## 2016-17

## Academic Catalog



Wittenberg University
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## Profile, History and Academic Mission of Wittenberg

Accreditation: The university is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. The Higher Learning Commission is located at 30 North LaSalle Street, Suite 2400, Chicago, Illinois 60602, and its telephone number is (800) 6217440. Wittenberg is also accredited by the American Association of University Women. The Department of Education is accredited by the National Council for Accreditation of Teacher Education (both initial and advanced preparation levels), the Department of Chemistry is accredited by the American Chemical Society, and the Department of Music is an accredited member of the National Association of Schools of Music.

Wittenberg is a member of the American Council on Education, the Association of American Colleges and Universities, the Association of Governing Boards of Colleges and Universities, the Ohio College Association, the Ohio Foundation of Independent Colleges, the Association of Independent Colleges and Universities of Ohio, the National Association of College and University Business Officers, the College Board, the Council on Undergraduate Research, and EDUCAUSE.

Consortia: Wittenberg benefits from membership in numerous consortia. The Marine Science Educational Consortium provides the opportunity for Wittenberg students to enroll for a semesterlong program in marine science at the Duke University Marine Laboratory in Beaufort, North Carolina. The Southwestern Ohio Council for Higher Education, composed of 24 institutions, promotes cooperation among the member colleges and universities. The International Educational Association of Ohio Colleges and Universities promotes the international aspect of higher education through workshops and institutes. Through OhioLINK, Wittenberg students have access to more than one billion items, from the libraries of more than 80 colleges and universities; in addition, the Online Computer Library Center further connects Wittenberg to information about library holdings around the nation and the world. Wittenberg also holds membership in several study abroad consortia including the Institute for the International Education of Students, the International Student Exchange Program, the Council of International Educational Exchange, and Denmark ’s International Study Program.

## History \& Academic Mission

## The Objectives of a Liberal Education at Wittenberg

A liberal education imparts a broad base of knowledge, and understanding, that enables the individual to discover his or her own interests and potentialities in a life that will likely extend well past the middle of the 21 st century. To that end, the Wittenberg program sets broad, general requirements designed to enable the student to explore as many frontiers of knowledge as possible while becoming acquainted with the continuing traditions of society, thus preparing the student for the continuity and change that he or she will experience. In addition, the student is expected to pursue a particular field or fields in greater depth by means of the major and minor areas of concentration.

Wittenberg University's mission finds expression in a liberal arts curriculum that seeks specifically to develop persons who:

1. Possess the skills and tools of communication appropriate to the needs of the complex civilization at the dawn of a new century. Such skills and tools include:
o writing proficiency,
o oral communication,
o mathematical skills,
o computing skills,
o foreign languages, and
o the symbolic language of the arts;
2. Achieve competence in thinking rigorously and rationally both with respect to subjects of general interest and concern and within the parameters of a specific discipline or profession;
3. Understand the fundamental aspects of their physical and biological environment and of their own bodies, as well as their responsibilities both to preserve their environment and to care for their bodies. Wittenberg is committed to developing the whole person in physical as well as in other ways and expects this commitment to be fulfilled not only to enhance physical fitness but also to develop a lifelong skill that improves the quality of life;
4. Comprehend the nature, structure, and function of society and of government within a local, national, regional and global perspective, as well as their social responsibility as citizens;
5. Discern the variety and complexity of their own and other cultures in a broad historical and cosmopolitan perspective;
6. Appreciate the literary and artistic fruits of culture; and,
7. Exercise moral responsibility and seek to extend ethical integrity and spiritual or religious concern in every dimension of life.

## Campus Location \& Facilities

## Campus Location

Wittenberg is located in Springfield, Ohio, the county seat of Clark County, which has 140,000 inhabitants. Columbus is 45 miles to the east, Dayton is 25 miles to the southwest, and Cincinnati is 72 miles to the southwest. The university is easily reached by Interstate 70, U.S. Highways 40 and 68, and Ohio Highways 4, 72 and 41. Students and visitors also have access to the Dayton International Airport in nearby Vandalia, as well as to Springfield's transcontinental bus line.

Springfield is both a "living laboratory" and a "college town." Students have access to a wide range of real learning opportunities that include the advantages, challenges and realities of smallcity life. Wittenberg's campus is located in a residential setting, yet the downtown area, shops, restaurants and parks are all within walking distance. Public transportation is available to the mall, to the airport, and to other major cities.

## Academic Advantages of Wittenberg's Location

- Students can gain internship experience with local businesses, law firms, service organizations, and local governments.
- A hospital, where students interested in the health field or in public relations can opt for an internship, is just a few blocks from campus.
- Students volunteer in organizations ranging from the Springfield Museum of Art, the Head Start program and Habitat for Humanity, to the YMCA, Clark County Historical Society and the Public Library.
- Education majors can student teach in private/public, urban, suburban, and rural schools.
- Parks and a reservoir are living laboratories for research and field experience in environmental studies or the sciences.


## Social Advantages of Wittenberg's Location

- Springfield offers a wide variety of places to go for shopping, dining and recreation.
- Whether you like to listen to an orchestra or watch a ballet troupe pirouette across the stage, you will find cultural activities such as the Springfield Symphony, the Great Entertainment Series and the Summer Arts Festival.
- Students can hop on the interstate for easy access to the metropolitan areas of Dayton (25 miles), Columbus ( 45 miles), and Cincinnati ( 72 miles).
- Nature enthusiasts can hike in Springfield's parks or in nearby Clifton Gorge or Glen Helen. The city and state park systems also give students the great outdoors to camp, canoe, swim, sail, windsurf, cycle and play golf.


## Campus Facilities

Wittenberg's campus is located on 70 acres of wooded and rolling hills. It consists of 26 major buildings, including nine academic buildings; a modern library; an outstanding Health, Physical Education, and Recreation Center; and seven residence halls. Myers Hall, constructed between 1846 and 1851 and located in the center of campus, is Wittenberg's oldest building and one of its most popular student residences. It is listed in the National Register of Historic Places and, in 1994, in honor of Wittenberg's sesquicentennial, was commemorated on a postcard issued by the United States Postal Service.

The Barbara Deer Kuss Science Center provides modern and accessible laboratory and computing facilities for study in biology, chemistry, biochemistry and molecular biology, computer science, environmental studies, geology, physics and mathematics. Almost all classrooms in the Kuss Science Center have Internet access and are equipped with multimedia projection systems. In addition to standard laboratory equipment, the building is equipped with both transmission and scanning electron microscopes with Energy Dispersive X-Ray Analyzer, a genetic analysis system, a physiograph, a 400,000-volt particle accelerator, narrow bandwidth tunable diode lasers, an ultrahigh vacuum system, gas chromatograph / mass spectrometer, vapor phase and liquid chromatographs, a High Performance / Fast Protein Liquid Chromatography System,

Raman Fourier transform infrared spectrophotometers, an electrochemistry workstation, X-ray diffraction equipment, a pulsed dye laser system and fast flow reactor, radiographic equipment, and nuclear magnetic resonance, atomic absorption, fluorescence, and uv-vis diode-array spectrometers. The building also contains microcomputer laboratory/classrooms serving biology, physics, mathematics, computer science, geology and chemistry. A state-of-the-art computer lab and classroom, including a large-format scanner, printer, and digitizer, supports Geographic Information System (GIS) instruction in biology and geology, and its applications in other disciplines across campus. The Geology Learning Center, cooperatively designed and built by faculty and students, contains exhibits about regional fossils, rocks and minerals. Weaver Observatory, with its newly refurbished 10-inch refractor telescope with digitally controlled drive system and solid state photometer, is adjacent to the Kuss Science Center.

The new 64-bit WARP (Wittenberg Advanced Research Processors) cluster is located in the Barbara Deer Kuss Science Center. This parallel processing cluster is used by faculty members and advanced students to solve computational science problems. Software includes C/C++ and Fortran compilers along with mathematical and statistical libraries. WARP's front end consists of four hard-wired Linux workstations; the computer nodes consist of 12 dual processor AMD Opteron nodes and 1 quad processor node ( 28 computer processors in all). Each utilizes 1.6 GHz processors. The dual processor nodes have 2 GB of RAM and the quad processor has 8 GB of RAM. Each node also has access to 64 GB of local disk space. The front-end node and computer nodes have a Gigabit Ethernet interface and an Infiniband system area network interface.

The department of education is located in Blair Hall, the original laboratory experimental school on Wittenberg's campus used to prepare teachers through classroom practice. This historical remnant of Wittenberg's early curriculum has been renovated to house the current faculty of education as well as six classrooms, a 30-seat Macintosh computer lab, a student theatre production auditorium with seating for more than 90 , and a student-faculty lounge for informal or seminar presentations, social events and group project workspace.

The department of music is located in Krieg Hall, a facility designed with ample space for teaching, practice, study and performance. Available are five pipe organs, in addition to the large organ in Weaver Chapel, and 55 pianos. An electronic piano laboratory has become a popular means of learning fundamentals of piano technique and theory. A computer laboratory, with a full range of computers, synthesizers and software, is used not only for composition but also for courses in orchestration, counterpoint and ear training. A full collection of early instruments includes two harpsichords, and various wind and string instruments. There are many modern instruments available to students participating in the music programs. A library of musical scores, books and periodicals, and a computer-assisted reference resource center are located in Thomas Library, along with audiovisual facilities, which include more than 15,000 audio recordings. The facilities and programs of the department of music meet the expectations for fully accredited membership in the National Association of Schools of Music, which it has consistently maintained for more than seventy years.

Koch Hall, renovated for the Art Department in 1980, is a 36-room building containing studios for the major areas of the visual arts, a computer imaging laboratory, art history lecture rooms and
seminar rooms. The Ann Miller Gallery, which hosts rotating exhibits of professional and student art, is also located in Koch Hall.

The Chakeres Memorial Theatre complex houses a 200-seat black box theatre. The facility accommodates productions in proscenium, thrust, or arena and utilizes a computerized lighting system. A scene shop, costume shop, makeup room, lecture room, dance studio and a computer lab for design, along with faculty offices and a student lounge, complete the complex. In addition to the Chakeres Theatre complex, students present productions in Blair Hall Theatre, a 100-seat thrust-stage facility.

