Literary Expression.

RELI-105 World Religions

Examines both historical and contemporary aspects of the world's major religions. 4 SH. CC: Diversity Intensive, Ethics Intensive.

RELI-107 Faiths and Values

Examines the contemporary personal and social consequences of religiously based values from a multicultural perspective. 4 SH. CC: Diversity, Ethics.

RELI-113 Introduction to Judaism

Examines Judaism as it has been defined and developed as a way of thought and a way of life. The course focuses on central religious concepts, holidays, life-cycle ceremonies and various forms of religious expression, including prayer and ritual, in order to help students understand what it means and has meant to be a Jew. Same as JWST-113. 4 SH. CC: Diversity.

RELI-115 Jewish Philosophy and Ethics

Explores issues and problems related to the philosophical and ethical literature of the Jews, from the Talmudic period through the present. Topics vary and may include classical Jewish texts, mysticism, continental and poststructural Jewish philosophy, morality and social practice, women and gender, and Judaism in America. The course encourages students to recognize in Jewish texts reflections of Judaism that are diverse and, at times, antithetical to one another. Same as JWST-115. 4 SH. CC: Ethics.

RELI-117 Introduction to Asian Religions

This course provides students with an introduction to various religious traditions in Asia. It will provide an overview of the history, beliefs and practices of Hinduism, Buddhism, Confucianism and Daoism, with the intent of helping students to understand the culture, history and values of Asian communities. 4 SH. CC: Diversity Intensive, Ethics Intensive.

RELI-120 Introduction to Islam

Examines the traditions, history, and main social and legal institutions of Islam. Besides considering the basic tenets and texts of the religion, this course focuses on the variety of ways in which Muslims and non-Muslims have understood and interpreted Islam. Specific topic areas addressed include the life of the Prophet of Islam, Islamic pre-modern, modern and contemporary history, the Quran, the Islamic concept of God and society, the role of women, and Islamic governments and movements. 4 SH. CC: Ethics, Diversity.

RELI-201 The Hebrew Bible

An introduction to the texts of the Hebrew Bible, with concern for their sociohistorical contexts, literary forms and theological insights. Attention also to the variety of ways in which this literature has been and continues to be valued. Same as JWST-201. Prerequisites: Sophomore standing and one of the following: a course in religious studies, a course in English, a course in history, DIVS-100, WMST-100, or instructor's permission. 4 SH. CC: Diversity Intensive, Interdisciplinary, Writing Intensive.

RELI-203 The Historical Jesus

Close reading of both the canonical and noncanonical gospels and their various representations of Jesus. Consideration of the search for the historical Jesus and the nature of the communities from which the gospels derived. 4 SH. CC: Historical Perspectives, Ethics Intensive.

RELI-207 Women in the Biblical Tradition

An extensive inquiry into women's stories and images in the Hebrew Bible, New Testament and related literature from the biblical period. Explores the range of roles played by women within biblical narratives, the variety of metaphorical/symbolic uses of femininity in biblical traditions, and legal and ethical precepts related to the status of women in the biblical period. Methods and approaches from the social sciences, history, literary studies and theology, as shaped by feminist theory, will serve as the main guides for this study. Same as WMST-207 and JWST-207. Prerequisites: Sophomore standing and one of the following: a course in religious studies, a course in women's studies, a course in English, a course in history, or DIVS-100. 4 SH. CC: Diversity Intensive, Interdisciplinary, Writing Intensive.

RELI-208 Buddhism

This course gives students an intensive introduction to Buddhism, one of the most influential and vibrant religious traditions in the world today. Beginning at home with North American Buddhism, the course covers the history, practices and beliefs of all major Buddhist traditions, organized geographically. Primary texts in English translation are emphasized, and students are encouraged to try out Buddhist practices in optional sessions. The course also covers contemporary Buddhist responses to ethical issues like abortion, global poverty and the peace process. 4 SH. CC: Diversity Intensive, Ethics.

RELI-209 The Bible and Archaeology

A study of the events, persons and sociocultural processes of ancient (biblical) Israel. Examines carefully the ways in which both the Bible and archaeology can and cannot serve as prime source material for a history of ancient Israel. Considers also the relationships between the biblical text and archaeological findings for historical reconstructions. Prerequisites: Sophomore standing and either one course in history or one of the following courses: RELI-102, RELI-103, RELI-201, RELI-203, or RELI-207. 4 SH. CC: Historical Perspectives, Interdisciplinary.

RELI-210 Philosophy of Religion

Focus on classical and contemporary writings to determine the credibility of religious faiths and beliefs. Same as PHIL-210. 2 SH.

RELI-215 Music in Christian Rituals

Examines the theological and musicological aspects of artistic contributions to Christian worship as recognized in varied cultural settings. Same as MUSC-215. Prerequisite: Junior standing. 4 SH. CC: Artistic Expression, Diversity Intensive, Interdisciplinary.

RELI-220 Magic, Witchcraft and Religion

Examines anthropological concepts of magic, witchcraft and religion in a cross-cultural context. Drawing on ethnography, anthropological theory, history and film, the class explores the nature of magic, witchcraft and religion; the relations among them; and the ways in which they interact with other social formations–for example, gender, politics and economics. Countries studied have included South Africa, India, Haiti and the United States. Same as ANTH-220. 4 SH. CC: Diversity, Social Interactions.

RELI-225 Women in Religion

Critically studies how women are perceived, portrayed and involved in a number of the world's religions, including Hinduism, Buddhism, Judaism, Islam, Christianity and women's spiritual movements. Same as WMST-225. Prerequisite: Sophomore standing. 4 SH. CC: Diversity Intensive, Interdisciplinary, Writing Intensive.

RELI-235 Environmental Ethics

This course combines religious, philosophical and ecological thought as a means of addressing questions about appropriate ethical responses, actions and attitudes in our relationship with our ecosystems. It covers current utilitarian, deontological and virtue-based religious moral thought to focus on questions about the morality of economic and built-environment infrastructures and resultant cultural sea-shifts that need to take place to enable us to embody an ethical relationship with the environment. Prerequisite: Sophomore standing or permission of the instructor. 4 SH. CC: Ethics, Interdisciplinary, Team Intensive.

RELI-277 Philippines–History, Religion, and Culture

This course offers an introduction to the history, religion and culture of the Philippines. It is designed as a pre-departure course for students taking part in the GO-Philippines program. 2 SH.

RELI-300 The Book of Revelation and Zombie Apocalypses

This course uses contemporary zombie films to frame an interdisciplinary exploration into the ancient origins of the apocalyptic genre and the origins and reception history of the Book of Revelation. Discourses about the end(s) of the world/society are explored across history in an effort to find ethically meaningful ways of interpreting John's apocalypse. Prerequisite: Sophomore standing. 4 SH. CC: Ethics, Interdisciplinary.

RELI-305 Topics in Religion

Examines selected topics in religion, depending on student and instructor interest. Course may be repeated for credit if topic is different. 2-4 SH. CC: Ethics Intensive and Interdisciplinary when the topic is Theology and Philosophy in the Fiction of C.S. Lewis.

RELI-309 Luther: Life and Thought

Through readings from the writings of Martin Luther (1483-1546) and major secondary sources, this course examines the life, thought and importance of Luther in the context of his times and with attention to his significance for today's Christian churches and interfaith dialogs. 4 SH.

RELI-312 Church History: Early and Medieval

The purpose of this course is to offer an introduction to the academic study of the Christian Church from its inception through the Middle Ages. Beginning with a quick background sketch of the events in the New Testament, this course will examine the people, events and theology that we associate with the early and medieval church, up to the dawn of the Reformation. This class is designed, then, to introduce students to the defining people and events during this period that shaped, and continue to shape, the Christian Church. 4 SH. CC: Historical Perspectives.

RELI-313 Church History: 1500 to the Present

The purpose of this course is to offer an introduction to the academic study of the Christian Church from the 16th century until today. Beginning with a quick background sketch of the events in the Middle Ages, this course will examine the people, events and theology that we associate with the Reformation, Enlightenment and contemporary Church. We will also be considering the history of the Church outside of its Western parameters. This class is designed, then, to introduce students to the defining events during these periods that shaped, and continue to shape, the Christian Church. Prerequisite: Sophomore standing. 4 SH. CC: Historical Perspectives.

RELI-315 Being Awesome At Life

This course offers a cross-cultural examination of the pursuit of a good human life, and how one learns to live better. In other words, it is about the theory and practice of being awesome at life. We focus on ethical dispositions (skills, habits and virtues) as critical features of ethics, explored through texts from various religious and philosophical figures in English translation, as well film and other media. Prerequisite: Junior standing. Previous experience in philosophy or religious studies is helpful, but not required. 4 SH. CC: Ethics, Team Intensive.

RELI-316 Daoism, Zen and Authenticity

This course is an in-depth study of two uniquely East-Asian religious traditions: Daoism and Zen Buddhism. It is also an exploration of the ethical implications of authenticity in personal conduct, especially as it relates to interpersonal communication and interaction. We will read primary texts in English translation as a way to understand how these texts were created and used in the East Asian context, as well as how they might speak to students' own ethical lives. No prerequisites, but previous experience in Religious Studies or Philosophy will be helpful. 4 SH. CC: Ethics, Oral Intensive.

RELI-318 Confucian Ethics

This course introduces students to the indigenous system of ethical thought that has most profoundly shaped Chinese and East Asian culture: Confucianism. We focus on original textual material in English translation and place these materials in their historical context to understand their relationship to each other and to subsequent developments in

China and beyond. However, the course primarily focuses on the ideas these texts express and how those ideas relate to universal concerns in ethics, as well as specific ethical issues. In other words, this is first and foremost an ethics class, and in particular it deals with Chinese materials and East Asian approaches to ethical issues. 4 SH. CC: Diversity Intensive, Ethics, Writing Intensive.

RELI-350 Science and Religion

Examines the interaction of science and religion by looking at the history of their relationship, philosophical and theological issues, and current debate on specific questions of interest to both disciplines. Prerequisite: Sophomore standing or instructor and adviser permission. 4 SH. CC: Interdisciplinary, Ethics Intensive.

RELI-360 Religious Fundamentalisms in the Modern World

This course examines religious beliefs, practices and ways of life that have come to be labeled "fundamentalist." The course attends in particular to their emergence in the modern world and the ways in which they critically engage secular convictions about morality, aesthetics and epistemology. The focus of the course is on Protestant fundamentalism and the Islamic Revival, but, depending on student interest, the class may also consider "ultra-orthodox" Judaism or Hindu nationalism. Same as ANTH-360. Prerequisite: One of the following: ANTH-162, ANTH-220, SOCI-101, SOCI-102, a 100-level religious studies course or instructor's permission. 4 SH. CC: Diversity Intensive, Social Interactions, Writing Intensive.

RELI-400 Independent Study

Individual and in-depth study of a specialized topic under a faculty member's direction. May involve a reading program, a major research paper or experiential learning in conjunction with written analysis and reflection. Prerequisite: Department permission. Variable credit.

RELI-500 Capstone

Study of a particular topic under a faculty member's direction. The capstone is to serve students as the culmination of their studies allowing them to address questions in religious studies through the lens of their total undergraduate education. Such projects could be structured in a number of different ways and might include an experiential learning aspect. The capstone should culminate in a major research paper. 2-4 SH. Capstone.

SOCIOLOGY AND ANTHROPOLOGY

Faculty

John J. Bodinger de Uriarte, Associate Professor of Anthropology

Dave Ramsaran, Ph.D., Professor of Sociology

Shari Jacobson, Ph.D., Associate Professor of Anthropology

Michael Smyth, Ph.D., Associate Professor Sociology

Salvatore R. D'Angelo, Visiting Lecturer in Sociology

Sociology and Anthropology Studies

Learning goals:

- Develops a critical understanding of the relationships between individuals, culture and social structures.
- Improves abilities to speak, write and present information clearly to a variety of audiences.
- Develops an understanding of the links between theory and methods in the production of knowledge.
- Analyzes and critiques the dynamic nature of contemporary social and cultural worlds.

Requirements for Degrees. The Department of Sociology and Anthropology offers a major in sociology, a major in anthropology, a minor in sociology and a minor in anthropology. It also offers, in collaboration with the Department of Education, a course of study that leads to social studies teacher certification.

Sociology

Requirements for a Major in Sociology. A sociology major must complete 44 semester hours of required courses in sociology and anthropology and receive grades of C- or better. All majors must achieve at minimum a cumulative GPA of 2.00 in courses offered by the department. There are five compulsory courses. At least 12 of the remaining 24 hours must be taken at the 300 level or higher. In consultation with a department adviser, a sociology major may fulfill some of the major requirements by taking anthropology courses. The department recommends that SOCI-235/ANTH-235 Qualitative Research Methods, SOCI-245/ANTH-245 Quantitative Research Methods and SOCI-311 Sociological Theory be completed by the end of the junior year. The capstone requirement for a major in sociology is met by taking SOCI-500/ANTH-500 Seminar or, with the permission of the department chair, by taking SOCI-501/ANTH-501 Independent Research, which requires the production of a research paper.

20 Compulsory Courses for Sociology Major

- 4 SOCI-101 Principles of Sociology
- 4 SOCI-235 Qualitative Research Methods
- 4 SOCI-245 Quantitative Research Methods
- 4 SOCI-311 Sociological Theory
- 4 SOCI-500 Seminar

24 Electives

Of the 24 remaining semester hours, at least 12 must be taken at the 300 level or higher.

Requirements for a Minor in Sociology. Students must complete 24 semester hours of required courses in sociology and receive grades of C- or better. All minors must achieve at minimum a cumulative GPA of 2.00 in courses credited

toward the minor. Required courses include SOCI-101 Principles of Sociology, SOCI-235/ANTH-235 Qualitative Research Methods or SOCI-245/ANTH-245 Quantitative Research Methods, and SOCI-311 Sociological Theory. At least eight of the remaining 12 semester hours must be taken from courses offered at the 200 level or higher. Credit received for practica courses are not included in the 24 semester hours required of sociology minors.

Anthropology

Requirements for a Major in Anthropology. An anthropology major must successfully complete 44 semester hours of coursework primarily in anthropology. Courses in related disciplines (e.g., sociology and history) may be credited toward the major as noted below. Students must receive grades of C- or better in classes applied to the major and achieve a cumulative GPA of 2.00 in the major. Required courses include ANTH-162 Introduction to Anthropology, ANTH-235/SOCI-235 Qualitative Research Methods, ANTH-400 History of Anthropological Theory and, as a capstone experiences, ANTH-500/SOCI-500 Seminar or, with the permission of the department chair, by taking ANTH-501/SOCI-501 Independent Research. Of the remaining 28 semester hours, students must take at least five anthropology courses designated as theory courses, one course designated as an area studies course and one elective course. At least 12 of the theory course semester hours must be taken at the 300 level or above. Topics courses or Honors courses taught by anthropology faculty may be credited toward the theory requirement pending departmental approval. GO programs reviewed by the department may satisfy the area studies requirement for the major. Depending on the project, ANTH-501 Independent Research may be credited toward either the theory or area studies requirement.