The departments of communication, English, foreign languages, history, philosophy, political science and religion, Wittenberg's programs in East Asian studies, Africana studies, and urban studies, the International Education Office, the Math Workshop and the Wittenberg Writing Center are located in Hollenbeck Hall, Wittenberg's state-of-the-art classroom building, which opened in January 2000. Hollenbeck's classrooms are equipped with an impressive array of computer and audiovisual technology. The building contains three computer classrooms, including a 24 -hour, open-use student computer lab.

Zimmerman Hall, which houses the psychology department, contains lecture and seminar rooms, two computer laboratories for student use, a state-of-the-art animal conditioning laboratory, and a suite of experimental chambers equipped with one-way mirrors and videotaping equipment. The Behavioral Neuroscience Laboratory is located in nearby Barbara Deer Kuss Science Center.

## Library Facilities and Services

## Computer Facilities

## Degrees \& Requirements

## Degrees

Wittenberg offers the following five undergraduate degrees:

- Bachelor of Arts (B.A.)
- Bachelor of Music Education (B.M.E.)
- Bachelor of Fine Arts (B.F.A.)
- Bachelor of Science (B.S.)
- Bachelor of Science in Nursing (B.S.N)


## Credits

All candidates for the Bachelor of Arts degree, Bachelor of Music Education degree, Bachelor of Fine Arts degree, Bachelor of Science or Bachelor of Science in Nursing degree must complete 126 credits to earn their degree.

## Grade-Point Average

To qualify for graduation, a student must attain a cumulative grade point average of C (2.0) and at least a C (2.0) average in each major field of concentration. To be certified as having completed a minor, a student must achieve a cumulative grade-point average of $C(2.0)$ in the courses counted toward the minor.

## Majors, Minors, and Electives

In addition to completing the general education requirements, each student must pursue at least one area of knowledge in depth. This is done by completing the requirements for a major concentration. The student has the option of completing the requirements for one or more minors. Generally, a major consists of 32 to 42 credits, and a minor consists of 20 to 22 credits. Each student completes the degree with electives sufficient in number to meet the minimum credit requirement of 126 credits.

## Fields of Study Available as Majors (most also offer minors):

- Accounting
- American Studies
- Art
- Biochemistry and Molecular Biology
- Biology
- Business
o Entrepreneurship
o Finance
o Management
o Marketing
- Chemistry
- Communication
- Computer Science
- Criminology and Criminal Justice (School of Community Education only - degree completion program)
- Dance
- Earth Science
- East Asian Studies
- Economics
- Education
- English
- Environmental Science
- Exercise Science
- French
- Financial Economics
- Geology
- German
- History
- International Studies
- Liberal Studies (School of Community Education only)
- Mathematics
- Music
- Organizational Leadership (School of Community Education only)
- Nursing- BSN - (School of Community Education only - RN to BSN degree completion. )
- Nursing - BSN Pathways (cooperative program with Clark State)
- Philosophy
- Physics
- Political Science
- Psychology
- Religion
- Russian and Central Eurasian Program
- Sociology
- Spanish
- Sports Management
- Theatre


## Additional Minors:

- African and Diaspora Studies
- Archaeology
- Chinese
- Cinema Studies
- Creative Writing
- Environmental Studies
- Health Science
- International Studies
- Journalism
- Marine Science
- Neuroscience
- Pre-Modern and Ancient World Studies
- Russian
- Statistics
- Urban Studies
- Women's Studies


## Others:

- Engineering
- Marine/Aquatic Biology
- Pre-Law
- Pre-Medicine (including Pre-Dentistry, Pre-Optometry, Pre-Veterinary, and other health professions)
- Pre-Theology


## Self-Designed Majors

Students whose area of academic inquiry spans traditional disciplinary boundaries or does not fit well within those boundaries may propose a self-designed major, composed of courses selected from one or more departments, all contributing to a unified theme, focus, or area of study. The major's topic will appear on the student's transcript as the specialization.

Students desiring to plan a self-designed major must complete the following requirements :

1. Form a three-member faculty team, each of whom is a voting member of the faculty and whose area of specialization is relevant to the student's academic focus, to approve and oversee the implementation of the proposed interdepartmental major, ensuring that it meets the academic standards required of any Wittenberg major.* One of the three faculty members must be (or become) the student's academic adviser.
2. Once the faculty team is in place, students must prepare a formal proposal containing the following:

- A complete list of all proposed coursework toward the completion of the major.
- A rationale for the proposed selection of courses and the student's objectives in creating a particular self-designed major.
- A detailed plan for formal end-point assessment activities devised in conjunction with the faculty team.
- Approval of the proposal by the faculty team.
- Approval of the proposal by the Chair of the department of the Faculty Advisor.
- Students must submit the formal proposal to the Registrar's Office by the first day of preregistration for courses for Fall semester of the Senior year. Under exceptional circumstances, later proposals may be considered by petition, if received no later than the final add day for the semester courses in the fall of the senior year.
*Any self-designed major must demonstrate breadth of study; that is, coursework must "introduce students to the range of essential topics and practices within the field." It must also demonstrate depth of study and "involve each student in advanced study in at least some aspects of the field," typically "achieved by several upper-level courses." A self-designed major consists of at least 36 credits; required coursework should include no fewer than eight credits at the 300 level or higher, and no more than twelve credits at the 100 level. Additionally, the self-designed major must accomplish the general education goals required of any major (Faculty Manual, Academic Policies). The self-designed major must include courses that allow the student to address the component of the writing goal within the major (i.e., two of the classes counted toward the interdepartmental major must be writing intensive - W), the Speaking goal, the Research goal, the Computing goal, and the Diversity of Human Experience goal.


## Assessment of Student Achievement

Wittenberg's general education program and each of its major programs are organized around distinct learning goals. Students typically accomplish these learning goals by completing a variety of general education courses and courses in their major field of study. To ensure that students are meeting these goals, as well as satisfactorily completing the requisite courses in general education and in their major, the university has established a formal assessment program. Each student is expected to complete assessment activities that monitor both individual progress and departmental or program effectiveness. In addition to university-wide assessment, each department designs and administers its own assessment activities, including "end point" assessment of its majors in the senior year.

Assessment makes it possible for the university not only to evaluate student achievement of learning goals and the effectiveness of its academic programs, but also to discover opportunities to improve teaching and learning. As such, assessment is a central feature of liberal learning at Wittenberg and an integral component of its commitment to continuous quality improvement.

No student is advanced to candidacy for a degree until he or she has completed required departmental assessment activities. Departments inform their majors in a timely manner regarding assessment procedures and requirements.

## Residence Requirements

At least 32 of the 126 credits required for graduation must be earned at Wittenberg or through Wittenberg courses offered off campus. At least 50 percent of the credits for course work in the major department or program are to be completed at Wittenberg or through Wittenberg courses offered off campus. Cognate requirements are not included in the 50 percent minimum. At least one of the last two semesters must be done in residence; any deviation from this regulation must have approval of the Registrar. Seniors applying to nonaffiliated and study-abroad programs must petition for part of the residency requirement to be waived.

Rules regarding the number of credits required at Wittenberg or in the major department do not apply to degree completion programs offered in nursing and criminal justice.

Upon the approval of the Registrar and the major department involved, a student who enters a graduate or professional school at the end of the junior year and works toward a postbaccalaureate, graduate, or professional degree may be granted the Bachelor of Arts degree upon completion of the advanced degree at the graduate or professional school provided that (1) the student completed 96 credits; (2) the student completed at least 64 credits while in residence at Wittenberg; (3) the student completed at least one of the last two semesters in residence at Wittenberg; (4) the student met the major and general education requirements stipulated in the Academic Catalog (In rare and special circumstances, certain requirements may be waived by
petition.); (5) the student is in good standing and has at least a 3.000 grade-point average at Wittenberg and its equivalent in the courses taken at the graduate or professional school.

## Academic Year and Summer Session

The academic year begins in late August and concludes in early May. It is divided into two semesters, each of which is 16 weeks in length, including one week for final examinations. Progress toward the degree is measured in credits. A student should earn an average of approximately 16 credits each semester ( 32 credits each year) to graduate at the end of four years.

For the student who wishes to accelerate the program, Wittenberg conducts a summer session through the School of Community Education. Most courses that meet during the day meet daily, Monday through Friday; most evening courses meet two or three times weekly. Additional information is available from the School of Community Education.

## General Education

General Education provides the foundation of liberal learning upon which Wittenberg realizes its primary purpose, as emphasized in its mission statement, of imparting knowledge, inspiring inquiry, and encouraging independent thought. General education informs the more specialized study of the major and the minor and provides the basis for both lifelong learning and participation in Wittenberg's learning community. In addition, the Wittenberg student has the opportunity to develop, assess, and clarify spiritual beliefs and ethical values, gain an appreciation of human diversity, and define the role of the educated citizen in the world community and in the individual's particular society.

By achieving the specific goals of general education, a student acquires a basis for understanding varied domains of knowledge and experience and for appreciating the power and limitations of the ways of knowing that characterize each domain. A student develops the analytic and expressive skills necessary to engage creatively in exchanging ideas and assimilating information and gains an awareness of the interconnectedness of academic disciplines and the relation between various areas of inquiry and specialized courses of study.

The university offers a variety of courses especially designed to ensure that a student has sufficient opportunity to develop these skills and achieve these understandings. A minimum number of these courses, distributed with reference to learning goals, are required for a bachelor's degree. Courses that may be applied to the general education learning goals have been designated with an appropriate letter code in the course number. There are also a number of topics courses offered each semester by various departments, which have been approved to meet a general education learning goal. Students should consult the website's open course listing for a list of these topics courses.

While some courses may be designated to meet two different learning goals, students may use such courses to fulfill only ONE of these designations, NOT both. The only exceptions to this
policy are writing-intensive and mathematical-reasoning courses, which may be used to meet other general education learning goals.

To complement and support this academic program, the university provides a wide range of cocurricular activities and events that address particular components of Wittenberg's mission. These include lectures, performances, religious events, counseling, athletics, and recreational activities.

The general education learning goals and requirements are divided into three groups: Foundations, Arts and Sciences, and Co-Curricular Activities.

## Foundations

This category contains those goals and requirements that provide an essential foundation for successful college study. They include writing, mathematics, languages, speaking, research, and computing.

## First Year Seminars

The student will gain the necessary understandings of self and of the institution to make a successful transition to college life.

## REQUIREMENT:

Registration and completion of the Wittenberg First Year Seminars, FYS 101 (fall) and FYS 102 (spring), one credit each, paired with a fall freshmen-only advising section of four to five credits that counts for general education credit. Transfer students are exempt from this requirement.