Required Courses

4 ANTH-162 Introduction to Anthropology

4 ANTH-235 Qualitative Research Methods

4 ANTH-400 History of Anthropological Theory

4 ANTH-500 Seminar

Theory Courses

4 ANTH-152 Public Culture

4 ANTH-220 Magic, Witchcraft and Religion

4 ANTH-222 Life During Wartime

4 ANTH-237 Museums and Anthropology

4 ANTH-310 National, Transnational and Diasporic Communities

4 ANTH-311 Regulating Bodies: Food, Sex, Drugs and the Economy

4 ANTH-312 History and Culture of Jewish Cuisines

4 ANTH-322 Visual Anthropology: Imagining the Other

4 ANTH-341 Family and Kinship

4 ANTH-360 Religious Fundamentalisms in the Modern World

4 ANTH-413 Race, Ethnicity and Minorities

Area Studies Courses

Latin America and the Caribbean

4 SOCI-210 Caribbean Culture and Society

4 SPAN-305 Spanish for the Service Professions

4 SPAN-447 Seminar in Hispanic-American Studies

4 HIST-180 Latin America, 1492-1825

4 HIST-181 Latin America 1825-Present

Asia

4 HIST-151 Traditional East Asia

4 HIST-152 Modern East Asia

4 HIST-258 Modern China

Africa

4 HIST-171 African Civilization

4 HIST-172 Early Modern Africa

North America

4 ANTH-227 Native America North of Mexico

4 HIST-111 United States History Before 1877

4 HIST-112 United States History Since 1877

4 HIST-115 African-American History

4 HIST-215 The Civil War in the American Experience

4 HIST-218 Work and Play in the U.S.A.

4 HIST-313 Social History of the United States

4 HIST-314 The Long Civil Rights Movement

4 HIST-316 Making a Multicultural United States

4 HIST-323 History of American Medicine

4 HIST-370 American Women

4 FILM-230 American Film and Culture

4 ENGL-345 Themes in Modern American Literature

Europe

4 HIST-132 Europe, 1648-Present

4 HIST-226 Soviet and Russian Politics

4 HIST-321 European Union

4 FRNC-310 French/Francophone Literary and Cultural or Film Studies

4 FRNC-320 French/Francophone Film Studies

4 FRNC-460 Seminar on French and Francophone Literature and Culture or Film

4 GERM-460 Seminar in German Studies

4 GERM-461 German Theatre and Film

4 SPAN-350 Introduction to Hispanic Literature

4 SPAN-445 Seminar in Peninsular Spanish Studies

4 ENGL-325 Themes in Modern British Literature

Diasporas and Transnations

4 JWST-113 Introduction to Judaism

4 JWST-115 Jewish Philosophy and Ethics

4 JWST-255 Jewish Literature

4 JWST-312 History and Culture of Jewish Cuisines

4 JWST-338 The Holocaust

For the purposes of calculating the required 2.00 minimum GPA in the anthropology major, the Sociology and Anthropology Department uses all of the major courses with the ANTH prefix.

Requirements for a Minor in Anthropology. Students must complete 24 semester hours in anthropology and receive grades of C- or better. All minors must achieve at minimum a cumulative GPA of 2.00 in courses credited toward the minor. Required courses include ANTH-162 Introduction to Anthropology, ANTH-235/SOCI-235 Qualitative Research Methods and ANTH-400 History of Anthropological Theory. Students must also complete eight semester hours of anthropology theory courses and four semester hours of an area studies course.

Teaching Certification. Coursework required by the state of Pennsylvania for admission to the teacher certification program includes successful completion of ENGL-100 Writing and Thinking or equivalent course, at least 3 semester hours in British or American literature, at least 6 semester hours of mathematics coursework (or other courses which satisfy the Central Curriculum Analytic Thought requirement), and at least one 40-hour externship.

Education course requirements for secondary education are EDUC-101 Introduction to Education and Society, EDUC-102 Historical and Philosophical Foundations of Education, EDUC-250 Educational Psychology, EDUC-260 Introduction to Special Education, EDUC-270 Instruction of Exceptional Students, EDUC-330 Technology in Education, EDUC-350 English Language Learners: Theory and Instruction, EDUC-380 Instructional Design, EDUC-479 Principles of Learning and Teaching in Secondary Education, EDUC-483 Differentiated Instruction and Classroom Management in Secondary Education, and the EDUC-500 Student Teaching package (EDUC-501, EDUC-502, EDUC-503, and EDUC-600).

Sociology students who seek secondary education certification in social studies must take the following additional courses outside the Department of Sociology and Anthropology: EDUC-425 Methods of Curriculum Instruction and Assessment in Teaching Social Studies, ECON-105 Elements of Economics, POLI-111 American Government and Politics, POLI-121 Comparative Government and Politics, PSYC-101 Principles of Psychology, HIST-322 Pennsylvania History or HIST-324 Pennsylvania's Pasts and Their Publics, and 1 course in U. S. history (HIST-111, HIST-112 or HIST-115).

Secondary education sociology students must also take the following courses within the Department of Sociology and Anthropology: ANTH-162 Introduction to Anthropology, SOCI-101 Principles of Sociology, SOCI-235 Qualitative Research Methods, SOCI-245 Quantitative Research Methods, SOCI-311 Sociological Theory, SOCI-333 Development, Globalization, and Society or ANTH-310 National, Transnational and Diasporic Communities, SOCI-341 Family and Kinship, SOCI-413 Race, Ethnicity, and Minorities, SOCI-500 Seminar or SOCI-501 Independent Research, and 8 semester hours in sociology electives (student teaching may be substituted for the electives requirement).

Honors. The departmental honors program recognizes outstanding academic performance in the major with departmental honors. To graduate with departmental honors in sociology or anthropology, candidates must:

- Have a GPA of 3.50 or above in the major and 3.25 or above overall,
- Secure the recommendation of the department faculty to pursue honors,
- Write a senior thesis or equivalent paper based on departmental seminars, and
- Sit for an oral honors examination.

Sociology Courses

SOCI-101 Principles of Sociology

Methods and approaches of scientific analysis applied to contemporary cultures and societies. Includes socialization, individual and group interaction, major social institutions, social organizations, social change, and collective behavior. 4 SH. CC: Diversity, Social Interactions.

SOCI-102 Social Problems

Basic concepts and principles of sociology applied to significant social problems. Examines social disorganization, cultural conflicts and personal deviations associated with the stress of industrialization, urban life and bureaucracy. 4 SH. CC: Social Interactions.

SOCI-202 Black Feminism I

Black feminism is the study of how gender, race and class issues are inextricably linked to oppression. Black feminism goes beyond mainstream feminisms and sees itself as a collective social movement. This course is primarily an activist response to intersecting oppressions that subordinate black women and others in terms of race, gender, class, sexuality, nation and the need for autonomy in the face of the privileged. Politics not only concerns personal experiences, however challenging and courageous, but must address larger agendas that go beyond individual temperament, choices and placement. There are no formal prerequisites for this course. 4 SH. CC: Diversity.

SOCI-206 Gendered Bodies and Social Control

Gender roles are delineated by the norms and behaviors that an individual is expected to perform in society. Such roles change over time. This course examines the social construction of gender, the mechanisms through which society controls "gendered" bodies, and how gender intersects with race, ethnicity, class, disability, sexuality, age and other dimensions of identity. Normative behavior and performance, group sexual misconduct, sexual politics and living with apparent contradiction in regards to gender are key topics. Prerequisite: SOCI-101, ANTH-162 or SOCI-102. 4 SH. CC: Diversity Intensive.

SOCI-210 Caribbean Culture and Society

This course considers the history, politics, economics and culture of the people of the Caribbean area. It focuses on issues of self-identity and expression within the context of hegemonic European values and institutions. Prerequisite: SOCI-101 or ANTH-162. 4 SH. CC: Diversity Intensive, Writing Intensive.

SOCI-235 Qualitative Research Methods

This course is designed to develop students' competence as social researchers. We will cover both theoretical issues-like the epistemology and ethics of qualitative research-and practical ones-the nuts and bolts of the research process, from data collection to analysis. The course will focus on the connection between researchers' theoretical goals and the practical resources and constraints of the research process. Students will be trained in some of the common forms of qualitative social research: ethnography, interviews, content analysis, case studies and the comparative method. Students will also be required to employ qualitative methods to collect and analyze original data, both for (near-weekly) short written assignments and a 15-20 page final research paper. Same as ANTH-235. Prerequisites: Sophomore standing and at least one introductory course in sociology or anthropology. 4 SH. CC: Ethics Intensive, Writing Intensive.

SOCI-245 Quantitative Research Methods

This course is intended to introduce students to common methods used in quantitative social science research. It is intended to help us conceptualize a research problem and how to collect evidence to address that research problem. Students will learn how to conduct basic quantitative social science research, evaluate relevant evidence and determine the best method to be used based on theoretical and practical considerations. The course also focuses attention on such issues as the time dimension, sampling design and ethical issues when conducting quantitative social research. Finally, we use SPSS and series of datasets to test and demonstrate our knowledge of the respective statistical procedures. Upon completion of this course, students should be better able to critically evaluate the quantitative research they encounter in their social science coursework and in the mass media, as well as be able to design a basic quantitative research project. Same as ANTH-245. Prerequisite: Sophomore standing. 4 SH. CC: Ethics Intensive.

SOCI-255 Crime and Justice

This course explores the dimensions, causes, costs and correlates of the crime problem in the U.S. and considers the uses and limitations of the criminal justice system in dealing with it. To do this, the course is organized around three interdisciplinary literatures: criminology, law and society, and criminal justice studies. Focusing on issues of lawmaking, law breaking and state response to crime, students will review and critique classical and contemporary approaches to the study of these phenomena; identify a range of theoretical approaches and empirical findings in the literatures identified above; and assess the strengths and limitations of contemporary crime control policies in light of accumulated empirical evidence. Prerequisite: SOCI-101, SOCI-102 or ANTH-162. 4 SH.

SOCI-301 Topics in Sociology

Intermediate study of selected topics. Topics vary and depend on student and instructor interest. Possibilities include social policy analysis, sociology of dissent, juvenile delinquency and sex roles. Prerequisite: SOCI-101, ANTH-162 or instructor's permission. 2-4 SH.

SOCI-311 Sociological Theory

Western social theory from Comte to the present with emphasis on recent developments. Considers major schools, including positivism, conflict theory, symbolic interactionism, functionalism, social exchange theory, critical theory, phenomenological theory and postmodernism. Prerequisite: Three courses in sociology. 4 SH.

SOCI-315 Social Stratification in Contemporary Society

This course examines factors that contribute to social stratification in contemporary society. Specifically, the course looks at three dimensions of social stratification, namely the economic, political and ideological dimensions and interaction of race, class and gender in this process. Topics include theories of social stratification, occupational prestige and mobility, segregation, corporate welfare, social welfare, and the ideology of legitimization. Prerequisites: Sophomore standing and SOCI-101, SOCI-102 or ANTH-162. 4 SH. CC: Diversity Intensive, Interdisciplinary.

SOCI-316 Social Justice

Social Justice is a team-taught course focusing on the multiple forms of oppression that occur in any given society. The distribution of various advantages and disadvantages can be affected by capitalistic systems, greed, personal intention, social and/or political agendas, and even compromise. In this course, we will study the changing dynamics of oppression, earned and unearned privileges, and competing ethical and social theories of social justice and their interaction with race, ethnicity, nationality, ability, gender, class and sexuality. Students will have the opportunity to complete social justice projects requiring their collaborative engagement to identify and understand strategies for social transformation in areas as diverse as access to technology, globalization and ethics. Prerequisite: SOCI-101, ANTH-162 or SOCI-102 or instructor's permission. 4 SH. CC: Ethics Intensive, Team Intensive.

SOCI-333 Development, Globalization and Society

A study of the relationship between economic development paradigms, institutions and groups in society. The course focuses on international economic relationships, world order, and the resultant social and political conflict. More specifically, this course examines how global economic development policy since the 1960s has influenced relations between states, major institutions, organizations and social groupings in both the developed and developing world. Same as POLI:333. Prerequisite: Junior standing and either SOCI-101 or ANTH-162. 4 SH. CC: Interdisciplinary.

SOCI-341 Family and Kinship

A comparative study of family and kinship. Covers the structures and functions of family and kinship in different cultures. Emphasizes historical and contemporary changes in knowledge and practice focused on family, marriage, procreation and kinship in the United States with particular emphasis on the cultural construction of kinship, the naturalization of identity and difference, the politics of reproduction and new reproductive technologies. Same as ANTH-341. Prerequisite: SOCI-101 or ANTH-162. 4 SH. CC: Diversity Intensive, Writing Intensive.

SOCI-350 Punishment and Society

This course develops students' ability to understand and critique modern penal practices and to interrogate the relationship of punishment to criminal behavior, the rendering of justice, the promotion of public safety and the management of risk. In addition to examining the structure, practices and legal foundation of corrections in the United

States, students will be exposed to a range of scholarship examining the social, moral, economic, political, ideological and historical contexts of punishment in the West, with an eye toward understanding how penal practices came to be as they are, their social implications and cultural meanings. Review and discussion of these materials will develop students' appreciation for the depth and complexity of the topic, as well as their ability to link punishment practices with broader sociocultural conditions and worldviews. Prerequisite: SOCI-101 or ANTH-162. SOCI-311 is recommended but not required. 4 SH.

SOCI-374 Social Work

Introduces and exposes students to the various aspects of social work and social welfare. Includes examples of casework, group work, community organizations and a combination of current practices. Explores how society provides services to meet human needs through public, voluntary and combined efforts. Prerequisite: SOCI-101 or PSYC:101. 4 SH.

SOCI-405 Law and Society

An introduction to the sociology of law. Upon successful completion of this course, students should be able to understand the manner in which sociologists study law and empirically analyze relevant dynamics of law and law-related phenomena in a variety of social settings. Successive sections of this course will focus on: classical theoretical contributions to the sociology of law; selected modern approaches to the sociology of law; and an array of empirical themes of law and law-related processes and structures to which the sociological theories will be applied. Empirical topics include, but are not necessarily limited to, law and social structure; law and culture; notions of legality, legitimacy and legal consciousness; the legal profession; law, identity and inequalities; international and human rights law; and the impact of globalization on concepts and practices of law and legal change. Prerequisites: Sophomore standing , SOCI-101 or ANTH-162 and at least one other 200- or 300-level course in sociology or anthropology. 4 SH. CC: Interdisciplinary, Oral Intensive.

SOCI-410 Economic Sociology

This course looks at the factors that contribute to social stratification in the contemporary United States, as well as some dimensions of global social stratification. Students may find this course challenging because they are continually affected by social inequalities but are not encouraged to think about them. More specifically, this course will look at three dimensions of social stratification, namely the economic, political and ideological dimensions and the interaction of race, class and gender in this process. The course will explore the continued debate over inequality and the extent of income and wealth inequality in the United States and its causes and consequences, as well as the causes and consequences of global inequality. Prerequisites: Sophomore standing, SOCI-101 or ANTH-162 or SOCI-102, or instructor's permission. 4 SH. CC: Interdisciplinary.

SOCI-413 Race, Ethnicity and Minorities

Focuses on race and ethnic relations in contemporary society and popular understandings of race and ethnicity in the United States. Explores the boundaries and markers for membership in an ethnic, racial or minority group. Specifically, this course regards race as a social construct that has significance for structural opportunities, experiences, worldviews and conceptions of self and others. The course investigates the designations "race," "ethnicity" and "minorities," and locates them in foundational and current tensions concerning power and identity. Prerequisite: SOCI-101 or ANTH-162. Same as ANTH-413. 4 SH. CC: Diversity, Oral Intensive, Social Interactions, Writing Intensive.

SOCI-500 Seminar

Research workshop that fulfills the capstone requirement for majors. Prerequisites: SOCI/ANTH-235 or SOCI/ANTH-245 and two courses in sociology or anthropology, at least one of which has been taken at the 300 level or above. SOCI-311 or ANTH-400 recommended. 4 SH. Capstone.

SOCI-501 Independent Research

Supervised readings and writings in advanced fields of sociological study. Prerequisites: SOCI-101, three courses in sociology, a minimum cumulative GPA of 3.00 in departmental courses and instructor's permission. 1-4 SH. Capstone. May fulfill the capstone requirement with permission of the department head and when taken for at least 2 semester hours. Students not majoring or minoring in sociology or anthropology who wish to use SOCI-501 for their capstone must also have successfully completed SOCI/ANTH-235 or SOCI/ANTH-245, receiving a C- or higher.

SOCI-510 Internship in Sociology

Individual student work in an appropriate setting. Open only when positions are available. 1-8 SH.

SOCI-570 Practicum

Supervised field work in selected social work agencies. Students will keep a log, meet with a faculty member to discuss work and write a paper. Prerequisites: Junior or senior standing, relevant coursework and the department's permission. 4 SH.

SOCI-571 Practicum

Supervised field work in selected social work agencies. Students will keep a log, meet with a faculty member to discuss work and write a paper. Prerequisites: Junior or senior standing, relevant coursework and the department's permission. 4 SH.

Anthropology Courses

ANTH-110 Introduction to Archaeology

The discipline of archaeology involves the study of past societies, their practices and behaviors deduced by the analysis and interpretation of their material remains. It is therefore our only access to the 3 million years of human history before writing. This course is an introduction to method and theory in anthropological archaeology, with consideration of selected case studies. The course begins with an introduction to the history of the discipline and then focuses on archaeological methods and theory to provide a background to the practice of archaeology. Students will learn concepts, methods and techniques required in archaeological excavation and the analysis of material remains. They will have the opportunity to research and discuss problems in anthropological archaeology. The latter half of the course will take the students through a review of some of the major archaeological discoveries of modern times. This will provide a unique opportunity to review past surveys and excavations and to evaluate and critique past efforts in light of current archaeological theory and practice. 4SH. CC: Social Interactions.

ANTH-152 Public Culture

This course is an anthropological introduction to public culture in the U.S. It takes public culture to be: a public circulation of sensibilities, identities, dreams, styles, discourses and forms of power; and a way of life enacted and given form in the practices of everyday life and in institutions, laws, social movements, physical and social spaces, and expressive forms. Students will be introduced to key terms and theories in contemporary anthropology and their application in the study of representation; historical imagination; gender, sexuality and identity politics; and nationalism, citizenship and globalization. 4 SH. CC: Diversity, Social Interactions, Writing Intensive.

ANTH-162 Introduction to Anthropology

This course is an introduction to the field of anthropology. Specifically, the course introduces students to the ways in which anthropologists have thought about and investigated human diversity. We inquire into what it is that makes us human; the unique role culture plays in our humanity; the relationships of culture, language and biology; and how anthropologists have studied material culture in past and present civilizations using the tools and theoretical paradigms of archaeology. Students explore these questions through the study of ethnographies and a textbook. 4 SH. CC: Diversity, Social Interactions.

ANTH-220 Magic, Witchcraft and Religion

Examines anthropological concepts of magic, witchcraft and religion in a cross-cultural context. Drawing on ethnography, anthropological theory, history and film, the class explores the nature of magic, witchcraft and religion; the relations among them; and the ways in which they interact with other social formations, for example, gender, politics and economics. Countries studied have included South Africa, India, Haiti and the United States. Same as RELI-220. 4 SH. CC: Diversity, Social Interactions.

ANTH-222 Life During Wartime

Exploration of key understandings and discourses about war and the intersection of anthropology and violent conflict. The course begins with an introduction to anthropological theory and methods, then examines the role of anthropology in both understanding and responding to war and violent conflict, and then turns its attention to literature and materials drawn or arising from current wars and violent conflicts in the world. The course focuses on popular and scholarly materials addressing current conflicts, including texts, journal and magazine articles, documentary and ethnographic films, television and popular films, and newspapers. The class seeks to understand how we understand war and what role it plays in cultural practice. Prerequisite: ANTH-162 or SOCI-101 or instructor's permission. 4 SH. CC: Diversity Intensive, Writing Intensive.

ANTH-227 Native America North of Mexico

This course is an interdisciplinary introduction to the histories and cultures of the indigenous peoples north of Mexico. Topics to be considered include cultural diversity, colonial history and federal Indian policy, land use patterns, identity and ethnicity, myth and ritual, contemporary issues, representations of Native Americans in the dominant culture, and the role of cultural revitalization and innovation in the negotiation of contemporary community survival. Course readings represent a variety of perspectives, including historical, ethnographic, ecological and literary. Prerequisite: ANTH-162, ANTH-152 or SOCI-101 or instructor's permission. 4 SH. CC: Diversity.

ANTH-235 Qualitative Research Methods

This course is designed to develop students' competence as social researchers. We will cover both theoretical issues-like the epistemology and ethics of qualitative research—and practical ones—the nuts and bolts of the research process, from data collection to analysis. The course will focus on the connection between researchers' theoretical goals and the practical resources and constraints of the research process. Students will be trained in some of the common forms of qualitative social research: ethnography, interviews, content analysis, case studies and the comparative method. Students will also be required to employ qualitative methods to collect and analyze original data, both for (near-weekly) short written assignments and a 15-20 page final research paper. Same as SOCI-235. Prerequisites: Sophomore standing and at least one introductory course in sociology or anthropology. 4 SH. CC: Ethics Intensive, Writing Intensive.

ANTH-237 Museums and Anthropology

This course will explore key interrelationships between museums, anthropology and the practices of representation. Students will be introduced to the history of museums and will also be given the analytical tools to read museums and exhibitions as cultural texts. The course focuses on the production and meanings of public museums and other exhibitionary spaces. We will pay close attention to issues of representation in anthropological and other arenas, to how museums communicate information about cultural-historical processes and events, and to the formation of ethnographic and other subjects. While anthropology and museum studies are the course's focus, we will not restrict our readings to those disciplines and modes of representation alone but will consider other disciplinary perspectives and offerings. Prerequisites: Sophomore standing and ANTH-162 or SOCI-101 or instructor's permission. 4 SH. CC: Interdisciplinary, Team Intensive.

ANTH-245 Quantitative Research Methods

This course is intended to introduce students to common methods used in quantitative social science research. It is intended to help us conceptualize a research problem and how to collect evidence to address that research problem. Students will learn how to conduct basic quantitative social science research, evaluate relevant evidence and determine the best method to be used based on theoretical and practical considerations. The course also focuses attention on such issues as the time dimension, sampling design and ethical issues when conducting quantitative social research. Finally, we use SPSS and series of datasets to test and demonstrate our knowledge of the respective statistical procedures. Upon completion of this course, students should be better able to critically evaluate the quantitative research they encounter in their social science coursework and in the mass media, as well as be able to design a basic quantitative research project. Same as SOCI-245. Prerequisite: Sophomore standing. 4 SH. CC: Ethics Intensive.

ANTH-301 Topics in Anthropology

Intermediate study of selected topics. Topics vary and depend on student and instructor interest. Possibilities include the anthropology of modernity, cross-cultural perspectives on gender and sexuality, and drugs and culture. Prerequisite: SOCI-101, ANTH-162 or instructor's permission. 2-4 SH.

ANTH-310 National, Transnational and Diasporic Communities

Considers the nature of belonging in the world today. Who is "at home"? Who is displaced/out of place? Begins with theories of the nation and anthropological research on national communities and nation-building, then turns to a consideration of those considered outsiders to the nation-state, i.e., diasporic, transnational and refugee communities. Addresses culture as it is formed by the globalization of capital, commodities, media, literacy, and international political and religious movements. Topics covered may include Jewish, Palestinian, African and Chinese diasporas; refugees in Tanzania and in Europe; and Indian intellectuals in the United States. Prerequisite: ANTH-162, SOCI-333 or instructor's permission. 4 SH. CC: Writing Intensive.

ANTH-311 Regulating Bodies: Food, Sex, Drugs and the Economy

What is the proper relation between the state and its citizens? Should states merely ensure the basic safety of citizens, or should they somehow promote their well-being? How should decisions about what constitutes safety or well-being be made? Through a study of regulation, this course considers how economics, politics, ethics and aesthetics inform life in modern liberal democracies. We begin by establishing a theoretical framework for our study and then turn to four instances in which states seek to intervene in or regulate the lives of citizens, namely the economy, drugs, food and sex. We will examine issues such as the recent financial meltdown, medical marijuana, food safety and Internet pornography. Prerequisite: Sophomore standing. 4 SH. CC: Interdisciplinary, Oral Intensive, Social Interactions and Team Intensive.

ANTH-312 History and Culture of Jewish Cuisines

Using anthropological approaches to the study of food, this course examines the meanings and uses of various Jewish cuisines as they developed in diverse regions and historical periods. We will consider the laws of kashrut and their modern interpretations, the social history of traditional Jewish foods, the literary development of Jewish cookbooks, and literary and cinematic representations of Jewish cuisines and dining. Underlying our study will be questions concerning how class, gender, faith, ethnicity, aesthetics and politics inform Jewish foodways. Because cooking and eating are frequently done in the company of others, much of our work will be collaborative. Same as JWST-312. 4 SH. CC: Diversity, Team Intensive.

ANTH-322 Visual Anthropology: Imagining the Other

Explores key interrelationships between image-making and ethnographic discovery and representation. Students are introduced to the history of ethnographic film and photography and are also given the analytical tools to read popular films and photographs as cultural texts. The course focuses on the production, representation and use of images to communicate information about cultural-historical processes, events and subjects. Prerequisite: ANTH-162, SOCI-101 or instructor's permission. 4 SH.

ANTH-341 Family and Kinship

A comparative study of family and kinship. Covers the structures and functions of family and kinship in different cultures. Emphasizes historical and contemporary changes in knowledge and practice focused on family, marriage, procreation and kinship in the United States, with particular emphasis on the cultural construction of kinship, the naturalization of identity and difference, the politics of recognition, and new reproductive technologies. Same as SOCI-341. Prerequisite: ANTH-162 or SOCI-101. 4 SH. CC: Diversity Intensive, Writing Intensive.

ANTH-360 Religious Fundamentalisms in the Modern World

This course examines religious beliefs, practices and ways of life that have come to be labeled "fundamentalist." The course attends in particular to their emergence in the modern world and the ways in which they critically engage secular convictions about morality, aesthetics and epistemology. The focus of the course is on Protestant fundamentalism and the Islamic Revival, but, depending on student interest, the class may also consider "ultra-orthodox" Judaism or Hindu nationalism. Same as RELI-360. Prerequisite: One of the following: ANTH-162, ANTH-220, SOCI-101, SOCI-102, a 100-level religious studies course or instructor's permission. 4 SH. CC: Diversity Intensive, Social Interactions, Writing Intensive.

ANTH-400 History of Anthropological Theory

Surveys major anthropological theories (e.g., evolutionism, functionalism, structuralism, symbolism and postmodernism) and theorists (e.g., Malinowski, Radcliffe-Brown, Lévi-Strauss, Geertz and Clifford). Examines how

ideas about culture have changed over time. Takes a critical perspective by locating both theories and theorists within national and historical frameworks. Prerequisite: ANTH-162. 4 SH. CC: Historical Perspectives.

ANTH-413 Race, Ethnicity and Minorities

Focuses on race and ethnic relations in contemporary society and popular understandings of race and ethnicity in the United States. Explores the boundaries and markers for membership in an ethnic, racial or minority group. Specifically, this course regards race as a social construct that has significance for structural opportunities, experiences, worldviews, and conceptions of self and others. The course investigates the designations "race," "ethnicity" and "minorities," and locates them in foundational and current tensions concerning power and identity. Same as SOCI-413. Prerequisite: ANTH-162 or SOCI-101. 4 SH. CC: Diversity, Oral Intensive, Social Interactions, Writing Intensive.

ANTH-500 Seminar

Research workshop that fulfills the capstone requirement for majors. Prerequisites: ANTH/SOCI-235 or ANTH/SOCI-245 and two courses in anthropology or sociology, at least one of which has been taken at the 300 level or above. SOCI-311 or ANTH-400 recommended. 4 SH. Capstone.

ANTH-501 Independent Research

Supervised readings and writings in advanced fields of anthropological study. Prerequisites: ANTH-162, three courses in anthropology, a minimum GPA of 3.00 in departmental courses and instructor's permission. 1-4 SH. Capstone. May fulfill the capstone requirement with permission of the department head and when taken for at least 2 semester hours. Students not majoring or minoring in sociology or anthropology who wish to use ANTH-501 for their capstone must also have successfully completed ANTH/SOCI-235 or ANTH/SOCI-245, receiving a C-or higher.

ANTH-510 Internship in Anthropology

Individual student work in an appropriate setting. Open only when positions are available. 1-8 SH.

THEATRE

Faculty

Erik K. Viker, M.F.A., Associate Professor of Theatre

Doug Powers, Ph.D., Associate Professor of Theatre

Anna Andes, Ph.D., Assistant Professor of Theatre

Andrea Heilman, M.F.A., Visiting Assistant Professor of Theatre

Daniel Whitlow, Visiting Artist in Costumes

Theatre Studies

Learning Goals:

- Students will develop proficiency in the methods of creating artistic and scholarly work and acquire abilities to integrate the study and practice of theatre.
- Students will learn how to create and contribute to the discipline of theatre by recognizing and employing relevant and worthy theatre, non-theatre and interdisciplinary sources to inform their creative and scholarly activities.
- Students will articulate artistic and scholarly vocabularies drawn from written, visual and physical texts that will support their continued practice and study of theatre.
- Students will learn how to reflect upon and assess their work in critical and constructive ways by applying concepts, theories and methods within academic and professional contexts.

Requirements for the Bachelor of Arts in Theatre. Susquehanna offers a major in theatre with three emphases: performance, production and design, and theatre studies. Majors complete university Central Curriculum requirements plus 52 semester hours of courses in one of the three theatre emphases. These include introductory courses and specific emphasis requirements. A grade of C- or better is required for any course to apply to the major or minor. Courses may count toward only one emphasis or minor. The department also expects theatre majors and minors to participate each semester in department theatre productions and activities supervised by department faculty.