## Writing

The student should achieve a level of competence in writing that provides the necessary foundation for subsequent college work and further learning and should also strengthen writing with continued practice.
Requirements:

1. Demonstrate competence in writing. Competence may be demonstrated in two ways: (1) by completing English 101E during the first two semesters, with a minimum grade of Cor $S$ or by transferring in a comparable course from an accredited institution; (2) by earning a score of 4 or higher on the Advanced Placement Exam in English Language and Composition or Literature and Composition, or earning an International Baccalaureate Diploma and by receiving a grade of "B" or higher on the Extended Essay.
2. Demonstrate continuing proficiency in writing: All students are required to earn a grade of satisfactory(S) for their writing proficiency in six courses designated as "writing intensive," at least two of which must be taken as part of the student's major. Failure to demonstrate such proficiency will result in no credit (NC) for writing proficiency in that course. A student may earn graduation credit for the course even if the grade for writing proficiency is NC, but the student may not graduate until an $S$ has been earned in six writing-intensive courses. Transfer students will have one writing intensive course waived
if 16 or more credits are transferred; two writing intensive course will be waived for 32 or more credits transferred.

## Mathematics

The student should achieve a level of competence in mathematics that provides the necessary foundation for subsequent college learning and should also strengthen problem-solving and reasoning skills through continued use.
Requirements:

1. Demonstrate competence in mathematics. Competence may be demonstrated by completing one course (four credits) in mathematics, statistics, or computer science that meets the foundational mathematics goal with a minimum grade of C - or S ; or by earning a sufficiently high score on an examination administered on campus by the Department of Mathematics and Computer Science. Quantitative courses are designated with a "Q" in the course number.
2. Complete one additional mathematical-reasoning-intensive course. Mathematical-reasoning-intensive courses may be used to meet other general education learning goals. Mathematical-reasoning courses are designated with a "M" or "Z" in the section number throughout the Master Schedule of Classes published each semester by the Registrar’s Office.

Students are strongly encouraged to meet this requirement by the end of the sophomore year.

## Foreign Language

The student should achieve the degree of competence in a foreign language necessary to encounter another culture on its own terms and to enhance understanding of the structure of the language itself.

Requirement: Demonstrate competence in a foreign language. Competence may be demonstrated by completing a foreign language " F " course at Wittenberg and earning a minimum grade of C or S; or by earning a sufficiently high score on an examination administered on campus by the Foreign Languages and Literatures Department. Language courses from outside Wittenberg may be used to meet this requirement only after the Foreign Languages and Literatures Department has determined their equivalence to Wittenberg's standard of competence. The Registrar maintains a list of such determinations.

Students are strongly encouraged to meet this requirement by the end of the sophomore year.
Courses are designated with " F " in the course number.

## Speaking

The student should be able to speak effectively within and before groups.

No specific course is required. The student meets this goal through some general education courses and through the major.

The student should learn to speak within groups in a manner that conveys ideas clearly to others and that equitably and respectfully involves others in discussion/conversation.

The student should learn to speak before groups in a manner that conveys a clear message (thesis), demonstrates clear structure and organization, shows an awareness of audience and genre, uses language and terminology appropriate to the language and discipline, effectively utilizes visual/audio aids, uses the body and voice appropriately and effectively, and incorporates, credits and cites appropriate evidence.

Research

The student should be able to use the library to acquire information and to explore ideas and should understand the role of technology in the collection, analysis, and dissemination of information.

Requirement:
No specific course is required. The student meets this goal through some general education courses and through the major.

## Computing

The student should be able to use a computer to help perform a variety of learning activities and should understand the power and limits of computing.

Requirement:
No specific course is required. The student meets this goal through some general education courses and through the major.

## Arts and Sciences

This category moves beyond foundations toward an understanding of how different academic disciplines contribute to our growing body of knowledge.

Students are required to complete courses from five areas of learning that are defined by their methods or approaches: The Natural World; Social Institutions, Processes, and Behavior; Fine, Performing, and Literary Arts; Religious and Philosophical Inquiry; and Western Historical Perspectives. Most students take eight courses of four or five credits each to meet these requirements. In doing so, students must choose courses from eight different departments. In instances in which students take course work in more than two departments to fulfill an eightcredit requirement (as is possible in the Arts), they must take courses from six other departments for the remaining six courses.

Students are required to complete one course from a sixth area of learning, Non-Western Cultures, which is defined by subject matter rather than by method or approach.

In addition, the Arts and Sciences requirements introduce students to the diversity of human experience and to the inter- and trans disciplinary nature of knowledge. These learning goals transcend the disciplinary and methodological limits of the areas and subject matters in this category.

## The Diversity of Human Experience

Students should gain an appreciation for and understanding of the role of human diversity in contemporary culture.

Requirement:
No specific course is required. Students meet this goal through the Arts and Sciences courses (excluding courses covering The Natural World) and through the majors.

## The Natural World

Students should gain an understanding of the natural world through scientific inquiry and see the relations among science, technology and contemporary culture.

Requirement:
At least eight credits in courses that meet the Natural World goal, one of which must include laboratory experience. Non-laboratory courses are designated with a " N " in the course number. Laboratory courses are designated with a " B " in the course number.

## Social Institutions, Processes and Behavior

Students should achieve, through empirical and analytic methods, an understanding of human behavior, relationships and institutions.

Requirement:
Eight credits in courses that meet the Social Institutions, Processes and Behavior goal. Courses are designated with a " $S$ " in the course number.

Fine, Performing, and Literary Arts
Students should gain an understanding of aesthetic experience and of how the arts enrich and express the human spirit.

## Requirement:

Eight credits in the creation, study, or performance of dance, literature, music, theatre, and/or the visual arts. Courses are designated with an "A" in the course number.

## Religious and Philosophical Inquiry

Students should gain an understanding of how central questions about reality, knowledge and value are pursued in religious and/or philosophical traditions.

Requirement:
Four credits in religion or philosophy course work that satisfy the goal. Courses are designated with an " $R$ " in the course number.

## Western Historical Perspectives

Students should gain an understanding of the histories of the peoples and cultures of Europe and/or of the post-Columbian Americas.

Requirements:
Four credits of coursework that satisfy the goal. Courses are designated with a " H " in the course number.

## Non-Western Cultures

Students should gain an understanding of the diversity of non- Western cultures through a study of the history, institutions, or traditions of one or more of these cultures.

Requirement:
Four credits devoted to the study of a culture or cultures outside the Western tradition. Courses are designated with a "C" in the course number.

## Co-Curricular Activities

These goals support two components of the university's purpose to develop "in harmony" the qualities that characterize "wholeness of person:" service to the community and care for the body. By practicing service to the community, students can discover connections between academic studies and responsible membership in a community. By participating in disciplined physical activity, students can perceive the benefits of personal wellness to lifelong learning.

## Community Service

Students should gain an understanding of the role, responsibility and challenge of service in community life through participation, experience and reflection.

Requirement:
Successful completion of Community Service 100 ( 0 credits): Twenty-seven credits of direct service and three credits of reflection on the service experience. The Community Service Office coordinates the community service requirement and serves as a liaison between students and community sites.

Students are strongly encouraged to meet this requirement by the end of the junior year.

## Ohio Community College Transfer Credits

Students who have completed the Ohio Transfer Module and have been awarded an A.A. or A.S degree can apply their coursework toward the graduation requirements at Wittenberg University.

1) The entire 60 credits of the A.A. or A.S. degree will count toward Wittenberg's graduation requirements (up to 94 credits can be transferred). Courses with a grade of C - or below will not be transferred.
2) Students will be considered to have met the requirements of the General Education program at Wittenberg; students who have completed less than the equivalent of one year of foreign language at their home institution will be required to complete the Wittenberg General Education Language requirement. In addition, students will be required to complete the Community Service requirement and four writing-intensive courses at Wittenberg to fulfill graduation requirements

## Special Academic Programs \& Opportunities

## Academic Advising

At Wittenberg, we believe in independence with direction. You should have the opportunity to pursue your special interests and build on what you know you enjoy. However, we also believe you must gain insight into certain areas of knowledge if you are truly to be educated.

Additionally, with more than 800 courses and hundreds of other educational opportunities available, you deserve some help with designing an educational program that fits you best. For these reasons, academic advising is important at Wittenberg.

Your first adviser (and later, your major adviser) can quickly evaluate your academic strengths and weaknesses, observe your personal learning style and determine your interests. Armed with this knowledge and an understanding of the various requirements and options at Wittenberg, your adviser can help you carve a path that suits your interests and meets your educational and personal needs.

Of course, not all advisers and advisees are a perfect fit. Therefore, Wittenberg makes it easy to choose another adviser once you have identified a special field or individual. After a major is declared students turn to professors within their major fields for advising

## The University Honors Program

The Wittenberg Honors Program is intended to enhance the development of and provide support for a select group of outstanding students. The program brings students together in special and
sometimes interdisciplinary seminars during their sophomore and junior years and affords mutual support as each student undertakes independent work culminating in a senior honors thesis or project within the major. The senior honors thesis/project allows the student the opportunity to experience the intellectual process of identifying a problem, question, topic or type of artistic expression; and then producing a significant piece of work in which he or she can take pride.

All recipients of Provost scholarship are automatically inducted into the program when they register for courses at the beginning of their freshman year. Other first- and second-year students are invited to apply for membership early in the spring semester every year, if they hold a 3.50 GPA. The process can vary somewhat from year to year, but always includes a substantial critical essay. Applicants are also required to provide the names of two professors familiar enough with their work to recommend them with confidence.

## Honors Seminars

Once admitted to the program, the student may take honors seminars, which satisfy a general education requirement. Recent offerings include "In Search of the Holy Grail: Sex and Violence in Medieval Europe and Beyond," "Hitchcock's Cinema," "Comparative Religious Ethics," "Images of the Divine: The Sacred and the Literary Imagination," and "Scientific Progress and Public Policy." The objective is to bring small groups (each seminar is limited to 15 students) of honors students and faculty together to discuss challenging topics from different perspectives. The seminars are writing-intensive, and the participants rely heavily on class discussion, often presenting papers to the group.

## Honors 301- Honors Contract, 1 credits.

The Honors Contract allows a student to receive partial credit toward graduation with University Honors via a non-Honors course, by completing additional and distinctive work to be agreed upon in advance with the course instructor (set out in an Honors Contract). The additional project will be evaluated separately from the existing course, on a Satisfactory/No Credit basis. Prerequisites:
i) Student must be a member of the University Honors Program and have a cumulative GPA of 3.50 or above to register for an Honors Contract.
ii) Submission of approved Honors Contract to the University Honors Program.
iii) Honors Contracts can only be applied to courses at the 200-level or above, with the permission of the course instructor.

To graduate with university honors, a student must maintain a 3.50 cumulative GPA, complete two honors seminars, secure permission from his or her department to undertake a senior thesis/project and satisfy any additional departmental requirements to qualify for graduation with departmental honors.

Program members frequently gather for conversation and socializing at the Matthies House, the campus home of the University Honors Program. Conveniently located on Woodlawn Avenue
near Thomas Library, the Matthies House offers access to two comfortable study lounges, a kitchen with snack facilities and beverages, popular board games, a computer room with printers, network access and helpful reference books. Access is gained with use of the student's ID card, so students can (and do) use the facilities around the clock. In addition, senior honors students have access to a secluded study lounge at Thomas Library, where they may work and store books or materials. Occasionally there are off-campus trips for films, concerts, exhibitions, plays, lectures or recreation. In the spring, the program hosts colloquia at which senior members of the program present summaries of their thesis/project work. Thus, the University Honors Program provides an extracurricular and academic community for exceptional students with varied academic talents and interests who share the desire for intellectual challenge and fellowship.

## Departmental Honors

Departmental Honors are aimed at those students who could benefit from an in-depth exposure to the methodology of a field. Departmental Honors offer the student the opportunity to engage in a unified, scholarly project. The project includes a written component and an oral examination.

A student does not have to be a member of the Wittenberg University Honors Program to participate in Departmental Honors. In general, the student applies for Departmental Honors at the end of the junior year. The student should have a record of demonstrated high academic ability and self-discipline. In particular, the student needs a 3.50 cumulative GPA to be considered for Departmental Honors. In addition, the student should have demonstrated an advanced level of competence in the department of interest, which should include having completed half of the credits required for a major in that department. Some departments have additional requirements, which are noted later in the Academic Catalog in the descriptions of departments and programs of instruction.

After appropriate departmental evaluation of the proposal, a three person committee, chosen by the department, evaluates the completed project and conducts the oral examination. Ordinarily, one member of the committee serves as project supervisor. The student may undertake a project without enrolling for credits or may enroll in a project for up to 10 credits, which will be granted for a satisfactory project, whether or not Departmental Honors are awarded. Upon the recommendation of the project committee, the student is awarded Departmental Honors at graduation. See "Academic Policies and Procedures" for details.

## Honors for Self-designed Majors

Like Departmental Honors, Honors for Self-designed Majors are designed for students to engage in an in-depth academic project that exceeds the normal course of study in their chosen area of interest. Honors for Self-designed Majors follow the same guidelines as those for Departmental Honors. The student needs a 3.50 cumulative GPA to be considered for Honors for Self-designed Majors. In addition, the student should have demonstrated an advanced level of competence in the interdepartmental area of interest, which should include having completed half of the credits required for the Self-designed major.

After appropriate evaluation of the proposal by the three-person committee created to supervise the Self-designed major, this same committee evaluates the completed written project and conducts the oral examination. Typically, one member of the committee serves as project supervisor. The student may undertake a project without enrolling for credit credits or may enroll in the project for up to 10 credits, which will be granted for a satisfactory project, whether or not the Honors for Self-designed Majors are awarded. Upon the recommendation of the committee, the student is awarded Honors for Self-designed Major at graduation.

## Independent Study

A student may take a course by independent study. An independent study is viewed as an "adventure in scholarship." In most cases an independent study involves an in-depth look at a topic introduced in a current course or a study of a topic not covered by a current course offering. A student who wishes to take a course by independent study should consult both the professor who logically would be the study supervisor and his or her faculty adviser.

## Pre-Medicine and Other Health Professions

Wittenberg offers programs of study that prepare students for medical, dental, nursing, optometry and veterinary school, and has a cooperative program in occupational therapy with the School of Medicine of Washington University in St. Louis, and in nursing with the Johns Hopkins University and Case Western Reserve University.

Wittenberg is firmly committed to providing support and guidance to those preparing for postgraduate study leading to careers in any of the health professions. Consequently, all such students are advised not only by their regular academic advisers in their major departments, but also by a special Pre-Health Professions adviser. The students have organized a Pre-Health Professions Club, which is active in hosting speakers and organizing informational seminars for interested students. The university's Career Center and the Community Workshop, as well as the Assistant Provost for Off-Campus Programs, provide internship and volunteer service opportunities specially designed for students interested in the health professions.

## Other Pre-Professional Programs

Wittenberg's liberal arts and sciences curriculum provides excellent preparation for professional careers in law, theology, engineering and accounting, among others. There are specially designated pre-law, pre-engineering and pre-theological advisers for students interested in those fields.

## LEAD/@witt@home ( School of Community Education)

The School of Community Education offers courses through the @witt/@home course format, combining limited campus meetings and interactive web-supported activities. Courses structured
in this mode bring to working adults the best of both the classroom encounter and the convenience of individualized on-line work.

Even if students live some distance from Springfield and have the hyper-busy and "irregular" schedule that typifies the contemporary working man or woman, @witt/@home makes the Wittenberg experience a very real choice - without the sacrifice in learning quality that can occur in on-line programs. The @witt/@home courses have the same enrollment limits as our traditional campus courses. Classes typically meet four to eight times over a semester, with variances reflecting credit value, and incorporate guided readings and asynchronous interactive activities with instructors and classmates at home or at work.

## Interdisciplinary Program Opportunities

Urban Studies

The Urban Studies program is enriched by a number of opportunities. Students can study the City of Moscow with a political scientist before and during a visit. They can join a group of students and a political scientist and/or economist in a U.S. city during the summer for a mixture of courses and internships in that city's government. Some turn an internship in Springfield city government into a long-term placement and even a career. Others do study visits to cities in Europe that are Sister Cities of Springfield. GIS (Geographic Information Systems) students usually complete projects of direct application to the City of Springfield.

## Africana Studies

Africana Studies is the study, research, interpretation, and dissemination of knowledge concerning African American, African, and Caribbean affairs and culture. Because Africana Studies embraces a wide spectrum of experiences and issues, the program is multi- and interdisciplinary in its approach. Students can choose courses among many disciplines: English, history, sociology, music, religion, political science, Spanish, and theatre and dance. Each year the program offers opportunities and information about study trips to Africa, the Caribbean, and Europe.

## Environmental Studies

Students enrolled at Wittenberg have several options to explore and to develop their interests in the environment. An environmental science major and minor enables students to complement a major with an environmental focus. Through individualized course selection, the minor allows students the breadth to appreciate the interdisciplinary nature of environmental issues or problems. An environmental focus is also available to students majoring in biology, and geology. In addition, Wittenberg participates in a cooperative program with the Duke University School of the Environment, through which students may attend Wittenberg for three years and then complete a master's degree at Duke.

## International Studies

Along with the wide array of courses on non-western cultures in Wittenberg's General Education program, several academic departments offer courses or formal programs of study for students interested in deeper knowledge of international issues and western and non-western cultures. Wittenberg offers a formal, interdepartmental major in International Studies and provides instruction in six modern foreign languages (Chinese, French, German, Japanese, Russian and Spanish), as well as in Latin and Greek. Ample opportunity is provided to study foreign literatures and cultures in translation and, for students interested in western Europe, culture emphasis minors are available in French and German.

Wittenberg also offers interdepartmental majors in both East Asian Studies and in the Russian and Central Eurasian Program. The East Asian Studies Journal, published by students, is the only undergraduate publication in the country devoted to this region of the world, and it attracts submissions from colleges across the United States. The East Asian Studies Journal has been published annually since 1975.

The Russian and central Eurasian Program, through its class on Local Politics and Urban Planning: Moscow, offers opportunities for students to pursue original field research in Russia. Several students have presented original research papers from this experience at professional meetings and have won prizes at the meetings for their work.

## Engineering

Wittenberg offers its students the opportunity to participate in binary engineering programs (commonly referred to as "3-2" programs) with three schools of engineering. Although Wittenberg does not confer a bachelor's degree in engineering, the binary programs make it possible for a Wittenberg student to earn both a Bachelor of Arts degree from Wittenberg and a bachelor's degree in engineering from one of the participating schools.

A student participating in one of the college's binary programs spends three years at Wittenberg and, typically, two years at an engineering school. The student completes Wittenberg's general education requirements and the requirements for a major (usually in physics) during the first three years and then completes the requirements for the engineering program at the engineering school.

Schools currently participating in the "3-2" program include the Fu Foundation School of Engineering of Columbia University, The Case Institute of Technology of Case Western Reserve University, and the School of Engineering and Applied Sciences at Washington University in St. Louis, Mo.

## Graduating with More than One Major

A student completing more than one major will receive one degree with all majors listed in the official transcript. In the case of a student who completes more than one major in two separate degree programs (e.g. the Bachelor of Arts and Bachelor of Science), all majors will be listed in
the transcript, but the student will choose the degree to be awarded. (The choice of the degree cannot be changed after Commencement.)

If a student has completed the requirements of graduating with two degrees from Wittenberg University, the student will receive two degrees with all majors listed in the official transcript.

## Graduating with More than One Degree Earned at Wittenberg University

A student successfully completing a major in the Bachelor of Science degree or the Bachelor of Fine Arts degree or the Bachelor of Music Education degree programs may not receive a Bachelor of Arts degree in the same major.

While completing all requirements for a baccalaureate degree at Wittenberg, a student may qualify for a second baccalaureate degree by:

- Successfully meeting all requirements for the first degree, including the completion of the minimum graduation requirement of 126 credits, and
- Successfully meeting all requirements for the second degree, including completion of an additional 32 credits (typically in the curriculum of the second degree) with a minimum scholarship quotient of 2.000 for all credits earned toward the second degree.
- Completion of the general education program for the first degree can be utilized in meeting the general education requirements of the second degree.
- Upon successfully meeting the requirements for both degrees, a student may be awarded both diplomas at the same commencement.

A student who already has a baccalaureate degree from Wittenberg University or from another accredited college or university may apply to Wittenberg for the purpose of obtaining a second baccalaureate degree. The requirements for obtaining such a degree shall include:

- The successful completion of a minimum of an additional 32 credits at Wittenberg.
- Successfully meeting all general education requirements for the new degree in effect at the time of matriculation for that degree.
- Completing all requirements for a new major.
- Achieving a minimum grade point average of 2.000 for all work attempted toward a new degree.