Theatre Major Emphases

Students fulfill the university Central Curriculum requirements, participate fully in department productions and successfully complete the following courses:

24 Department Requirements

- 4 THEA-151 Acting I: The Stanislavski System
- 4 THEA-252 Survey of Western Theatre
- 4 THEA-253 Identity and Representation in Non-Western Theatre
- 4 THEA-258 From Page to Stage
- 4 THEA-340 Stage Management and Theatre Operations
- 4 THEA-453 Dramatic Theory and Criticism

Students also choose one of the following options:

28 Option One: Performance Emphasis

- 4 THEA-251 Acting II: Voice and Movement

4 THEA-351 Acting III: Period Styles

4 THEA-451 Directing

4 Four semester hours chosen from THEA-101 The Fall Musical, THEA-102 Student-directed Production, THEA-103 Spring Production, THEA-104 Advanced Acting Workshop and THEA-105 Experimental Acting Workshop.

12 Choose 12 semester hours from the following:

1 THEA-101 The Fall Musical

1 THEA-102 Student-directed Production

1 THEA-103 Spring Production

1 THEA-104 Advanced Acting Workshop

1 THEA-105 Experimental Acting Workshop

4 THEA-142 Stagecraft

4 THEA-143 Scenic Production

4 THEA-240 Theatre and Violence

4 THEA-246 Scenic Design

4 THEA-254 African-American Theatre History

4 THEA-452 Seminar in Theatre

4 THEA-341 Costume Design

4 THEA-342 Stage Makeup

28 Option Two: Production and Design Emphasis

4 THEA-142 Stagecraft

4 THEA-143 Scenic Production

4 THEA-501 Production Lab

16 Choose 16 semester hours from the following:

4 THEA-240 Theatre and Violence

4 THEA-246 Scenic Design

4 THEA-254 African-American Theatre History

4 THEA-341 Costume Design

4 THEA-342 Stage Makeup

4 THEA-345 Lighting Design

4 THEA-452:01 Seminar in Theatre: Technology

4 THEA-452:02 Seminar in Theatre: Advanced Scenic Painting

4 THEA-452:03 Seminar in Theatre: Costumes and Makeup

4 THEA-455 Computer Applications for Theatrical Design

28 Option Three: Theatre Studies Emphasis

4 THEA-240 Theatre and Violence

4 THEA-254 African-American Theatre History

4 THEA-246 Scenic Design

4 THEA-502 Individual Investigation: Dramaturgy

The remaining 15 semester hours may be chosen from the courses below:

4 THEA-142 Stagecraft

or THEA-143 Scenic Production

4 THEA-200 Introduction to Dramatic Literature

4 THEA-251 Acting II: Voice and Movement

4 THEA-451 Directing

4 THEA-452 Seminar in Theatre (repeatable with department head approval)

1 THEA-502 Individual Investigation: Dramaturgy (repeatable up to three times)

1 THEA-501 Production Lab (repeatable once)

No more than 4 semester hours from the following may be included:

1 THEA-101 The Fall Musical

1 THEA-102 Student-directed Production

1 THEA-103 Spring Production

1 THEA-104 Advanced Acting Workshop

1 THEA-105 Experimental Acting Workshop

No more than eight semester hours from the following may be included:

4 THEA-341 Costume Design

4 THEA-342 Stage Makeup

4 THEA-345 Lighting Design

Honor Society. Students who meet the requisite national and local standards are eligible to join Alpha Psi Omega.

Minor in Theatre. Students are expected to participate in departmental theatre productions and complete 20 semester hours: THEA-151 Acting I: The Stanislavski System and THEA-142 Stagecraft; four semester hours chosen from THEA-252 Survey of Western Theatre, THEA-253 Identity and Representation in Non-Western Theatre, THEA-240 Theatre and Violence or THEA-254 African-American Theatre History; and eight semester hours chosen from the following: four semester hours of production ensembles (THEA-101 The Fall Musical, THEA-102 Student-directed Production, THEA-103 Spring Production, THEA-104 Advanced Acting Workshop and THEA-105 Experimental Acting Workshop); THEA-143 Scenic Production; THEA-240 Theatre and Violence; THEA-246 Scenic Design; THEA-251 Acting II: Voice and Movement; THEA-258 From Page to Stage; THEA-340 Stage Management and Theatre Operations; THEA-341 Costume Design; THEA-342 Stage Makeup; THEA-345 Lighting Design; THEA-451 Directing; and THEA-502 Individual Investigation.

Theatre Courses

THEA-101 The Fall Musical

An ensemble of singers, dancers and actors that rehearses and performs a fully realized musical theatre production in the fall semester. Prerequisite: Instructor's permission, by audition. 1 SH. CC: Team Intensive.

THEA-102 Student-directed Production

An ensemble led by a student director that rehearses and performs a full-length production in the spring semester. Prerequisite: Department permission, by audition. 1 SH. CC: Team Intensive.

THEA-103 Spring Production

A large ensemble of performers that rehearses and performs a fully realized, challenging piece of dramatic literature in the spring semester. Prerequisite: Instructor's permission, by audition. 1 SH. CC: Team Intensive.

THEA-104 Advanced Acting Workshop

A small ensemble of highly select performers that rehearses and performs a fully realized, challenging piece of dramatic literature in the fall semester. Prerequisites: THEA-151, instructor's permission, by audition. 1 SH. CC: Team Intensive.

THEA-105 Experimental Acting Workshop

This ensemble course will challenge students with demanding roles in a bare-bones acting environment to bring out their best talent in a no-frills, cutting edge performance experience. Prerequisites: THEA-151, instructor's permission, by audition. 1 SH.

THEA-142 Stagecraft

Students explore production process, management and leadership skills, preparing scenery, properties, special effects, sound, and costumes for university theatre productions. The course offers hands-on training, exploring practical applications of artistic and structural design, project management, team development, construction techniques and resource coordination. Expectations are up to eight hours of lab each week with possible evening rehearsal and performance assignments. 4 SH. CC: Team Intensive.

THEA-143 Scenic Production

Students explore the production process for executing theatrical designs for university theatre productions. This course focuses on scenic painting techniques and the installation and operation of theatre lighting equipment. Hands-on training. Expectations are up to eight hours of lab each week with possible evening rehearsal and performance assignments. 4 SH. CC: Team Intensive.

THEA-151 Acting I: The Stanislavski System

This course explores a broad spectrum of skills in the creative process of acting. These skills (including expansion of vocal and physical abilities, emotional and sensory awareness, improvisational skills, etc.) will be focused toward introducing the prospective actor to the six basic steps in Stanislavski's "System of Acting." Prerequisite: Theatre major, theatre minor or the department's permission. 4 SH. CC: Oral Intensive.

THEA-152 Understanding Theatre

Fundamental characteristics and function of the theatre. Includes basic roles of the playwright, director, actor, designer, technicians and other professions. 4 SH. CC: Artistic Expression.

THEA-200 Introduction to Dramatic Literature

An introduction to world dramatic literature through study of the development of drama and its various forms, with a focus on dramatic movements and theatrical innovations, as well as the cultural aesthetic, literary and political contexts of individual works. 4 SH. CC: Literary Expression, Diversity Intensive.

THEA-240 Theatre and Violence

Through the reading and analysis of various genres of play texts written by a diverse collection of playwrights, this course analyzes theatre's unique ability to engage with both the agenda and the trauma of violence. Students in this course will learn to consider violence as a tool of oppression that reinforces power structures and as an expression of trauma by those un-empowered by the same societal power structures. Same as WMST-241. 4 SH. CC: Diversity Intensive, Ethics Intensive.

THEA-246 Scenic Design

This course will concentrate on the scenic design process and will expose the students to the responsibilities and the role of the scenic designer in the production process. Students will be introduced to the art of scenic design through practical projects in script analysis, literary research, technical drawing, scenic rendering and modeling. 4 SH.

THEA-251 Acting II: Voice and Movement

An in-depth exploration of the basic principles of acting and the creative process introduced in Acting I. These skills (including expansion of improvisational skills, action and text analysis, character analysis and transformation, communion, etc.) will be focused toward advanced work in scene and monologue study, specifically dealing with early and contemporary realism. Prerequisite: THEA-151. 4 SH. CC: Oral Intensive.

THEA-252 Survey of Western Theatre

Historical survey from the fifth century B.C.E. to the mid-19th century and the rise of realism, studying the theatre and drama of Europe and its colonies, including (but not limited to) Canada, the United States and Mexico. Integrates the study of the history of the theatre through representative plays and their production. Students view live performances, tapes and films to gain an on-stage perspective. Field trips involve some costs; waiver possible. 4 SH. CC: Artistic Expression.

THEA-253 Identity and Representation in Non-Western Theatre

Survey of the indigenous and postcolonial theatre and drama of Asia, Africa, the Middle East and the Americas, among others. Integrates the study of the history of the theatre through representative plays and their production. Students view live performances, tapes and films to gain an on-stage perspective. Field trips involve some costs; waiver possible. 4 SH. CC: Artistic Expression, Diversity.

THEA-254 African-American Theatre History

This course surveys the history of African-American theatre as a reflection of the African-American culture and experience. The course will examine the history of African-American theatre and the African-American practitioner's role in theatre from slavery to modern times. Through the study of African-American dramatic literature, the course examines various dramatic genres (comedy, tragedy and melodrama), historic and contemporary themes and developments in African-American theatre, especially the body of plays that shaped the popular image of black life in America and in many cases perpetuated negative stereotypes of African-Americans. 4 SH. CC: Diversity, Historical Perspectives.

THEA-258 From Page to Stage

An exploration of dramatic literature with a concentration in play analysis. The analysis will focus on the structure of dramatic art and how it can be applied by the theatre artist. Prerequisite: THEA-151. 4 SH. CC: Writing Intensive.

THEA-340 Stage Management and Theatre Operations

Survey of stage management and theatre administration, exploring the relationship between the artistry of theatre as a fine arts discipline and the execution of management principles in theatre operations. Topics to be studied include stage management, theatre organization, professional unions, production management, publicity/marketing, and box office and house management. Prerequisites: Instructor's permission and junior standing. 4 SH. CC: Interdisciplinary.

THEA-341 Costume Design

Portfolio projects in costume design, beginning with script analysis and research and culminating with finished renderings and realized design components for the student's portfolio. Prerequisite: Sophomore standing or instructor's permission. 4 SH.

THEA-342 Stage Makeup

Portfolio projects in makeup design, beginning with script analysis and research and culminating with realized and conceptual projects. Projects in makeup design expose students to the techniques of traditional, prosthetic and wig applications. Prerequisite: Sophomore standing or instructor's permission. 4 SH.

THEA-345 Lighting Design

This course concentrates on the lighting design process and exposes students to the responsibilities and the role of the lighting designer in the production process. Students are introduced to the art of lighting design through practical projects in script analysis, literary and artistic research, technical drawing, computer application and hands-on production work. 4 SH.

THEA-351 Acting III: Period Styles

Advanced training in acting with an emphasis on effective vocal/rhetorical techniques and on the use of poetic rhythm and imagery in creating a role psychologically as well as physically. Definition of style/language analysis, Greek period style, the comic impulse/Commedia Dell'arte, Renaissance/Elizabethan period style, 17th-century French farce and Restoration/Georgian "Comedy of Manners." Prerequisites: THEA-251 and either THEA-252 or THEA-253. 4 SH. CC: Oral Intensive.

THEA-451 Directing

Study of the basic processes of play directing, script selection, blocking, rehearsal procedure, casting, directorial function and the history of directing. Direction of in-class scenes and presentations of a single all-class scene program at the end of the term for the public. Prerequisites: THEA-258, THEA-251 and/or THEA-351, or instructor's permission. 4 SH.

THEA-452 Seminar in Theatre

Issues and topics in theatre. Emphasizes research and analysis. Prerequisite: Instructor's permission. 4 SH.

THEA-453 Dramatic Theory and Criticism

Students will engage in a focused examination of the major literary and theoretical movements found in drama, spanning the late 19th century to the present. Prerequisites: THEA-258, either THEA-252 or THEA-253 or instructor's permission. 4 SH. Capstone. CC: Diversity Intensive, Writing Intensive.

THEA-455 Computer Applications for Theatrical Design

This course explores artistic and technological applications of a range of computer programs used by contemporary artists in theatre technology and design, including Photoshop, Vectorworks and AutoCAD LT through demonstration, hands-on project work and practical assignments. Students will learn how to synthesize traditional design theory and modern technology practice related to bringing theatre texts to realization. Prerequisites: THEA-246 and either THEA-142 or THEA-143. 4 SH.

THEA-501 Production Lab

Applied projects in theatrical design, technical production or theatre management, completed in conjunction with Department of Theatre productions. The student and the supervising professor determine and tailor projects to ensure both mastery of the student's project (or assignment) and a general understanding of the complexities of theatre. All projects require department approval, are critically assessed by the supervising faculty member as well as the student, and must be completed to the satisfaction of the theatre faculty. Four semesters of Production Lab are required for graduation with the production and design emphasis of the Bachelor of Arts in theatre (may be waived at the discretion of the department). 1 SH.

THEA-502 Individual Investigation: Dramaturgy

In-depth exploration of selected topics in theatre with faculty guidance allows students to focus on topics outside normal sequence of course offerings. Prerequisite: Department-designated faculty director's permission. May be repeated. 1-4 SH.

THEA-503 Honors Study

Independent study for candidates accepted into the departmental honors program. Candidates work under faculty direction, develop and submit a written or production thesis, and defend their thesis orally. 4 SH.

THEA-504 Internship

Supervised work in fields related to professional and/or not-for-profit theatre. Prerequisites: Junior or senior standing and internship coordinator's permission. Variable credit.

DANC-101 Conditioning

Development of strength and muscular endurance, as well as lengthening of muscle groups and release of unnecessary tension. 2 SH.

DANC-140 Jazz/Tap

Fundamental technique, practice and appreciation of jazz and tap dance. 2 SH.

DANC-150 Modern Dance

Introduction to the technical skills, practice and appreciation of modern dance. Vocabulary, movement, floorwork, various dance patterns and movement combinations included. 2 SH.

DANC-155 Contemporary Ballroom Dance

Fundamental technique, training and appreciation of ballroom dances, including the foxtrot, waltz, rumba, cha cha and others. 2 SH.

DANC-250 Historical Partner Dance

Fundamental technique, training and appreciation of historical partner dances, including the minuet, quadrille, polonaise, gavotte, mazurka and others. 2 SH.

DANC-301 Advanced Topics in Dance

A contemporary dance class focusing on challenging improvisation, movement, and technical exercises, designed to introduce students to the demands of professional contemporary and modern dance in the context of supporting academic performance activity for majors and elective exploration for non-majors. Specific topics may vary from semester to semester. May be repeated once for credit. 2 SH.

WOMEN'S STUDIES

Faculty

Karol K. Weaver, Ph.D., Associate Professor of History, coordinator

Learning Goals:

- To use gender as a tool of analysis.
- To emphasize gender and how it intersects with race, class, ethnicity, sexual orientation, religion, nationality, geography and other identity markers.
- To demonstrate the connections between theory and practice.

Minor Requirements. The minor consists of 20 semester hours, including WMST-100 Introduction to Women's Studies (4 SH) and WMST-500 Research/Practicum in Women's Studies (2-4 SH), with the remaining semester hours coming from the array of courses listed under the "Courses" tab, as well as other women's studies courses offered on occasion by individual departments.