Note: These guidelines do not address the dual degree programs Wittenberg University offers in cooperation with other institutions, e.g., Engineering and Occupational Therapy.

## Graduating with a Self-designed Major

A student may graduate with a self-designed major only in the Bachelor of Arts degree program. Wittenberg's intensive degree programs (i.e., B.S., B.F.A., and B.M.E.) are chartered by the Board of Regents according to the curricular plan of each.

## Off-Campus Academic Opportunities

Recognizing that off-campus academic experiences are ways in which the students can extend and enrich their liberal arts education, Wittenberg offers a variety of special off-campus opportunities. Participation in one or more of these programs leads students to an understanding of what is meant by the phrase "the power of experience."

## Community Service

Believing students should gain an understanding of the role, responsibility, and challenge of service in community life, Wittenberg requires completion of thirty credits of community service for graduation.

In one semester before their senior year, students must register and complete all service requirements for Community Service 100, a non-credit class. Community Service 100 provides students with the opportunity to serve others, to connect the Wittenberg and Springfield communities, and to reflect on the service experience.

The Community Service Office coordinates the service requirement at Wittenberg and serves as a liaison between the students and community sites.

## Internships

Whether a student chooses a full-time internship during a period spent away from campus or a part-time internship near campus during the academic year, the experience provides an opportunity to combine theory learned in the classroom with real-world practice. It can be especially beneficial in the current job market, in which many organizations seek new college graduates who have experience or who can show evidence of superior internship performance.

Academic departments offer credit-bearing internships that are supervised by a faculty member in the department. The faculty member can help a student devise a plan for an internship experience that not only builds upon the student's academic preparation but also relates to the student's skill development and career interests. Resources in the Career Center Library include directories of internship opportunities in the United States and abroad, and copies of internship agreement forms submitted by former students. There is also a Web site on internships.

Local internship sites for Wittenberg students have included WHIO-TV in Dayton, Clark County Soil and Water Conservation, Mercy Medical Center, the Springfield City Manager’s Office, the Public Defender's Office, the Springfield Museum of Art and American Express Financial Advisers.

Off-campus internship opportunities have included research at the National Institutes of Health in Bethesda, Md., participation in the Wittenberg University Washington Semester program, the Student Conservation Association, and in a program that is unique among undergraduate, liberal arts and sciences colleges, urban studies summer field placements with a city government. See "Academic Policies and Procedures" for details.

## Wittenberg Center for Applied Management (WittCAM)

WittCAM is a student-managed center that offers faculty-directed programs designed to develop and enhance student analytical and project management skills. It sponsors speakers and seminars, and coordinates the Business Department 's portfolio program and Web site. WittCAM coordinates Business internships, as well as opportunities for students to serve as management consultants while earning graduation credit in center-sponsored consulting programs. Opportunities are available in small and large businesses, not-for-profit organizations, and social service and government agencies.

WittCAM's consulting programs are open to qualified students from all departments and programs, and are offered during the regular academic year. These consulting programs include:

- Project Management Assistance (planning, development, execution and evaluation of specific projects)
- the Creative Advertising Partnership (development of advertising campaigns for organizations)
- the Small Business Institute ${ }^{\mathrm{TM}}$ (evaluations of existing and proposed small business operations)

Business Internships offer student placement within local and regional firms as well as organizations located a significant distance from campus. Internships for Business academic credit are available during the regular academic year and summer to qualified students who have completed the prerequisite 300-level Business course(s).

Students interested in participating in any of the above programs can obtain more information, or apply, at the WittCAM office, 312 Carnegie Hall. Phone: (937) 327-7910; FAX (937) 327-6143; E-mail: wittcam@wittenberg.edu, or at the WittCAM webpage.

## Washington Semester Program

Wittenberg's Washington Semester Program is offered in collaboration with the Lutheran College Washington Semester (LCWS) and includes both classes and internships. Students have interned in the White House and various Executive Departments, Congressional offices and lobbying firms, News organizations, the Smithsonian, and various interest groups and DC social service offices. Through this, students gain real-life work experience dealing with issues that are local, national, and international in scope. Many of these internships have led to jobs for Wittenberg students after graduation.

During the fall and spring programs, students earn a full semester of academic credit through their internship, two classes, and completing the Dean's requirements (a summer residency program is available that offers only the internship). The internship is four full days a week. Courses are taught in the evenings in the complex where students live. Special events and field trips (part of the Dean's requirements) are typically on Wednesdays. Housing is provided in 13 fully-furnished penthouse condominiums (owned and operated by the Consortium) in Rossyln, Virginia, directly across the Potomac River from Georgetown, in the District of Columbia. Access to internships and other activities is convenient; the metro is only a five minute walk from the condominiums.

The Washington Semester Program is a residency program, which means that students are considered to be enrolled at Wittenberg while in Washington. This means that students received letter grades in their courses that count toward their GPA. Tuition is paid directly to Wittenberg and all financial aid applies. Room, however, is paid to LCWS and students must provide their own food.

## Wittenberg Summer Programs

Wittenberg regularly offers summer opportunities in both domestic and foreign locations, directed by our own faculty members. In recent years, these have included the following:

Bahamas Field Program:
A comparative study of biological communities, San Salvador Island (Bahamas).
Lesotho:
Africana Studies and Habitat for Humanity
Germany:
German language and culture
Local Government Management Intern Program
Field biology and geology

## Office of International Education

Wittenberg maintains a full-time office of International Education to assist students with study and travel plans, and to counsel them with integrating international dimensions with educational life goals. A minimum 2.5 grade-point average and junior status is required for study abroad programs.

Wittenberg is affiliated with programs operated by American consortia such as the Institute for the International Education of Students, and Council on International Education Exchange. The university directly enrolls students in these programs. Other programs, including new ones in Wittenberg Germany and Africa, are available to Wittenberg students.

## Exchange Programs

Wittenberg participates in study programs in which students here and abroad exchange places while enrolled in their home institutions.

## Direct Exchanges

While participating in a direct exchange, a student pays Wittenberg tuition and fees, including room and board, and also retains all scholarships. Direct exchanges require a high level of independence and superior linguistic skills. If selected by the university and linguistically qualified, the student may enroll directly in:

## International Student Exchange Program

Through Wittenberg's membership in ISEP, students can enroll directly in more than 200 institutions in 20 different countries around the world. Direct enrollment requires a high level of independence and superior linguistic skills.

## Wittenberg Run Programs

Semester abroad in Wittenberg Germany.
Wittenberg Faculty-Led Summer Programs:
Wittenberg offers many of its own summer programs that are directed/taught by Wittenberg faculty. These programs vary in length from 3-6 weeks. Most programs are offered on a biannual basis. Recent sites include

- Wittenberg, Germany
- Tokyo, Japan
- Lesotho
- Cuba
- Bahamas
- Poland


## Other Study Abroad

In addition to programs which the university operates or with which it affiliates, other programs administered by U.S. colleges and universities are available to Wittenberg students depending on approval by the Faculty Committee on International Education.

## Departments \& Programs of Instruction

This section contains a description of the curriculum of each departmental and interdepartmental program, along with degree requirements for majors and minors, elective courses, and suggestions about courses and programs in related fields. Each course description includes the
credit value of the course; a list of the course's prerequisites, if any; notification if the course is writing intensive, and information on the frequency with which the course is offered.

The courses of instruction, course descriptions, and major and minor programs are subject to change, and the university reserves the right to withdraw or modify them at any time without notice. Students should consult the master schedule, published by the Registrar's Office each semester, for current information on course offerings and curricula. Information on changes in department or program curricula or requirements is available at the appropriate department or program office.

## Departments \& Course Listings

- Accounting
- African and Diaspora Studies
- American Studies
- Archaeology
- Art
- Biochemistry/Molecular Biology
- Biology
- Business
- Chemistry
- Communication
- Community Service
- Computational Science
- Computer Science
- Criminology and Criminal Justice (Degree Completion only)
- East Asian Studies
- Economics (including Financial Economics)
- Education
- Engineering
- English (including Journalism and Creative Writing)
- Environmental Studies
- Geology
- Health, Fitness \& Sport (including Sport Management and Exercise Science)
- Health Science
- History
- International Studies
- Languages

Chinese
French
German
Greek
Japanese
Latin

## Spanish

## Russian

- Marine Science
- Mathematics
- Music
- Neuroscience
- Nursing
- Philosophy
- Physics
- Political Science
- Pre-Health
- Pre-Law
- Pre-Modern and Ancient World Studies
- Psychology
- Religion
- Russian and Central Eurasian Program
- Service Learning
- Sociology
- Theatre \& Dance
- Wittenberg Seminars
- Urban Studies
- Women's Studies


## Course Numbering

Courses that may be applied to general education learning goals have been designated with an appropriate letter code in the course number. Courses numbered from 001 to 009 are preparatory to college work and carry no graduation credit.

Courses at the 100-level are introductory courses or sequences of courses, with no departmental prerequisites, that introduce basic skills, techniques, concepts, or questions of the field.

Courses numbered from 200 to 299 continue the introduction to the field beyond the 100-level or introduce the field by focusing on a major area in the field. Such courses may not have departmental prerequisites but are designed for students with some college experience.

Courses at the 300-level are advanced courses that depend on previously learned knowledge and skills in the discipline or a maturity of skills in critical thinking. In such courses, students are asked increasingly to employ the tools of the discipline in response to basic questions. Ordinarily these courses have prerequisites or require junior standing.

Courses at the 400-level require students to do more independent work, often involving the creation or synthesis of knowledge using previously learned skills, and these courses usually are designed for the major.

## Accounting

Go to faculty and staff page

## Major Requirements

40 credits including the following:
Required in Accounting: 225, 226, 240, 325, 326, 327, 423, 426, 427
Required in Business: 460

## Course Numbers and Descriptions

## ACCT-225. Financial Accounting. 4 credits.

Provides an overview of the financial accounting reporting process with a primary focus on the analysis of economic events and their effect on the major financial statements (balance sheet, income statement and statement of cash flows). The fundamental principles and applications for financial reporting of the corporate business organization are presented with a balanced perspective on the practice, theory and conflicts in current accounting practice. The course objectives are to present the accounting model, process of measurement, data classifications and terminology needed to effectively use and prepare financial statements. Prerequisite: Math Placement Level 22. Every year.

## ACCT-226. Managerial Accounting. 4 credits.

Managerial accounting explores the various techniques for the preparation and analysis of accounting information for organizational planning and control. The development of critical thinking skills is necessary to understand the process of reporting information for people to use rather than following a set of rules or guidelines. The fundamental concepts of cost, decisionmaking, planning and performance evaluation in a managerial environment are presented. In-class discussions and problem solving are utilized to gain greater understanding of the application of managerial accounting. Prerequisite: ACCT 225. Every year.

## ACCT-240. Accounting Information Systems. 4 credits

Provides the theory and application of accounting information systems. The course will reflect how information technology (IT) is altering the nature of accounting. Specifically, how such developments as the Internet, electronic commerce, EDI, databases, and artificial intelligence are fundamentally transforming the way organizations conduct their business activities. Prerequisite: ACCT 225. Alternate years.

## ACCT-290. Topics in Accounting. 1-4 credits.

Seminar of selected accounting topics. Open to all students. Some sections writing intensive. Offered as required.

## ACCT-325. Intermediate Accounting I. 4 credits.

This course is the first of a two-course sequence in corporate financial reporting which examines the theoretical basis for financial accounting concepts and principles emphasizing income measurement and accounting for assets. The traditional financial accounting topics include the recent developments in accounting valuation and reporting practices promulgated by professional accounting organizations and implemented by practitioners in public and privat e accounting. The objective of this course is to provide a rigorous introduction to the methodology and logic behind the procedures and principles followed in the development of accounting information. Prerequisite: ACCT 225. Every year.

## ACCT-326. Intermediate Accounting II. 4 credits.

Sequential in-depth study of financial statements, accounting concepts, accounting principles, and alternative procedures and practices. Current professional pronouncements included where appropriate. Prerequisite: ACCT 325. Every year.

## ACCT-327. Cost Accounting. 4 credits.

Upper-level course covering the methods of determining product costs, their effective control, and their use for managerial decision-making. Prerequisite: ACCT 226. Alternate years.

## ACCT-390. Topics in Accounting. 1-4 credits .

Seminar of selected accounting topics. Restricted to advanced majors in management or those obtaining permission of instructor. Some sections writing intensive. Offered as required.

## ACCT-423. Advanced Accounting. 4 credits.

This course is a comprehensive study of business combinations, the equity and acquisition methods of accounting for investments, and consolidated financial statement preparation. In addition this course explores accounting theory as applied to special problems such as accounting for partnerships, estates and trusts, and segment and interim reporting. Accounting and reporting for private nonprofits, as well as state and local governmental entities are introduced in this course. Prerequisite: ACCT 325. Alternate years.

## ACCT-426. Federal Taxation. 4 credits.

Comprehensive coverage of the relevant tax code and regulations as they pertain to the individual taxpayer, as well as coverage of all major developments in Federal Taxation.
Additionally, an overview of tax concepts which apply specifically to corporations and partnerships is presented. Prerequisite: ACCT 225. Alternate years.

## ACCT-427. Auditing. 4 credits.

Auditing standards, auditing procedures, professional ethics and auditor's reports. Prerequisite: ACCT 200, ACCT 326. Writing intensive. Alternate years.

## ACCT-490. Independent Study. 1-8 credits

Project within the accounting field individually arranged by student and professor. Offered as required.

## ACCT-491. Internship. 1-8 credits.

Internship experience within the accounting field. Prerequisite: minimum 2.7 GPA in major and overall, 75 credits completed by start of internship, completion of the accounting courses on which the internship is based with a minimum C grade, learning 18 objectives approved by accounting professor and on-site supervision by a business-level employee. Offered as required.

## ACCT-499. Honors Thesis/Project. 1-8 credits

Thesis within the accounting field individually arranged by student and professor. Prerequisite: Declared major in Accounting, 3.500 GPA, 3.500 GPA in Accounting classes, and approval of the Business Department Chair. Offered as required.

## African and Diaspora Studies

Go to information on faculty staffing.

## Requirements for Minor

A minimum of 22 credits is required for the minor, 10 of which must be at the 200 or higher course level, with at least 4 credits in the social sciences, 4 credits in history, and 4 credits in literature. Courses should be chosen in consultation with the minor adviser and the Program Advisory Committee.

## Course Listings

## AFDS-201C/H. Introduction to African and Diaspora Studies. 4 credits.

Introduction to the discipline of Africana Studies. Focus on the history (political, economic, psychological, artistic, and cultural) of people of African descent. Every year. No prerequisite.

## AFDS-270. Topics in African and Diaspora Studies 2-4 credits.

Topical approach to specific themes in African, African-American, and African Diasporic studies. Some sections may be writing intensive. May be repeated for credit.

## AFDS-492. African and Diaspora Studies Senior Project 2 credits.

An integrated learning opportunity geared toward assessing student understanding of theories, methods and concepts central to the discipline. Every year. Prerequisite: permission of program director

## English

- 180A. Slave Narrative. 4 credits.
- 190A/C. Afro-Caribbean Studies. 4 credits.
- 313. Harlem Renaissance. 4 credits.
- 313. Studies in African American Literature (18th/19th century). 4 credits.
- 313. African American Literature (20th century). 4 credits.
- 315. Novels of the African Diaspora. 4 credits.
- 330. Major Authors (when African-American)


## History

- 170C. Topics in African History. 4 credits.
- 171C/H. African Societies to 1500. 4 credits.
- 172C. African Societies Since 1500. 4 credits.
- 230H. African American History. 4 credits.
- 270. Topics in African History. 4 credits.
- 370. Topics in African History 4 credits.


## Music

- 113A. Jazz Styles. 4 credits.


## Political Science

- 234S. Black Politics. 4 credits.


## Religion

- 176H. Racism and Social Ethics. 4 credits.
- 375R. Advanced Social Ethics: Racism. 4 credits.


## Sociology

- $277 \mathrm{C} /$ R. Islam and Islamic Societies. 4 credits.
- 301S. African American Social Thought


## Spanish

- 130A. Caribbean Literature. 4 credits.

Theatre \& Dance

- 112A. Dance in Popular Culture. 4 credits.
- 210C. Dance Ethnology. 4 credits.


## American Studies

The American Studies Program is an interdisciplinary program designed to offer the student an opportunity to study American culture in its broadest sense from a variety of perspectives. Each American Studies major is required to develop an individual program that provides breadth of knowledge about a variety of American cultural characteristics, an understanding of American history, and depth of knowledge about a particular aspect of American culture. Breadth of knowledge is acquired through course requirements that introduce the discipline of American Studies, explore American history, and fit five categories that describe particular aspects of American culture in greater detail. The major is able to deepen the knowledge of a particular aspect of American culture by taking either a research course or a readings course in American Studies. A list of topics (by no means exhaustive) that might be explored in the context of either a research or readings course includes African American culture, Native-American culture, gender issues in American culture, American culture in a global context, the fine and performing arts in the context of American culture, rural and urban studies in America, and the nature of American material and technological culture.

## Courses in American studies are drawn from various departments and fit the following categories:

## Human Diversity in American Culture

These courses focus on differing races, ethnic groups, religious groups, gender differences, and differences in sexual preference within the United States. Many view the United States as special insofar as the nation has been forged by people from many different backgrounds. Courses in this category examine the very American interactions among diverse peoples with emphasis on identity, dominance, and plurality.

## Americans and Their Natural Environment

These courses focus on the relationship between the geography and ecology of the United States and American culture. Special emphasis is given to the way American culture has cultivated a particular response to natural phenomena. There are historical and philosophical reasons for the unusual interest in natural phenomena in the United States that courses fulfilling this goal examine.

## American Culture Studies

Courses in this category focus on the prominence of popular culture in the United States as a result of the growth of a middle class. Much of what the middle class has helped to generate as cultural artifacts shows a separation that divides popular culture from high culture. Yet, courses fulfilling this goal often explore the complex relationships between high culture and popular culture in the United States. Courses can fulfill this goal by examining the cultural movements (folk art, for example) that are significant to the broader American culture.

## Individualism and Community in America

These courses focus on the dichotomy between self-reliance and the pursuit of self-interest versus the seeming compulsion for conformity that has been widespread in the United States. Courses could explore the distinction between individualism expressed in a positive, laudable way (e.g. rugged individualism) and individualism as a form of deviance. Community could also be cast in positive and negative terms.

## The United States in Cross Cultural Perspective

These courses examine what people outside the United States perceive as American and what Americans perceive as foreign. American culture has been both idealized and vilified by nonAmericans over time just as Americans are guilty of the same behavior with respect to foreign cultures. Americans are stereotyped by foreigners just as Americans stereotype them. Courses that fulfill this goal would focus on the ideals and stereotypes, and their origins, that define the United States from a global perspective and that define the foreign from an American perspective.

## Research in American Studies

Through these courses, students explore American culture, learn to apply the skills of critical analysis to such things as artifacts, documents and technology, and learn about regional differences in culture. One example of an approach that courses fulfilling this goal take is to use Springfield as a laboratory to acquaint the student with the dynamic character of Springfield as a frontier town and later as an agricultural and industrial center.

## Requirements for Major

American Studies 100: Introduction to American Studies, History 221H: United States History I, History 222H: United States History II, and either American Studies 400: Readings in American Studies or one of the courses in the Research in American Studies category. A student must take at least five additional courses ( 20 credits) drawn from at least three of the following areas: Human Diversity in American Culture, Americans and Their Natural Environment, American Culture Studies, Individualism and Community, or The United States in Cross-Cultural Perspective. Two of these courses (eight credits) must be at the 300 level or above. Successful defense of the senior thesis serves as the comprehensive examination in American Studies.

## Requirements for Minor

American Studies 100: Introduction to American Studies; History 221H: United States History I or History 222H: United States History II; 12 additional credits in American Studies with at least four credits taken in 300-level courses.

## Course Listings

## AMST-100 H. An Introduction to American Studies. 4 credits

Introduction to the study of American culture using methods drawn from cultural anthropology and from other disciplines such as history, literature, philosophy, and the social and natural sciences. The course begins by defining and outlining the basic elements of culture, then develops more complex concepts of culture such as ethnocentrism, cultural relativism, values, universalism, artifacts and idiosyncratic behavior. The content in this course necessarily varies regularly. Writing intensive. Every year.

## AMST-400. Readings in American Studies. 4 credits.

Directed readings course in American Studies topics, which involves the writing of literature surveys and oral presentation of topics under study. Writing intensive.