Women's Studies Courses

WMST-100 Introduction to Women's Studies

Introduction to Women's Studies focuses on issues relating to women and their lives and the impact that gender has on them. It also considers the topic of intersectionality. Finally, it reflects on the connections between theory (in particular, feminist theory) and practice/activism. 4 SH. CC: Diversity, Social Interactions.

WMST-200 Feminist Philosophy

An examination of the various forms of feminist philosophy (e.g., liberal feminism, radical feminism, existential feminism, Marxist/socialist feminism, psychoanalytic feminism, postmodern feminism, ecofeminism, multicultural and global feminism). Emphasizes how feminism differs from common (mis)understandings of it. Some attention is also given to various women in professional philosophy. Same as PHIL-212. Prerequisite: One course in philosophy or one course in women's studies or completion of the Diversity Central Curriculum requirement or instructor's permission. 4 SH. CC: Diversity.

WMST-207 Women in the Biblical Tradition

An extensive inquiry into women's stories and images in the Hebrew Bible, New Testament and related literature from the biblical period. Explores the range of roles played by women within biblical narratives, the variety of metaphorical/symbolic uses of femininity in biblical traditions, and legal and ethical precepts related to the status of women in the biblical period. Methods and approaches from the social sciences, history, literary studies and theology, as shaped by feminist theory, will serve as the main guides for this study. Same as RELI-207 and JWST-207. Prerequisites: Sophomore standing and one course from the following: a course in religious studies, a course in women's studies, a course in English, a course in history, or DIVS-100. 4 SH. CC: Diversity Intensive, Interdisciplinary, Writing Intensive.

WMST-211 Women and U.S. Politics

An introductory examination of the role of women in the U.S. political system. The course includes a theoretical and historical view of the development of women's political activity in the United States, as well as a contemporary look at women as activists, voters and candidates. Current issues are incorporated as appropriate. Same as POLI-211. Prerequisite: Sophomore standing. 4 SH.CC: Diversity Intensive, Interdisciplinary, Team Intensive.

WMST-225 Women in Religion

Critically studies how women are perceived, portrayed and involved in a number of the world's religions, including Hinduism, Buddhism, Judaism, Islam, Christianity and women's spiritual movements. Same as RELI-225. Prerequisite: Sophomore standing. 4 SH. CC: Diversity Intensive, Interdisciplinary, Writing Intensive.

WMST-240 Female Action Heroines in Film

This course examines the emergence and development of the female action heroine in film over the course of the last fifty years within the popular "action film" genre. This course critically evaluates visual and thematic markers of femininity, masculinity, sexuality, race, and class with respect to representations of female action heroines in a variety of films. Same as FILM-240. 4 SH. CC: Artistic Expression, Diversity Intensive.

WMST-241 Theatre and Violence

Through the reading and analysis of various genres of play texts written by a diverse collection of playwrights, this course analyzes theatre's unique ability to engage with both the agenda and the trauma of violence. Students in this course will learn to consider violence as a tool of oppression that reinforces power structures and as an expression of trauma by those un-empowered by the same societal power structures. Same as THEA-240. 4 SH. CC: Diversity Intensive, Ethics Intensive.

WMST-250 The Biology of Women

Examines the genetic and biological basis of gender difference, the unique biology of the female body and women's health care issues. Topics include female reproductive anatomy and the menstrual cycle, pregnancy and birth, developmental differences in the sexes, and reproductive technologies. Also covers problems such as breast cancer, premenstrual syndrome and osteoporosis. Includes the role of women in the health care system, as well as biology and science in general. Not for biology major or biology minor credit. Same as BIOL-157. 4 SH. CC: Diversity Intensive

WMST-300 Women and Violence

The course examines some of the many kinds of violence involving women, including pornography, sexual harassment, battering and rape. The course also considers the effects of such violence, as well as possible responses, including raising awareness, establishing and enforcing a variety of laws, training individuals in self-defense, and engaging in various forms of activism. The class also includes some practical training in women's self-defense. 2 SH.

WMST-313 Women in Art

A study of the historic perception and the social history of the role of women in art: as artist, as subject of art and as patron (audience) of art. Emphasizes exploration and debate over issues affecting present-day perceptions about the woman artist of the past and the future. Same as ARTH-313. Prerequisite: Sophomore standing. 4 SH. CC: Artistic Expression, Diversity Intensive, Interdisciplinary, Writing Intensive.

WMST-334 Psychology of Gender

Explores current theory and research on the development of gender and consequences of gender roles. Covers evolutionary, biological, psychoanalytic, cognitive, social learning and cross-cultural perspectives on gender, as well as approaches that seek to understand interactions among these influences. Same as PSYC-334. Prerequisites: Junior standing and either PSYC-101 or SOCI-101. 4 SH. CC: Diversity, Writing Intensive.

WMST-365 Studies in Literature and Gender

Courses exploring such topics as women in literature, literature by women, literature and sexuality, the construction of gender in literature, and feminist literary theory. Same as ENGL-365. 4 SH. CC: Writing Intensive.

WMST-370 American Women

This course traces the history of American women from the 17th through the 21st centuries. It considers the history of American women in relation to gender, race, ethnicity, class, sexual orientation and religion. Same as HIST-370. 4 SH.

WMST-380 Women in Organizations

Examines the role of sex and gender in organizations. Special attention is given to topics relevant to women working in organizations, such as sex and gender differences in career/job preferences, advancement and pay, teamwork, leadership, sexuality in the workplace, and work-family balance. Other topics addressed include hostile vs. benevolent sexism, as well as practices designed to increase diversity within organizations. Class is conducted in a seminar format. Same as MGMT-468. Prerequisite: Junior standing or instructor's permission. 2 SH. CC: Diversity Intensive.

WMST-400 Topics in Women's Studies

Occasional offerings of specialized courses exploring topics of pertinent interest to faculty members and students. 2-4 SH.

WMST-500 Research/Practicum in Women's Studies

Individual work on a focused topic or specialized area in women's studies/the study of gender. Course requirements may be fulfilled in a variety of ways: library research culminating in a major paper; work at an internship site leading to a report/analysis of that work; or some sort of creative activity that includes a written reflective analysis of same. 2-4 SH.

SPECIAL PROGRAMS

Cross Cultural Courses

The Susquehanna University cross-cultural requirement includes three course components: preparation, the cross-cultural experience off-campus and reflection on campus. Students accepted to a GO Short program are automatically registered in all three components: OFFP, OFFS and OFFR, all of which are required for participation. These course components are open only to students accepted to the corresponding GO Short program.

Students approved for a GO Long or GO Your Own Way program are automatically registered for the corresponding OFFP and OFFS or OFFC courses. GO Long and GO Your Own Way students must register for a cross-cultural reflection course (OFFR) in the semester following their return to campus.

International students who are issued a visa to attend Susquehanna may count their time on campus as their GO program. They must still register for a cross-cultural reflection course in order to complete the requirement.

OFFP-GOLONG Preparation for GO Long

This course prepares students for study on semester-length GO programs. Students begin work toward achieving the cross-cultural learning goals; examples include examining definitions and aspects of culture and learning to recognize ethnocentrism. They will be introduced to observational and reflective techniques to be used on site and will begin an investigation of the history and culture of their destination. This course also includes some mandatory workshops provided by the Office of Cross-Cultural Programs. Prerequisite: Approval by the Office of Cross-Cultural Programs. 1 SH.

OFFP-GYOW Preparation for GYOW Program

This course prepares students for study on GO Your Own Way programs during semester breaks. Students begin work toward achieving the cross-cultural learning goals: examples include examining definitions and aspects of culture and learning to recognize ethnocentrism. They will be introduced to observational and reflective techniques to be used on site and will begin an investigation of the history and culture of their destination. The course also includes some mandatory workshops provided by the Office of Cross-Cultural Programs. Prerequisite: Approval by the Office of Cross-Cultural Programs. 1 SH.

OFFR-210 Crossing Cultures Through Literature

This course explores notions of cultural interpretation and difference through study of literary texts in English translation. By comparing multiple English translations of a single text, students reflect on ethnocentric assumptions with respect to their own cultural filter and its influence on their interpretation of the cultures in which they were immersed. Finally, students consider the responsibilities inherent in translating their own experience to others. Same as LANG-210. Prerequisite: Successful completion of a semester-long study program or instructor approval. 4 SH. CC: Cross-Cultural Reflection, Ethics Intensive.

OFFR-310 Global Citizenship

This course is designed to allow students to reflect on a cross-cultural experience and to integrate that experience into their social, intellectual and academic life. They will explore the complexities of culture—both their own and that in which they have been immersed—in order to understand the possibilities and responsibilities of being a global citizen. Prerequisites: Completion of an approved cross-cultural experience. 1 SH. CC: Cross-Cultural Reflection.

OFFR-315 Self-Exploration Travel Writing

Students reflect on what a cross-cultural experience means to them and what they have learned about the nature of culture itself as a result of their engagement with global diversity. Students learn how to write creative nonfiction-style travel essays sharing their insights and memories. Prerequisite: Completion of the Cross-Cultural Experience. 2 SH. CC: Cross-Cultural Reflection, Writing Intensive.

INTD-315 Self-Exploration Travel Writing

Students reflect on what a cross-cultural experience means to them and what they have learned about the nature of culture itself, as a result of their engagement with global diversity. Students learn how to write creative nonfiction-style travel essays sharing their insights and memories. 2 SH.

GO Short Programs

OFFP/OFFS/OFFR-AUSTRAL Focus Australia

Focus Australia is a program of study concentrating on the history, culture and biogeography of one of the world's most arid countries. Students spend time in the rainforest, scuba dive or snorkel on the Great Barrier Reef, visit Alice Springs, walk at the sacred aboriginal sites of Uluru and Kata Tjuta, and tour the historic and beautiful city of Sydney. The reflective course requires a written review and a group project. Corequisite: BIOL-503 Biological Issues in Australia. 2 SH. CC: Cross Cultural.

OFFP/OFFS/OFFR-AUSTRIA National History, Global Responsibilities

A three-week travel experience based in Salzburg with required pre-departure meetings and a contiguous reflective component. Also spends time in Vienna, Munich and the Salzburg region. Focuses on questions of cultural inheritance and accountability for the nature of one's national heritage in part by working with students at the University of Salzburg. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-BRITLAW British Law and Culture

This course requires students to participate in a three-week, off-campus learning experience based in London (with several preparatory activities) and a two-semester-hour post-experience on-campus seminar. Focusing on the British legal system and law enforcement practices, the course will require students to 1) examine the British legal system within the context of the U.K. and the EU, 2) critically compare the U.K. legal system and enforcement practices with those of the United States, 3) be exposed to different cultures in the U.K., and 4) experience, understand and process culture through the lens of British law. 2 SH. CC: Cross-Cultural

OFFP/OFFS/OFFR-CHILE Life is Good in Chile

The Chile Global Opportunities (GO) program affords students the opportunities to learn about Chile's history, geography, economy and culture and to provide service to the Chilean community, especially the youth. Engaging in several cross-cultural experiences, students visit and study the beach location of Pichilemu, the metropolitan area of Santiago and the port cities of Valparaiso and Viña del Mar, and the small town of Los Quenes in the Andes Mountains. The course has no prerequisites, although knowledge of Spanish language will be useful and a willingness to learn some basic Spanish is essential. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-CHINART The Chinese Scholar-Artist

Records dating back to 17th-century China define "scholar" as a student and practitioner of Siyi, the four arts of painting, calligraphy, music and go. Inspired by the Siyi practice, this seminar presents China as an inspirational and informational resource for the creative artist, as well as other non-fine arts majors with strong interest in the creative arts. A multidisciplinary approach combining calligraphy, photography, music and tai chi frames a cultural exploration of contemporary Chinese arts (Beijing and Shanghai) and tribal culture (Hunan), revealing the Chinese commitment to cultural connection spanning more than 4,000 years. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-CUBA GO Cuba

The GO Cuba program will explore the complex culture that melds its Spanish colonial origins with a century of social, political, economic and cultural influence from the United States and the resulting 50 years of diplomatic Cold War and tension after the 1959 Revolution. As the door between our two countries begins to open, as students, you will be able to meet Cubans and learn directly from them about their culture and their hopes and concerns about the increasing social, political and cultural U.S. influence once again. 2SH.CC: Cross-Cultural.

OFFP/OFFS/OFFR-CYPRUS GO Cyprus: A Table Divided

GO Cyprus is a two-week summer program centered in Nicosia, Cyprus. Students are immersed in Cyprus' rich history and explore the political division between the Turkish-Cypriot Republic of Northern Cyprus and the Greek-Cypriot Republic of Cyprus, and how those identities are often reflected in the foods people eat. Students participate in a cooking class designed to compare and contrast the differing cultures of Greek Cyprus and Turkish Cyprus. Students visit both the northern and southern parts of the beautiful Mediterranean island. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-CZECH Culture and Crew

Learn about the Czech culture and its adaptation throughout history through the lens of rowing. This course involves social interaction with Prague youth rowers, adult rowers, and Czech disabled athletes. Through these interactions students will acquire an understanding of the Czech culture and its resilience to political influences throughout history. Open to rowers and non-rowers alike; the only prerequisite is an ability to pass a simple swimming test. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-FERRARA GO Ferrara

This course is aimed at students interested in broadening their horizons and deepening their knowledge of the Italian people and culture by spending 4 weeks living and studying in the Northern Italian Renaissance city of Ferrara. In addition to GO program credit, students will earn 3 SH of transfer credit from the program host (CIEE Ferrara) by taking an Italian Renaissance Art course. Through visits to art museums, a community engagement activity, and food demonstrations, students will be exposed to a variety of aspects of Italian culture in a relatively short period of time. Because students will be staying with Italian families while in Ferrara, they will need to have completed ITAL-102 (or equivalent) prior to the trip. 2SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-FRNC GO French Language and Culture

Students experience the culture of southern France while furthering their French language skills. In addition to GO Program credit, students will earn up to six semester hours of transfer credit from the program host, IAU; three semester hours of French language at their placement level; and three semester hours in the course taught (in English) by the SU GO program director on site. Students who have completed FRNC-101 prior to the trip will be able to complete the SU language requirement on this program. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-GERMANY GO Wittenberg

The interplay of religion and politics has been of critical importance during at least three formative periods in German history: the reformation of the 16th century, the Third Reich and Nazism, and the peaceful revolution and the reunification of Germany. This course centers around a two-week visit to Germany and will examine the ways in which this interplay has served as both mirror and maker of German culture. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-GLPGOS GalápaGOs

GalápaGOs is an interdisciplinary, collaborative course designed to familiarize students with methods, theories, approaches and histories necessary for understanding biological and cultural diversity in the Galápagos Islands of Ecuador. The course pays close attention to the intersections, and potential conflicts, of social and natural science. Theories of evolution—biological and cultural—are one primary focus, as are understandings of difference and power; historical imagination; gender, sexuality and identity politics; and nationalism, citizenship and globalization. Coursework, travel and fieldwork, and reflective components will pay careful attention to contemporary issues of development, environment, tourism and community to look carefully at relationship(s) between localities, national histories and controls, and the demands and effects of tourism. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-GONORTH GO North

Travel to the rugged edge of human habitation in Northern Ontario, Canada, and discover the culture of the isolated Mushkegowuk Cree community in Fort Albany. Learn how the community's distinct culture and relative geographic location has shaped its education, human services and health care systems through service learning. Then finish up your trip with a visit to Ottawa, Ontario, for a look at "mainstream" Canadian culture. 2 SH. CC:Cross-Cultural.