## AMST-490. Research in American Studies. 4 credits.

Writing intensive. Every year.

## AMST-491. Internship. 1-4 credits.

## AMST-499. Honors Thesis/Project. 0-10 credits.

Prerequisites: 3.50 GPA, permission of the Department Chairperson.

## Archaeology

The Archaeology minor requires a total of 20 credits distributed as follows: ARCH 103N (4 credits), HIST 305, plus 12 credits of which 8 credits are from two different departments and the final four credits at the upper-level for a select department.

The following courses are approved for consideration to fulfill the optional classes in the Archaeology minor.
ART 110 Art History I, 4 credits
ART 101 Studio Foundations, 4 credits
ART 130 Non-Western Art Survey, 4 credits
ART 145 Intro to Computer Imaging (no prereqs.), 4 credits
ART 240 Early Christian and Byzantine Art (ART 110 or 120), 4 credits
ART 243 Western Medieval Art (ART 110 or 120), 4 credits
ART 275 Greek and Roman Art (ART 110 or 120), 4 credits
ART 280 Art of Pre-Columbian Mesoamerica (ART 110, 130 or 120), 4 credits
ART 292 Ceramics I, 4 credits
EAST 100, Introduction to East Asian Studies, 4 credits
ENGL 180 "How Like a God" Myth, Epic, and Metamorphosis 4 credits
GEOL 113 Ohio Geology
GEOL 116 Deep Geological Time, 4 credits
GEOL 150 Physical Geology, 4 credits
GEOL 170 Geology of the Critical zone, 4 credits
GEOL 240 Process Geomorphology, (Prereqs. 100-level course in geology), 5 credits
GEOL 292 Spatial Analysis in the Natural Sciences, (Prereqs. 100-level course in biology, environmental studies or geology), 2 credits
GREE 111 Introduction to Greek I, 4 credits
GREE 112 Introduction to Greek II, 4 credits
HIST 100/200 Courses (as appropriate to student's interest in regional focus)
Examples:
HIST 110 Ancient Mediterranean World, 2 -4 credits
HIST 111 Medieval History, 4 credits
HIST 202 Children of the Past or Frank Lloyd Wright , 4 credits
HIST 203 Excavating Egypt’s History, 4 credits
HIST 210 Mummies, Myths and Monuments of Egypt, 4 credits
HIST 240 Topics in Pre-modern Europe, 4 credits
HIST 253 Medieval Russia, 4 credits
HIST 300 Courses
(As appropriate). Department has offerings for students interested in either Old or New World archaeology topics. (Most HIST 300’s require: ENGL 101, Junior Standing and one class in history or permission)
Examples:
HIST 302 Ancient History and Archaeology, 4 credits
HIST 303 Ancient and Pre-Modern Historians, 4 credits
HIST 304 Topics in Late Antiquity, 4 credits

HIST 306 Byzantium, 4 credits
HIST 312 Age of Cathedrals, 4 credits
HIST 380 Topics in Public History, 4 credits
LATN 111 Introduction to Latin I, 4 credits
LATN 112 Introduction to Latin II, 4 credits
SOCI 110 Cultural Anthropology, 4 credits
(Strongly encouraged for all Archaeology minors)
SOCI 201 Topics, 4 credits (Anthropological topics, see below)
Culture in the Classroom, 4 credits
Language and Culture, 4 credits (to be taught after 2014)
SOCI 245 Gender and Society, 4 credits
SOCI 301 Topics (to be taught 2014-2016)
Ethnography, 4 credits
RELI 100 Topics, 4 credits
RELI 121 Art of Biblical Literature, 4 credits
RELI 134 Chinese and Japanese Religious Traditions, 4 credits
RELI 200 Topics (no prereqs.), 2-4 credits
RELI 221 Understanding the Old Testament, 4 credits
RELI 321 Biblical and Modern Prophets, 4 credits
RELI 324 Apocalyptic Vision in Ancient and Modern Literature, 4 credits
RELI 333 Buddhist Thought and Scriptures, 4 credits
In addition to the possible courses above, a student may elect to include the following in consultation with Archaeology Minor.

Modern Foreign Languages:
4 credits of a Modern Foreign Language (CHIN, FREN, GERM, JAPN, SPAN or RUSS) beyond 112 would also count as one course of the "Breaking the Surface" foundational courses.

## Course Offerings:

## ARCH-103N Introduction to Archaeology. 4 credits.

This course provides an introduction to the history, methods, theory, and broader social context of modern archaeological practice. As a field dedicated to the study of the human past through the examination of material remains, the course examines a variety of methods such as scientific excavation, satellite imaging, materials analysis, paleopathology, ethnography, underwater archaeology, and landscape archaeology. In this class, we will explore some of the major questions that interest archeologists now, how these questions compare to archaeological work in previous generations, and the sources of evidence used to investigate the questions. ARCH 103 introduces minors to the field of archaeology and provides a foundation for advanced classes in anthropology, archaeology, geology, history, and religion. Two field excavation days, or laboratory days are part of the course requirements. Every year.

## Art

Go to information about faculty.

## Requirements for Bachelor of Arts Degree with a Concentration in Studio Art

Forty-four credits of art are required for a Bachelor of Arts degree with a concentration in studio art. The following course requirements and a Senior Studio Thesis Seminar exhibition must be completed:

1. Art History I and II; 8 credits
2. Modern Art History; 4 credits
3. Studio Foundations: Two-Dimensional Design; 4 credits
4. Studio Foundations: Three-Dimensional Design; 4 credits
5. Basic Drawing; 4 credits
6. Art Elective; 4 credits
7. Courses in concentration of choice; 12 credits
8. Senior Thesis - Studio Art; 4 credits (Art 498 Senior Thesis Seminar - 2 credits during fall semester of senior year, Art 496 - Senior Thesis Media Concentration - 1 credit during fall and spring semester of senior year)

Total: 44 credits

## Requirements for Bachelor of Arts Degree with a Concentration in Art History

Forty-four credits of art are required for a Bachelor of Arts degree with a concentration in art history. The following course requirements and an Art History Senior Thesis Presentation must be completed:

1. Art History I and II; 8 credits
2. Studio Foundations: Two-Dimensional Design; 4 credits
3. Studio Elective or Studio Foundations: Three-Dimensional Design; 4 credits
4. Basic Drawing; 4 credits
5. Upper-Level Art History (must include one course from each of the following areas: ancient and medieval; renaissance and baroque; modern); 20 credits
6. Senior Thesis - Art History; 4 credits Total: 44 credits

## Requirements for Bachelor of Fine Arts Degree

Sixty-eight credits are required for the Bachelor of Fine Arts degree. A student wishing to earn this degree needs to begin the general art requirements and foundations sequence in the freshman year and maintain an average of at least two art courses per semester throughout the four years. A 3.00 grade-point average must be maintained within the Art Department, and candidacy for the
B.F.A. must be declared by the end of the sophomore year. The following course requirements and a Senior Thesis Solo Exhibition must be completed:

1. Art History I and II; 8 credits
2. Modern Art History; 4 credits
3. Upper-Level Art History Elective; 4 credits
4. Studio Foundations: Two-Dimensional Design; 4 credits
5. Studio Foundations: Three-Dimensional Design; 4 credits
6. Basic Drawing; 4 credits
7. Drawing I or Upper-Level Printmaking; 4 credits
8. Art Electives; 12 credits
9. Courses in concentration of choice; 20 credits
10. Senior Studio Thesis Seminar; 4 credits (Art 498 Senior Thesis Seminar - 2 credit during fall semester of senior year, Art 496 - Senior Thesis Media Concentration - 1 credit during fall and spring semester of senior year)

Total: 68 credits

## Requirements for Minor

A minor in art may be earned with a focus in art history or studio art. Twenty credits in art are required.

Art History:

1. History of Art I and History of Art II; 8 credits
2. Studio Foundations: Two-Dimensional Design; 4 credits
3. Upper-Level Art History; 8 credits Total: 20 credits

Studio Art:

1. History of Art I or History of Art II; 4 credits
2. Studio Foundations: Two-Dimensional Design; 4 credits
3. Basic Drawing; 4 credits
4. Studio Electives; 8 credits

Total: 20 credits

## Residence Requirements for Bachelor of Arts and Bachelor of Fine Arts Degrees

Due to the need to maintain overall continuity in the art program for the B.A. in Art and the
B.F.A., the Art Department requires the two Foundations courses (101 and 103) and one art history course to be taken in residence. The Senior Thesis Seminar and the Art History Senior Thesis Seminar courses must also be taken in residence.

## Certification for Teaching in Art

Students interested in pursuing a course of study leading to a license to teach art should contact their adviser or the Education Department for specific requirements.

## Studio Courses:

Studio courses have class meetings combining lectures, demonstrations, and supervised inclass studio time for individual and group instruction.

## ART-101A. Studio Foundations: Two-Dimensional Design. 4 credits.

Introduction to the basic components of the visual arts with special emphasis on the role of media. A primary goal is to develop a student's ability to think in visual terms. Every year.

## ART-103. Studio Foundations: Three-Dimensional Design. 4 credits.

An exploration of the formal use of space as it is applied to threedimensional form. The student will be introduced to the elements of height, width, depth, volume and form. Project research will be in the realm of non-objectivity, abstraction and reality. Particular attention will be given to the techniques of drawing, model making and presentation of a final solution. Emphasis will be placed on creative thinking and problem solving in the context of small-scale and larger projects. Every year.

## ART 105A. Fundamentals of Art. 4 credits.

This course introduces students to the basic processes, theories, media and content of visual art. Students merge general theory with basic studio practice through a variety of studio production activities. Students will incorporate Basic Elements of Art into the design, creation, and evaluation of fine art projects. The course involves hands-on activities, lectures and discussion, and real time first-hand experiences with multiple art forms; students will follow traditional production techniques and experience a variety of media and materials as they intersect intellectual content with creative assignments. Much of the underlying structure behind visual art involves the application of some combination of Basic Elements and Principles of Design. This course will blend an investigation of those elements with several other concepts as they apply to both two and three-dimensional art production. A primary goal is to develop a student's ability to think in visual terms. No prerequisites.

## ART-121A. Basic Drawing. 4 credits.

Part of the first-year Foundations sequence. Introduction to the basic disciplines of drawing line, value composition, etc. Special emphasis on drawing as a tool for gathering ideas. Every year.