OFFP/OFFS/OFFR-GRKCLT Greek Culture: Ancient and Modern

In order to understand more deeply both Greek culture and our own, this course includes preparation for and reflection upon a two-week experience of ancient and modern Greek culture. Focusing on Greek philosophy, literature, architecture, sports, food and history, we will attempt to access ancient Greek culture and compare it to modern culture. We will investigate important ancient sites and artifacts in addition to engaging in reflection, discussion, lectures and hands-on activities in order to discover how rational explanations of the world first burst upon the scene of ancient Greece. All the while, we will ask whether the ancient Greeks still have something to offer us as we try to understand the world and our place in it. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-HAWAII GO Hawaii

This program offers students an opportunity to experience the unique and distinctive culture and history of the islands of Hawaii. Part of this program will investigate the events surrounding the circumstances that brought the island nation of Hawaii under U.S. control as a state, which is an issue of controversy among Hawaiians. This subject will be discussed and will afford students an insight into the historical events surrounding the United States' acquisition of Hawaii and the perspectives of the native Hawaiian people. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-ICELAND Nature, Culture, Identities

GO Ísland/Iceland is a multi-disciplinary, collaborative course designed to familiarize students with methods, theories, approaches, and histories necessary for understanding the formation and representation of national identities in Iceland. The course pays close attention to key sites for such representation, including museums, textual histories, touristic narratives, cultural festivals, and organized efforts to "reclaim" nature and tradition. Historical imagination is one primary program focus, as are understandings of difference and power; identity politics; and nationalism, citizenship, tourism, and globalization. Coursework, travel and fieldwork, and reflective components will pay careful attention to contemporary issues of economy, environment, and community to look carefully at relationship(s) between national histories, lived contemporary experience, and the representation of "Icelandicness" to national and international visitors. 2SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-ISRAEL Interfaith Encounters

Primarily based in the Old City of Jerusalem, the crossroads for the three Abrahamic faiths, students will meet, study, pray, socialize and engage in community service with groups from Jewish, Muslim, Christian and other religious organizations. In addition to an immersive living and learning experience in the Old City, we will also stay on a traditional kibbutz in the Galilee and engage with Jewish, Christian, and Muslim communities. Our experience will end in the city of Tel Aviv, allowing students to experience the range of contrasts that compose contemporary Israeli life. The trip will help students develop an understanding of the fundamental challenges and opportunities of interfaith engagement and the importance of tolerance and respect for divergent views. We will explore the range of religious diversity found here, as well as differences and challenges to common narratives that have shaped Western faith and thought. There are no course prerequisites, but students must demonstrate an interest in interfaith engagement and an openness to faith-based, peace and coexistence programming. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-ITALART The Arts of Italy: Music, Architecture, and Gastronomy

A short-term (two week) summer program of study centered in Faenza and Firenze, with a two-day stay in Bologna. In addition, we will take day trips to Ravenna, Ferrara, Sienna and San Gimignano. This program offers students an opportunity to fulfill their cross-cultural requirement by engaging with the rich culture and history of the Emilia-Romagna and Tuscany regions of Italy. Students will observe and attend music lessons and rehearsals in an Italian conservatory, as well as observe classes of music education for children and participate in teaching some elements of those classes. Students will prepare meals with the help of Italian cooks, visit and shop at food markets and street markets, and visit several architectural monuments that have defined Western architecture since the Trecento, as well as have the opportunity to observe the architectural styles in urban and rural settings. Preference will be given to music majors and minors, art majors, possible Italian majors, or students with basic knowledge of Italian. To qualify for this course, students must have completed one of the following courses: MUSC-101 Introduction to Music, ITAL-102 Beginning Italian II, ARTH-101 Introduction to Art History I, ARTH-102 Introduction to Art History II or ARTH-306 Renaissance Art History. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-JPNWND A Window to Japan: Western Concert Music Through the Eyes of Japan

A 19-day GO short program to Japan, centered on a 10-day residency at Niigata University, where SU students will rehearse and perform chamber music with Niigata University students. Additional trips to rural Sado Island and Tokyo, which will include traditional Japanese lodging; visits to local artisans, shrines and temples; and attendance of a Japanese Theatre performance. Open to music majors by audition and interview. Prerequisite: INTD-250 Japan Seminar. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-NAVAJO Exploration and Understanding of Navajo Nation

This course offers a short-term program with strong reflection components where students will have the opportunity to learn about Navajo life and culture and work on community-led service projects at two Navajo sites-Tuba City, Ariz., and Crownpoint, N.M. The Navajo Nation program offers two types of experiences based on the greatest needs of the tribe-relational services and physical services. Relational services focus on the intercultural exchange, tutoring, relationship building, interacting with different age groups and immersion in family life. Physical experiences are coordinated with the community for their needs, such as chopping wood, building structures, painting, food preparation and various daily tasks. Evenings include reflection sessions and cultural presentations. Cultural and recreational activities include site visits to the Grand Canyon, Navajo Monument, Monument Valley, Chaco Canyon, open air markets, mesa hikes, sheep ranches, farms and cultural museums. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-NEPAL Sherpa Life and Culture

This program provides students with the unique opportunity to learn about Nepal's Sherpa culture, geography and ecology. On a spectacular 14-day trek to Mount Everest Base Camp, students will be immersed in Sherpa culture both by engaging with our Sherpa team and through the many cross-cultural sessions we will have in villages along the way. Students must be physically fit and able to trek up to 10 miles each day over challenging terrain. Students will be required to submit a health form signed by a physician. Corequisite: BIOL-560 Life at High Altitude. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-NEWZLND GO New Zealand/Aotearoa

This course offers a two-week study trip to the north island of New Zealand. The course is designed to introduce students to both the indigenous (Maori) and settler (Pakeha) cultures of New Zealand. Students will use the knowledge and experience gained through this course to develop critical concepts about culture and a greater understanding of their own place within their own culture. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-NIREPCE Peace and Youth in Northern Ireland

Students in this course will work with organizations in Northern Ireland to combine a service component with a cross-cultural experience in a reflection-intensive course. Topics covered will include human equality, religion, politics, socioeconomics and global citizenship as they pertain to the long history of strife in Ireland and the resulting peace and reconciliation process. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-NOLA GO New Orleans

Students travel to the Gulf Coast to learn about the culture of this unique American city and assist with ongoing Hurricane Katrina recovery efforts. Service projects include working with Habitat for Humanity on general construction of homes, such as painting, framing, renovating, etc. New Orleans and the surrounding area offer a distinctive culture unlike any other in the U.S. Students will experience the rich ethnic, culinary, historical, music/arts and architectural mixture that makes New Orleans a completely unique city. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-PERUCLT Peruvian Culture and Society

The program will introduce students to both Hispanic and pre-Columbian cultures of Peru, with in-depth consideration of the specific history-culture and sociopolitical environments of Peru. This program includes a significant service component and a visit to Machu Picchu. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-PHILIPP Philippines: Service Learning

In the spring semester students take a course in which they study Filipino culture, history, language, religion and cuisine. Students are graded on the basis of papers, quizzes and a final exam. The second part of the program is a two-week service-learning trip to the Philippines. The first week focuses on a service project in the provincial city of Lipa

City in Batangas Province. The second week begins with a visit to United Theological Seminary in Dasmarines, Cavite Province, for a presentation and discussion led by faculty of the seminary. The majority of the second week is spent in Manila, working at the Kanlungan Shelter for children. There are also side trips, typically to the Manila office of the International Justice Mission and the island fortress of Corregidor. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-PRAGUE Prague Revisited

Students explore the juxtaposition of historical and modern art forms in Prague, a quintessential eastern European city. In this course they work firsthand with professional artists, visit the largest movie studio in Europe, and study the many architectural and design styles that have contributed to the extraordinary experience of post-Communist life in this unique community. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-PUERTO Service and Culture in Puerto Rico

Service and Culture in Puerto Rico will focus on health and wellness, land rights, environmental justice, cross-cultural understanding, and social change. Students will be based in San Juan, but will travel all over the island. They will meet with local community and professional leaders, serve 30 plus hours with local organizations on the front line of community development, and explore the history and culture of this U.S. territory located in the Caribbean through field trips and community events, including a visit to the island of Culebra and a series of hikes through El Yunque. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-RUSSIA The Golden Ring of Russia: Ecology and Culture

Provides students with field experiences in the ancient "Golden Ring" region of Russia, an area that has endured significant human impact for more than 1,000 years and is now going through major social, economic and political changes. The main focus is on the ecology of the region as it relates to geomorphology, land usage and Russian culture. A major portion of the course will include an introduction to the Russian language, together with cultural experiences in the Yaroslavl region and Moscow. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-SAFRICA Travel Writing in South Africa

This course takes students to South Africa and exposes them to a range of South African cultures, including Xhosa, English-speaking, Afrikaner and Muslim. Students read models of international travel writing to see how writers express awareness of cultural similarity and difference, and of their own cultural values and identity. Finally, students write travel essays of their own, in which they reflect on the South African cultures they have encountered and on their own relationships to these cultures, and subject these essays to the creative workshop method. Prerequisite: ENGL-100 with a grade of B- or better. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-SPAN Spanish Language and Culture

This trip helps students further develop their Spanish language and culture skills in Seville, Spain. Students live with host families and participate in two excursions to other cities in the region. Students have the opportunity to take an upper-level Spanish course as part of this program. 5 SH. 2 SH are CC: Cross-Cultural and 3 SH are Spanish language credit.

OFFP/OFFS/OFFR-SUCASA Images of Jesus in Central America

An intensive course combining two weeks of on-site study with service at clinics, churches and mission sites in Costa Rica and Nicaragua. This course examines icons, paintings, hymns, communal life, liturgies, devotional practices and theological statements as expressions of the Christologies that are operative in a variety of Central American churches. Travel occurs during winter break. This is the academic component of the SU CASA (Susquehanna University Central America Service Adventure) program. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-SWEDEN GO Sweden: Modern Medicine in the Land of the Vikings

Sweden provides health care to all of its citizens through national health care systems supported by taxes. This course examines approaches to nationalized health care and the culture which embraces a nationalized approach to health care. Sweden has a Viking heritage which appears to still influence modern life. The Swedish health care system arose through the Swedish Lutheran church's mandate to care for the poor through the establishment of almshouses in every parish. The evolution of a faith based assistance system into a completely public welfare system including health care

and education will be explored. While there are not prerequisites, HLCR-370 The Business of Health Care is recommended as is PHIL-224 Bioethics. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-TOKYO GO Tokyo

The GO Tokyo program provides students with experiences to various aspects of Japanese culture, society, education and history. The program also provides students with experiences to interact with their Japanese peers to gain a better understanding of their own culture and the cultural similarities and differences they share with others. Students will be introduced to some common Japanese phrases for everyday life in order to facilitate interaction with their Japanese peers. The activities of the program will take place in Tokyo, which is a historical and modern city, and Senshu University, which is the second oldest private university in Japan. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-VILLAND GO Villandraut

Students spend two weeks of this three-week GO program working on the restoration of the Chateau de Villandraut, a 14th-century castle in southwestern France, about 25 miles from Bordeaux. Activities include stone-cutting, masonry and general maintenance of the chateau site. Thematic study will vary with director's expertise. Included are field trips to such sites as other historic monuments of the same era, a vineyard, etc. French being the official language of the worksite, students will be required to make a commitment to speak only French during working hours. The two weeks on the site are complemented by time in Paris, where students visit several medieval landmarks. 2 SH. CC: Cross-Cultural.

OFFP/OFFS/OFFR-TURKEY

Go Turkey: Crossroads of Civilizations is a short-term program (2 weeks in late July and early August), which will run in alternate years. The program focuses on identifying and understanding interactions between Western culture (i.e. Western Europe) and Eastern culture (i.e. the Middle East) within the political, social and religious systems of Turkey. To that end, students will visit cultural and religious sites in Istanbul and Ankara, meet with religious and non-profit leaders representing various minority groups living in Turkey, and visit both Turkish and EU political institutions focused on Turkey's integration with the economic and political systems of Western Europe. Preparation for the course entails readings and class discussions about Turkish politics and culture and Turkey's relationship with both Western and Middle Eastern countries. 2SH. CC: Cross-Cultural.

PERSONAL DEVELOPMENT

The personal development courses are intended to help students adjust to college life and to get the most from their college careers.

Personal Development Courses

PRDV-100 Using Computers

Topics include basic operating concepts of computers and a hands-on introduction to their use for word processing, email, spreadsheet modeling, presentation graphics, library research, the World Wide Web and other uses on the Internet. Also discusses trends, projections and the impact of computers on society. 2 SH.

PRDV-104 Perspectives

A first-semester seminar focusing on a topic (often interdisciplinary) chosen by the individual instructor as appropriate to allow students to connect the academic content of the material to their growth and development as first-year college students. Recent examples have included American pop culture, the rights and responsibilities of citizenship, and the relationship of science and religion to human society. 2 SH. CC: Perspectives.

RESERVE OFFICERS TRAINING CORPS (U.S. ARMY)

ROTC, or military science, is a four-year program divided into basic courses in the first and second years and advanced courses in the junior and senior years. Susquehanna University offers the program jointly with nearby Bucknell University. Some classes are taught at Susquehanna; some are taught at Bucknell.

The program is designed to prepare college graduates for commission as officers in the U.S. Army. Program goals are to strengthen responsibility and integrity and develop leadership skills and the moral courage to apply those skills.

First-year students and sophomores may enroll in the program on a trial basis with no commitment either to the program or to the military. Students may choose to leave the program or continue with advanced courses to earn officers' commissions. Although the program is designed to start with new first-year students each fall, it is possible to make special arrangements to enter the program as late as the second semester of the sophomore year. Students with prior military service may validate the basic course and enter directly into the advanced course.

Students enrolled in the advanced courses receive a monthly subsistence allowance during the school year. Students also receive books, uniforms and equipment at no cost. First-year students and sophomores may compete for U.S. Army ROTC merit scholarships that pay full tuition and fees, with an additional $1200 each year for books.

Program requirements include a 28-day summer training camp between the junior and senior years. Students receive a salary for the camp experience and are provided travel, lodging and meals at no cost. Students also must complete one course in the area of military history.

First-year classes meet once weekly for 60 minutes; sophomore classes meet for a total of two hours weekly. Advanced course classes meet weekly for a total of three hours. Students also are required to participate in physical-fitness training sessions (one hour each, number varies with class), and 12 hours of laboratory time throughout the semester. There also is one weekend field training exercise each semester.

Reserve Officers Training Corps Courses

ROTC-101 Introduction to ROTC

Acquaint students with the ROTC program. Increase self-confidence through team study. Learn fundamental concepts of professional leadership in both classroom and outdoor laboratory activities. 2 SH.

ROTC-102 Introduction to Leadership

Learn and apply principles of effective leading. Develop communication skills to improve individual performance and group interaction. Relate organization ethical values to the effectiveness of a leader. 4 SH.

ROTC-201 Self/Team Development

Learn and apply ethics-based leadership skills. Develop skills in oral presenting, concise writing, event planning and coordinating group efforts. 4 SH.

ROTC-202 Individual/Team Military Tactics

Focuses on leading a small group of individuals. Examines the role of the leader, military leadership concept, personal character, decision making, implementing decisions, motivation, supervision and training. 4 SH.

ROTC-301 Leading Small Organizations

Series of practical opportunities to lead groups, receive personal assessments and lead again in situations of increasing complexity. Plan and conduct training for younger students to teach and develop leadership skills. 4 SH.

ROTC-302 Leading Small Organizations II

Analyze tasks; prepare written or oral guidance for students to accomplish tasks. Delegate tasks and supervise. Plan for and adapt to the unexpected in organizations under stress. 4 SH.

ROTC-401 Leadership Challenges and Goal Setting

Plan, conduct and evaluate activities of the ROTC cadet organization. Articulate goals, put plans into action to attain them. Develop confidence in skills to lead people and manage resources. 4 SH.

ROTC-402 Transition to Lieutenant

Continues the methodology from ROTC-401. Identify and resolve ethical dilemmas. Refine counseling and motivating techniques. Prepare for a future as a successful army lieutenant. 4 SH.

Minors in Strategic Studies and Military Science

The military science program offers two minors, one in strategic studies and one in military science.

Minor in Strategic Studies. The minor in strategic studies consists of ROTC-301, ROTC-401 and one course from each of the following three areas:

Ethics: RELI-107 Faiths and Values, PHIL-122 Resolving Moral Conflicts and PHIL-225 Just War Theory

U.S. Policy: POLI-331 American Foreign Policy, POLI-333/SOCI-333 Development, Globalization and Society, and ECON-341 Economic Policy

Geography: PSYC-350 Psychology, Culture and Ethnicity

None of the courses in the strategic studies minor may be applied to the student's major.

Minor in Military Science. The minor in military science consists of ROTC-301, ROTC-302, ROTC-401, ROTC-402 and one course from each of the following two areas:

Human Interactions: PSYC-230 Social Psychology, PSYC-340 Cognitive Psychology and PSYC-350 Psychology, Culture and Ethnicity.

Ethics: RELI-107 Faiths and Values, PHIL-122 Resolving Moral Conflicts and PHIL-225 Just War Theory

None of the courses in the military science minor may be applied to the student's major.

ACADEMIC POLICIES AND REGULATIONS

Academic standards exist at every college and university. Many are common throughout higher education and others are specific to a particular campus. Standards are both an indicator of general educational quality and a means by which an individual student's achievement and progress can be measured. Susquehanna's academic year is composed of 30 weeks of instructional time, and in each semester a full-time student must complete at least 12 semester hours of credit. To receive the full benefit of a Susquehanna education, each student has these basic responsibilities:

- To attend class regularly (if a student misses the equivalent of two weeks of class in a 14-week course or one week of class in a seven-week course, the faculty member may remove the student from the course with a final grade of F),
- To meet frequently with the faculty adviser,
- To make steady progress toward graduation, and ·
- To understand and follow university policies outlined in this catalog and the *Student Handbook.*

Advising and Course Selection. Academic advising is one of the most important services available at a college or university. The process helps students plan an educational program that satisfies their individual needs.

First-year and transfer students at Susquehanna first meet their advisers during Welcome Week. Their initial discussions focus on course choices and the university in general. After that, students meet with their advisers as often as necessary—at least once each semester. These are opportunities to talk about academic goals and decide upon a major. Advisers can also help students gain approval for independent study and find out more about off-campus study programs. While academic advisers may provide guidance and support as described here, students are ultimately responsible for their academic choices and the consequences of those choices.

In March and November, students register for the upcoming semester after selecting their courses with the guidance of their advisers. In addition, during the first two days of each semester, all students go through a mandatory electronic registration check-in process.

Susquehanna reserves the right to limit the size of any course. Students majoring in a department are normally given enrollment priority in that department's courses required for the major. Every effort is made to accommodate individual needs, but the university cannot guarantee placement in a specific course in a particular semester.

Adding and Dropping Courses. Students may change their course schedules through mySU during the drop/add period.

Students may withdraw from a course through mySU and receive a grade of W until the end of the third week of the semester in full-semester courses or the end of the eighth day of classes in seven-week courses. For first-semester, first-year students, the withdrawal period is extended to six weeks for full-semester courses and three weeks for seven-week courses. After these dates, students may obtain a special late-course withdrawal and still receive a grade of W in a full-semester course until the end of the 10th week of the semester and in a seven-week course until the end of the fifth week of the course. A student may use this special late-withdrawal option for a maximum of 12 semester hours of credit while at SU. To take advantage of the option, the student must fill out a special late-withdrawal form and submit it to the Office of the Registrar by the appropriate deadlines. After the times indicated above, students may withdraw from a course only for extraordinary circumstances, such as medical emergency or family crisis, as approved by the Dean of Academic Engagement; in such situations, the student must provide written validation from the appropriate authority. In all other cases, the instructor will assign a final grade. Failure to attend class does not in itself constitute withdrawal, and students who stop attending a class without going through the official withdrawal procedures will receive a final grade for the course, with Fs being factored in for all missing coursework.

Dropping a course can delay graduation and may affect a student's eligibility for financial assistance, for insurance or for some academic honors.

All students are responsible for their own enrollment. Failure to add, drop or withdraw from a course properly may result in no credits awarded and/or a failing grade.

Course Loads. The normal course load for a full-time student is 16 semester hours (typically four courses) per semester. Students may take 12 to 18 semester hours each semester without losing their full-time status or incurring extra charges. Students may take more than 18 semester hours and up to a total of 24 semester hours with the permission of their adviser if they do not have any outstanding grades of EC, I or N and meet a specified GPA. This option is open to seniors with a cumulative GPA of 2.50 or higher and underclassmen with a cumulative GPA of 3.00 or higher. Other students in good academic standing without grades of EC, I or N need approval from the dean of their school to exceed 18 semester hours. Students who have a cumulative GPA below 2.00 are not eligible to take an overload under any circumstances.

Semester Hour. A "semester hour," used interchangeably for Susquehanna courses with "credit hour," is a course unit normally involving three to four hours of student effort per week during one 14-week semester. This includes both in-class contact hours and out-of-class activities. The major parameters influencing the in-class/out-of-class division include the mode of instruction and the level of the course. A special or compressed term shall meet a number of hours per credit equivalent to a semester but in a compressed or extended time frame, as determined by the registrar in consultation with the provost.

Independent Study is an option for students who would like to investigate a topic not covered by the regular curriculum. It can also provide an opportunity for more in-depth research on an issue raised in another course. To qualify for independent study, a student must have completed 48 semester hours with a cumulative GPA of 3.00 or higher. Independent study also requires written approval of the supervising faculty member and of the head of the department offering the course. Other students who are in good academic standing and who have no grades of EC, I or N may attempt an independent study if they also receive permission from the dean of the appropriate school. Individual faculty and departments may establish higher standards of eligibility. Normally an independent study project earns from two to four semester hours of credit.

Internships. Most academic disciplines offer internships during the junior or senior year. These work experiences allow students to apply what they have learned in courses to the real world of professional organizations. A faculty intern adviser and a supervisor in the place of work design internships together, and each evaluates the student's performance following completion of the internship.

Before arranging an internship, the student consults the academic department in which credit is to be earned. Department faculty must approve the student for the internship and determine the nature of the academic responsibilities and the amount of credit. Academic good standing (2.00 GPA or better) is required for all internships. Many departments require a 2.50 GPA or better for internship approval. Students must complete and submit to the Office of the Registrar a Student Learning Contract *before* beginning their internship. The university will not grant retroactive internship credit.

Students participating in summer internships for academic credit or part-time students pay 50 percent tuition on a credit-hour basis. Normally, the university awards one to four semester hours for a summer internship. Summer internship credit is registered through the Office of the Registrar.

Practica are typically unpaid work assignments required in conjunction with a major program. Student teaching within the Department of Education is one example of a practicum experience. Practica typically involve supervised experience and training in professional, academic, clinical, community and research settings. Faculty from their major department inform and guide students in the practicum requirements. Internships or practica are possible for any Susquehanna student who meets the basic eligibility requirements. Interested students should consult their faculty advisers or department heads.

Attendance Policy. It is the university's policy that when a student has accumulated more absences than weekly class meetings in any particular course during the semester, the faculty member may warn the student in writing of the consequences of additional absences. When a total absence accumulation has reached the equivalent of two weeks' class meetings (one week's class meetings for a seven-week course), the faculty member may award a grade of F, which automatically withdraws the student from the course. As with any grade, appeal may be made through normal channels if gross unfairness or illegal discrimination is alleged.

Each faculty member may choose to establish more stringent or less stringent attendance requirements than those set by the university or to abide by the university's policy. In either case, for each course the attendance policy must be clearly stated in the syllabus and distributed on the first day of classes.

Participation in university-sponsored events does not constitute an automatic excused absence from classes. The instructor may require student attendance if, in the context of the course, this appears to be in the student's best interest. In any case, the student is responsible for informing the instructor of an intended absence as early as possible and at least by the class period preceding that absence. If circumstances make such notification impossible, the student must see the instructor on the first day of returning to class.

Grades and Grading. Normally, the instructor is the final authority for all grades. Grades are changed only in the event of error, and changes require authorization by the faculty member and approval by the dean of the appropriate school. All grade changes must be submitted within one month from the end of the semester in which the grade is assigned. A student may not raise a final grade by doing additional assignments after the course has concluded or by revising previously submitted assignments. Any grade conflict that cannot be resolved between the faculty member and the student shall be referred to the department head. If the conflict cannot be resolved at the departmental level, the issue may be referred to the dean of the school.

Grading System and the GPA. Each letter grade from A to F carries a designated number of quality points per semester hour. These points are used to calculate the grade point average (GPA). To determine the GPA for each semester, the number of quality points earned that semester is divided by the number of semester hours taken that semester. To compute the cumulative GPA, all quality points earned at Susquehanna are divided by all semester hours attempted.

The following values are used in the computation of quality points:

A	4.00 quality points
A-	3.67 quality points
B+	3.33 quality points
B	3.00 quality points
B-	2.67 quality points
C+	2.33 quality points
C	2.00 quality points
C-	1.67 quality points
D+	1.33 quality points
D	1.00 quality points
D-	0.67 quality points
F	0.00 quality points

The following grades carry no quality points and do not affect the GPA:

W	Withdraw
S	Satisfactory (C- or higher)
U	Unsatisfactory (D+ or lower)
TR	Credit (credit by examination or transfer credit from other institutions)
AU	Audit

EC	Extended Course
I	Incomplete
N	Not Reported (final grade delayed for administrative reasons)
CIP	Course in Progress

Coursework accepted for transfer from other institutions will be recorded only as credit earned toward graduation. It will not be included in the student's GPA.

Extended Course (EC) Grades. Some courses, especially senior seminars and advanced research courses, may require more than one semester to complete. In such cases, the instructor will give a temporary grade of EC. Students then submit all remaining work by the end of the next semester or before graduation, whichever is earlier. Students who fail to complete all assignments by the required date will be graded on the work submitted up to that point. Grades of zero or F may be calculated for missing assignments.

Incomplete (I) Grades. Occasionally an illness or family emergency may prevent a student from completing all assignments before the end of the course. Under these circumstances a professor may award the temporary grade of I. If the I is for a seven-week course in the first half of the semester, the student must complete all outstanding work by the end of the 14th week of classes. If the I is for a full-semester course or a seven-week course in the second half of the semester, the student must complete all outstanding work within the first two weeks of the next semester. Extensions of this deadline must be approved by the instructor and filed with the registrar. Students who do not finish all assignments by the required date will be graded on the work submitted up to that point. Grades of zero or F may be calculated for missing assignments.

The S/U Option. Susquehanna encourages students to explore different disciplines and pursue new interests by enrolling in a wide variety of courses. The S/U, or satisfactory/unsatisfactory, option allows students to take an elective in an area in which they have had little or no prior experience without taking a chance of lowering their GPA. Under the S/U option, students who earn a grade of C- or higher receive a grade of S, or satisfactory. Students who earn a grade of D+ or lower receive a grade of U, or unsatisfactory. Neither grade is calculated into the student's GPA, but a course completed with a grade of U does not earn credit toward graduation.

Students must officially declare their intention to use the S/U option during the first two weeks of the semester by submitting a completed S/U form to the Office of the Registrar. A student may not take more than four semester hours of S/U coursework in any one semester except in the case of certain internships. A maximum of 10 semester hours of electives may be taken on an S/U basis. Courses graded only on an S/U basis, such as the accounting internship, are not included in the S/U maximum total.

Auditing. Another way to take advantage of the university's diverse curriculum is to audit a course. Students who choose the audit option are not required to take examinations. They are expected to attend and participate in class regularly. Audited courses carry no academic credit, but the university does note audited courses on transcripts. Students planning to audit a course must notify the Office of the Registrar before the conclusion of the drop-add period and pay the appropriate fee.

Repeating a Course. There are times when students wish to retake a course, either to improve their knowledge or to earn a higher grade. In such cases, the university calculates both grades into the cumulative GPA and records both grades on the transcript. Students will not earn additional credit toward graduation by repeating a course in which they previously received a passing grade.

Credit and Exemption by Examination. Susquehanna recognizes exceptional high school achievement by participating in the Advanced Placement Program of The College Board. Students may earn academic credit and/or exemption from entry-level courses by superior performance on AP examinations. In general, departments award credit for scores of four and five.

As part of an orientation program held on campus during the summer, students with strong skills in foreign language may earn exemption without credit from the university Central Curriculum foreign language requirement.

Some academic departments at Susquehanna also grant credit toward graduation for both the general and the subject examinations of the College Level Examination Program (CLEP). Normally, a CLEP score at or above the 50th percentile receives the equivalent of four semester hours of course credit.

Students who earn exemption or credit through examination for a specific course may not subsequently enroll in and receive credit for the same course. They also may not enroll in any lower-level course in the same department without the permission of the department head.

For further information on exemption and placement examinations, please contact the Office of the Registrar at 570-372-4109.

International Baccalaureate Credit Policy. Susquehanna University recognizes the intellectual rigor, high academic standards and emphasis on international understanding and responsible citizenship of the International Baccalaureate (IB) program. The IB program is an internationally recognized two-year, comprehensive curriculum overseen by the International Baccalaureate Organization, a nonprofit foundation based in Switzerland. The program is available to students between 16 and 19 years of age at numerous domestic and international secondary schools. Recipients of the IB certificate may receive credit for up to two courses in each subject area for which a higher-level examination score of five or more has been achieved, subject to final confirmation by the appropriate university department. Credit for a higher-level examination score of four will be awarded at the discretion of the appropriate university department. No credit will be awarded for subsidiary level examinations.

Coursework at Other Institutions. First-year students, sophomores and juniors may take courses at other accredited institutions and transfer the credit to their record at Susquehanna. Seniors may do so only if they are not in violation of the residence requirement explained below. Students must file a notice with the registrar's office of their intention to take coursework at another college or university, and all such work must be approved in advance by the appropriate department heads. Susquehanna will accept transfer credit only from U.S. institutions that are accredited by federally recognized accrediting agencies. Transfer credit from foreign institutions will be evaluated on a case-by-case basis.

Students must earn a grade of at least C- in courses accepted for transfer. The university does not calculate grades from courses taken at other colleges into a student's Susquehanna GPA, and Susquehanna will not award more transfer credit for a course than the parent institution offered for that course.

Off-Campus Summer School. In keeping with university policy on coursework at other institutions, Susquehanna students may also take summer courses at other institutions. Students planning to do so should complete the necessary form in the Office of the Registrar and provide the associate registrar and appropriate department heads with course descriptions from the other school at least two weeks before the end of the spring semester.

Susquehanna Summer Session. Susquehanna offers a seven-week regular summer session and two four-week intensive summer sessions, featuring a variety of online and on-campus courses, which are available both to Susquehanna degree candidates and to non-degree students. A list of the summer session courses is posted online early in the spring semester. Recent high school graduates who have been admitted to other colleges may enroll in the summer session. They should confer in advance with the college they plan to attend to make certain the credit earned will be transferable. Summer session students who plan to earn a Susquehanna degree should have their applications approved by the Office of Admissions.

Services for Students with Disabilities. In compliance with the Americans with Disabilities Act of 1990 and section 504 of the Rehabilitation Act of 1973, the university makes efforts to provide reasonable accommodations for students with disabilities. To be considered for disability accommodations, students should forward recent documentation of their condition to the coordinator of disability services. Full information about the required documentation and steps for obtaining accommodations is discussed in the disabilities policy available at www.susqu.edu/academics/12687.asp.

There are several compliance officers for services to students with disabilities. The coordinator of disability services coordinates the programs. The director of facilities management is responsible for physical facilities compliance with the Americans with Disabilities Act of 1990. The director of human resources is responsible for employment compliance.

Academic Honors. The university sponsors a variety of programs to encourage and recognize outstanding academic performance. These include the Dean's List for each semester, honors awards at commencement and the annual University Scholars program.

To graduate with honors, a bachelor's degree student must have completed no fewer than 65 semester hours in residence at Susquehanna. Students who have done work of honors caliber while at Susquehanna but who have not satisfied this requirement are so recognized at commencement, but they do not receive degrees with honors.

The cumulative grade point averages required for honors designation at commencement are shown here:

Designation	Cumulative GPA
Cum laude	3.40-3.59
Magna cum laude	3.60-3.79
Summa cum laude	3.80-4.00

Students who successfully complete the Honors Program, fulfill the semester-hour requirements above and earn a cumulative GPA of 3.40 or better are also awarded University Honors. The university awards departmental honors to recognize students who exhibit superior performance in their major field. Specific requirements for departmental honors appear under department listings.

The Dean's List recognizes students who earn a GPA of 3.40 or better in a particular semester. To be eligible, students must complete at least 12 semester hours and receive a letter grade for at least eight of those hours during the semester. Any student who receives an I or EC during the semester is ineligible.

The university also annually designates University Scholars to recognize superior academic achievement. This honor goes to full-time students who have achieved or maintained a cumulative GPA of 3.75 or better after at least one full academic year of study at Susquehanna.

Academic Standing and Satisfactory Progress Toward Degree. To be in good academic standing, a student must maintain a 2.0 or better cumulative GPA.

Credits Earned	Class Standing	Warning	Probation	Suspension
Less than 26 credits	First-year	Less than a 2.00 overall or less than a C- in at least 8 credits in a semester	Less than a 1.80 overall or less than 2.00 (i.e., on warning) for second semester or less than a C- in at least 8 credits while on warning	Less than a 1.50 overall or second semester on probation or less than a C- in at least 4 credits while on probation
26-57	Sophomore	Less than a 2.00 or less than a C- in at least 8 credits in a semester	Less than a 1.90 or less than a 2.00 (i.e., on warning) for second semester or less than C- in at least 8 credits while on warning	Less than a 1.70 or second semester on probation or less than a C- in at least 4 credits while on probation
58-93	Junior	None	Less than a 2.00	Less than a 2.00
More than 93 credits	Senior	None	Less than a 1.901	Less than a 2.00

* A junior who has attempted more than110 semester hours, including withdrawals, is subject to loss of federal financial aid if his/her GPA is <2.00.

* A second semester on warning leads to probation, but warning is not a prerequisite for probation.

In a case of catastrophic academic performance (e.g., D, F or W in all courses for a given term, leading to a term GPA of 1.00 or less), a first-year student may be placed on suspension without having been on probation. Otherwise, a student must be on probation for at least one semester before suspension, and a second semester below the relevant probation criterion leads to suspension.

If a first-year student or sophomore completes a semester on probation above the relevant probation criterion but below the relevant good academic standing criterion, he/she will be continued on probation. Juniors and seniors must return to good academic standing or be liable to suspension.

A student on probation must complete an academic recovery plan with the Center for Academic Achievement, signed by his/her adviser, within the first two weeks of the semester every semester he/she is on probation. The student must meet the academic performance milestones and any other requirements of the plan or be subject to suspension.

A student returning from suspension will be on probation until meeting the criteria for good academic standing and must complete an academic recovery plan. Students returning from suspension are expected to achieve good academic standing by the end of two semesters after being readmitted. If, after two semesters, the student remains below the relevant probation criterion, he/she will normally be permanently suspended from the university. If, after two semesters, the student is above the relevant probation criterion but still below good academic standing, he/she may have a third and final semester to achieve good academic standing.

The first suspension must include at least one semester and one summer and, depending on circumstances, may require two semesters and one summer. If the student again meets the criteria for suspension after readmission, he/she will be permanently suspended from the university.

Warnings are not subject to appeal. Academic probation or suspension may be appealed in writing to the provost. The appeal must include new information that was not available to the Academic Standing Committee and must include a recommendation by the student's adviser and dean. An appeal based on discrimination or on capricious or negligent action by the Academic Standing Committee may also be addressed to the provost.

Graduation Requirements. To earn a baccalaureate degree, a student must do the following:

- Complete at least 130 semester hours (with no more than 65 semester hours in a single department unless the student is pursuing a major accredited by the National Association of Schools of Music or by the Pennsylvania Department of Education which explicitly mandates more credit in a particular department),
- Satisfy major requirements,
- Fulfill all sections of the university Central Curriculum,
- Have a cumulative grade point average of 2.00 (C average) or better for all courses attempted at Susquehanna and a minimum cumulative grade point average of 2.00 (C average) for all courses in the major, unless the department has a higher standard (unless otherwise indicated in the departmental listings, every course applied to the major will be included in the major GPA calculation),
- Satisfy the university residence requirement, and
- Have program approval from his or her academic adviser and the Office of the Registrar.

Each student is responsible for ensuring the completion of all degree requirements. The university provides an automated degree audit program to help students chart their progress toward graduation and recommends that students periodically check their records and immediately bring any questions or concerns to the Office of the Registrar.

Candidates must declare their anticipated graduation date at least two semesters before they intend to graduate. The university expects graduating seniors to attend commencement ceremonies to receive their degrees. Susquehanna will award degrees in absentia only on approval of a written request addressed to the provost.

Residence Requirement. Baccalaureate candidates must take at least 65 semester hours of their total coursework, including 24 of their last 32 semester hours and their major capstone course and any other course a major program may designate, in residence or in approved off-campus programs. At least half the courses applied to a student's major or minor must also be taken in residence. The faculty or the Residence Waiver Committee as its designee must approve any variation from this policy.

Second Bachelor's Degree. Students who have earned a bachelor's degree, whether from Susquehanna or from another institution, must fulfill the following requirements if they wish to enroll at Susquehanna for a second bachelor's degree:

- Be formally admitted to the bachelor's degree program at Susquehanna,
- Complete a minimum of 32 additional semester hours in current residency at Susquehanna,
- Satisfy all the current requirements for the Central Curriculum and for the chosen major, and
- Complete at least half of the coursework for the major, the major capstone course and any other course a major program may designate at Susquehanna.

Any coursework that a student has taken at another college or while earning a first bachelor's degree at Susquehanna must be approved by the appropriate department in order to be applied to the new major.

Susquehanna graduates who wish to complete a second major but who do not wish to earn a second degree need to notify the Office of the Registrar of their intention. Such students must satisfy all of the current requirements for the chosen major and must complete half of the coursework for the major at Susquehanna. Any coursework that the student has taken at another college or while earning a bachelor's degree at Susquehanna must be approved by the appropriate department in order to be applied to the new major. After the student has completed the second major, the double major will be recorded on the transcript.

Dual Degree. Students who complete two majors may be awarded both degrees if they complete a total of 162 hours of coursework. A second degree presumes not just completion of a dual major but the completion of a greater amount of coursework than would be required by one degree. The additional coursework is also needed to give the breadth that a liberal arts education should provide. Students who complete two majors and who do not wish to take a total of 162 semester hours of coursework will be awarded one bachelor's degree.

Accelerated Degree. Most majors, with the exception of accounting, music and elementary education, adapt to Susquehanna's accelerated degree option, which allows highly motivated students to complete degree requirements in three or three and one-half years of study. To complete an accelerated degree, students plan carefully from the beginning to do the following:

- Earn exemption from some first-year courses through placement testing,
- Use the full 18 hours of tuition "credit" each semester by taking the maximum number of courses,
- Pursue course overloads when appropriate, and
- Add summer courses at modest cost.

For further details, please contact the Office of Admissions.

Transcripts. The Office of the Registrar will issue official transcripts of the student's permanent academic record upon written request (electronic signatures are not accepted for this purpose). Susquehanna reserves the right to withhold transcripts of a student who has any outstanding financial obligations to the university.

Leave of Absence. Students may take leaves of absence for personal, medical or financial reasons, or for study at other institutions with which Susquehanna has no formal cooperative program. Any interested student may arrange a leave of absence by filing the appropriate form with the Office of the Registrar. Students in good academic standing may re-enter the university after their leave by writing to the registrar. Students on academic warning or academic probation who take a leave of absence must be formally reinstated by the Academic Standing Committee before they may return to Susquehanna. The procedures for such reinstatement are identical to the procedures for readmission after academic suspension.

Withdrawal from the University. To be eligible for any refunds under the schedule established by Student Financial Services at www.susqu.edu/refund, students must complete the formal withdrawal form available from the Office of the Registrar. Simple departure from campus does not constitute official withdrawal. Students who do not immediately notify the registrar of their intention to withdraw will lose all fees and deposits. Degree candidates who withdraw or take a leave of absence from the university for more than one year are subject to any changes made in their academic

program requirements during that time. Students who have left the university for one year or less may fulfill either their original major and distributional requirements or the revised requirements.

Nondegree Students. Students not formally admitted as degree-seeking candidates may enroll in courses as nondegree students with the permission of the registrar. The registrar must approve the nature and amount of coursework based upon the student's prior academic record. Nondegree students may be required to provide a transcript of all previous academic work, and they must maintain a cumulative grade point average of 2.0 or higher in their Susquehanna courses. If the cumulative GPA falls below this point, the university may refuse permission to pursue further coursework. Enrollment will be on a space-available basis only.

Nondegree students planning to attend the university later as degree candidates should consult the admissions staff. This should be done as early as possible to assure proper guidance and to complete the admission process. Nondegree students who have completed 12 semester hours of coursework and who intend to become degree candidates must declare their intention and be properly advised before continuing to enroll in courses at Susquehanna. Students planning to transfer Susquehanna credits elsewhere should obtain prior clearance from the academic dean or registrar of the receiving institution.

Nondegree students are subject to all rules and regulations of the university. They will be graded on the same basis as degree candidates, and the Registrar's Office will maintain a permanent academic record of all courses attempted or completed. If a student enters the university as a nondegree student and later becomes a degree candidate, the grades earned as a nondegree student are included in the GPA.

Veterans. The Commonwealth of Pennsylvania has approved Susquehanna to provide education under the public laws pertaining to veterans, reservists and the children of armed forces personnel who lost their lives in the service of their country. Candidates should present certificates of eligibility and entitlement before registration. Veterans who come to the university without the appropriate certificates may apply after arrival through the Office of the Registrar.

To be eligible for full veterans' benefits, a student must be a degree candidate in good academic standing and must be actively enrolled in at least 12 semester hours at any point during the semester. Veterans must notify the associate registrar of re-enrollment at the beginning of each semester and of any course dropped later.

Susquehanna is a participant in the Yellow Ribbon GI Education Enhancement Program. The Yellow Ribbon program is a provision of the Post 9/11 Veterans Educational Assistance Act of 2008. This program allows institutions of higher learning in the United States to voluntarily enter into an agreement with the Veterans Administration (VA) to fund expenses up to the annual cap as determined by the VA each academic year. The institution can contribute up to 50 percent of any remaining tuition, and the VA will match the same amount as the institution. Contact the Office of the Registrar for information on Susquehanna's participation in the Yellow Ribbon program.

Privacy Policy and Student Right-to-Know Act. The offices of admissions, the registrar and student life and the Career Development Center maintain records on degree candidates. Enrolled students may review their records by submitting a written request to the appropriate office. They may not remove documents from their files without the administrator's permission. University employees, including the university attorney, emeriti faculty and educational consultants employed by the university, may be given full access to student records.

Each year Susquehanna publishes an online directory listing each student's name, program, class, home and campus addresses, campus mailbox, and campus email address. The university may release this information publicly without prior consent from the student. The university may also release the date and place of birth, student activities, photographs, home telephone number, dates of attendance and graduation, degrees awarded, honors received, and other educational institutions attended. Weight and height for varsity athletes may also be released. The university may also release photographs of students for use in the news media and in university publications in printed, video and electronic formats. A student may request that any of this information not be released by writing to the vice president for student engagement and success.

As of Jan. 3, 2012, the U.S. Department of Education's FERPA regulations expand the circumstances under which students' education records and personally identifiable information (PII) contained in such records—including Social Security number, grades or other private information—may be accessed without student consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local education authorities ("Federal and State Authorities") may allow access to student records and PII without student consent to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation

may relate to any program that is "principally engaged in the provision of education," such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to students' education records and PII without student consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive PII, but the authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain and share without student consent PII from education records, and they may track student participation in education and other programs by linking such PII to other personal information about students that they obtain from other federal or state data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service and migrant student records systems.

The university may release academic information to parents of a dependent student at any time.

In accordance with the Student Right-to-Know Act, Susquehanna University publishes the graduation rate of full-time bachelor's degree students. Anyone interested in receiving this information may access the university website at http://www.susqu.edu/documents/about/graduation_rate_report.pdf.

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Mark Fertig, *Associate Professor of Art*; B.F.A. 1994, Shepherd College; M.F.A. 1997, East Tennessee State University. (2002, 2008)

Emma Fleck, *Associate Professor of Management*; B.A. 2002, Ph.D. 2006, University of Ulster. (2016, 2016)

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Christine L. Cooper Grace, *Associate Professor of Management*; B.S. 1985, Elizabethtown College; M.L.H.R. 1989, Ph.D. 1990, Ohio State University. (2001, 2001)

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