## ART-130C. Non-Western Art Survey. 4 credits

This course surveys visual culture generally classified as "non-western art." The regions explored include Western and Central Asia, South and Southeast Asia, China, Japan, Korea, the Pacific, Africa, and the Americas. The art historical periods studied range from those of the earliest visual evidence in the regions to the present day. An investigation of "patronage, creation, and use" serves as the comparative theme that threads together the contents’ significant breadth. No prerequisites. Writing Intensive.

## ART-131A. Introduction to Painting. 4 credits.

Survey of a variety of painting techniques and visual issues. Emphasis placed on creative expression and exploration with several painting styles and historical approaches to picture making. Students will also learn about general historical contexts of painting from ancient through contemporary applications. Every year.

## ART-151. Introduction to Printmaking. 4 credits.

Survey of printmaking techniques designed to expose students to the possibilities of artistic expression through traditional as well as recently developed approaches to printing. Every year.

## ART-221. Drawing I. 4 credits.

Emphasis on further developing drawing techniques introduced in Basic Drawing. Skills in problem solving will be enhanced through narrative interpretation and drawing from landscapes, nature and the human figure. Visual analysis, media exploration, and personal stylistic growth are also vital components of this course. Prerequisite: Art 121. Every year.

## ART-231. Painting I. 4 credits.

Introduction to the basic materials, processes, and concepts of oil painting. Prerequisite: Art 121. Every year.

## ART-241A. Introduction to Photography. 4 credits.

This course introduces students to traditional black and white photographic techniques. Instruction covers the understanding and use of a 35 mm SLR camera and its functions, the process of developing black and white negatives and creating black and white $8 \times 10$ prints. Some areas of photographic capture covered: depth of field control, motion control, portraiture, and experimental approaches. This course is intended to be the introductory course to the photography concentration for the Department of Art. It is also a course designed for students who want an introduction to the medium as part of a broad liberal arts experience. A chemistry fee and camera rental fee are required for the course. Every year.

## ART-245A. Digital Imaging I. 4 credits.

Photoshop has changed the world of visual imaging and indeed photography as we know it. This course is intended as an intensive introduction to the broad range of functions in the program, and how they can be applied to design, advertising, fashion and especially fine art. Some functions explored in detail are: creative uses of tools, layer management, filter exploration, useful workflow and printing management. Prerequisites: Art 101A and Art 121A or permission of instructor. Every year.

## ART-251A. Printmaking I. 4 credits.

Introduction to the processes and techniques of intaglio or lithographic printmaking. Alternate years.

## ART-261A. Sculpture I. 4 credits.

Introduction to three-dimensional concepts. Exploration in wood construction, plaster and clay emphasized. Every year.

## ART-265A. Silver Jewelry. 4 credits.

Silver used to produce small art forms intended as body embellishment. Basic fabricating techniques, simple forming and centrifugal casting. Every year.

## ART-271-Graphic Design. 4 credits.

The area we call Graphic Design is a rich and complex amalgam of more than one creative area. Its practice includes the creation of many different kinds of signage, industrial products and packaging. It also promotes effective and creative uses of typography. Finally, it has truly become its own area of fine art expression, as proven by many recent designer/artists, who have pushed this craft in exciting and experimental directions. This course will attempt to touch on all the above areas as students explore how to communicate both aesthetically and purposefully using the visual language. The student will apply the design process (which includes concept ideation through research, brainstorming, and drawing/sketching) to appropriately integrate twodimensional design concepts with technological ingenuity. The student will use digital media, including the Adobe Creative Suite programs, as tools for design refinement and production. Prerequisite: Art 101A or Art 145A or permission of instructor.

## ART-285A. Handbuilt Ceramics. 4 credits.

Construction of clay pieces without the potter's wheel. Handbuilding investigated primarily through the use of coils and slabs. Basic decorating and glazing techniques explored. Every year.

## ART-292A. Ceramics I. 4 credits.

Introduction to wheel throwing and handbuilding methods of clay construction, and basic decoration and firing techniques. Every year.

## ART-321. Drawing II. 4 credits.

Emphasis on further developing drawing techniques explored in Drawing I. Students will be encouraged to choose an art direction and solve associated problems in order to reach a satisfactory creative outcome. We will continue to work with a wide range of subject matter and in a variety of media, and attention will be given to the development of personal artistic style. Prerequisite: Art 221. Every year.

## ART-331. Painting II. 4 credits.

Continuation of Art 231. Primary emphasis placed on understanding the unique characteristics of various painting techniques. Prerequisite: Art 231. Every year.

## ART-340. Modern Art. 4 credits.

Investigation into the art and architecture from the end of the 19th century (c. 1890) through the contemporary period, primarily in Western Europe and America. Art historical movements, including the artists and stylistic traits which embody them, will be studied chronologically. Every semester.

## ART-341. Advanced Photography. 4 credits.

Designed as a continuation of 241 A , this course will ask students to further explore their personal expression, and hone their skills as artists through the photographic medium. 35 mm and/or medium-format cameras and their functions will be explored. Alternative processes, abstraction, the zone system, large-format cameras, self-portraiture, photojournalism, and the bridge between digital and analog photography are some of the areas that may be explored. Prerequisite: Art 241A. Every other year.

## ART-345. Digital Imaging II. 4 credits.

An advanced studio course in which students hone their skills using Photoshop and related software for the creation of design and fine artwork.

## ART-351. Printmaking II. 4 credits.

Advanced printmaking techniques. Continuation of Art 251, which is a prerequisite. Every year.

## ART-361. Sculpture II. 4 credits.

Continuation of Art 261. Exploration in carving, modeling, and construction. Investigation of stone, wood, metal, plaster, clay, and found objects. Prerequisite: Art 261. Every year.

## ART-365. Silver Jewelry II. 4 credits.

Advanced silver jewelry techniques. Continuation of Art 265, which is a prerequisite. Every year.

## ART-380. Topics in Studio Art. 2-4 credits.

Courses in special studio art as described in the course schedule for each semester. This course may be repeated for credit.

## ART-385. Handbuilt Ceramics II. 4 credits.

Advanced study of handbuilding techniques. Prerequisite: Art 285. Every year.

## ART-392. Ceramics II. 4 credits.

Advanced study of building methods. Prerequisite: Art 292. Every year.

## ART-421. Drawing III. 4 credits.

A continuation of 321. Development of a deeper understanding of drawing techniques in a more concentrated individual style. Prerequisite: Art 321. Every year.

## ART-431. Painting III. 4 credits.

Continuation of Art 331. Major emphasis on the development of the student as an independent artist. The student makes a series of paintings as a means of investigating a single idea or theme. Prerequisite: Art 331. Every year.

## ART-451. Printmaking III. 4 credits.

Advanced work in the graphic processes. Specialized study in individual creative and technical problems. Prerequisite: Art 251 or 351. Every year.

## ART-461. Sculpture III. 4 credits.

Individual studio atmosphere with the student expressing a strong creative direction on material. Working from the figure model is a possibility. Prerequisite: Art 361. Every Year.

## ART-490. Independent Study. 1 - 4 credits.

Advanced individual study in the history, theory, or studio aspects of art. Prerequisite: Permission of the department. Every year.

## ART-491. Internships. 1-4 credits.

Structured opportunities for the junior or senior art major to apply learned skills in a real-world situation. The student must register and complete the required application before beginning the internship and must have both a departmental sponsor and an on-site sponsor. The internship is evaluated on a credit/no-credit basis, and it is the depatmental sponsor's responsibility to review the project upon completion and decide whether credit should be granted.

## ART-492. Ceramics III. 4 credits.

Continuation of Art 392, which is a prerequisite. Every year.

## ART-496. Senior Thesis - Studio/Media Concentration, 1 credit

(available for repeatable credit, one credit taken each semester during senior year)
Taken concurrently with the Art 498 Senior Thesis Seminar. In depth guidance and development of Senior Thesis Studio Art project with media faculty advisor. The product of this year-long course will be exhibited in the Senior Thesis Exhibition during the spring semester. Pre-requisites: Art 101A Studio Foundations 2-D Design, Art 103A Studio Foundations 3-D Design, Art 121A Basic Drawing, 2 of the following (Art 110 History of Art I, Art120 History of Art II, Art 340 Modern Art History), two courses within chosen media area (Ceramics, Drawing, Graphic Design/Computer Imaging, Painting, Photography, Sculpture, Silver Jewelry), must be taken concurrently with Art 498 Senior Thesis Seminar during fall semester of senior year.

## ART-498. Senior Seminar - Studio Art. 2-4 credits.

The Art 498 Senior Thesis course is to prepare each student graduating form college with professionally relevant skills that will enable him/her to matriculate into a graduate or professional venue that is related to their own major. The course serves to expose students to contemporary perspectives in the visual art field through critical dialogue and written reviews connected to the field.

## ART-499. Honors Thesis/Project. 2-4 credits.

Prerequisite: 3.50 GPA and permission of the Department Chair.

## Art History Courses

## ART-110H. Art History I. 4 credits

Selective chronological survey of architecture, painting, sculpture and decorative arts from the birth of art in the Prehistoric period through its development in the Middle Ages, with an emphasis on the Western tradition. Although this course focuses on art created in Western Europe, the survey will also include the art of the Ancient Near East and the Byzantine Empire. Every year.

## ART-120H. Art History II. 4 credits.

Selective chronological survey of the arts of the Western world from the Renaissance through the present. This course traces the development of the pictorial traditions of the West by concentrating on the major artists and movements, beginning with the resurgence of classical antiquity in the Italian Renaissance and culminating with the radical artistic innovations of the 21st century. Every semester.

## ART-220H. Italian Renaissance Art. 4 credits.

Examination of Renaissance painting, sculpture and architecture from the Late Gothic period (ca. 1270-1300) through the Renaissance (Early and High) and Mannerism. The artists and monuments in Florence, Rome and Venice will receive special attention, although developments in other regions in Italy will also be discussed. Emphasis will be placed on the departure from Medieval art and the revival of Antiquity, and art objects and monuments will be discussed in the context of individual artists, patrons and religious and historical events. Every third semester.

## ART-230H. Baroque and Rococo Art. 4 credits.

Surveys the art, architecture and sculpture produced during the Baroque and Rococo periods (ca. 1600-1800) in Western Europe. Art objects and monuments will be discussed in the context of individual artists, patrons and religious and historical events. Every third semester.

## ART-240H. Early Christian and Byzantine Art. 4 credits.

Explores the foundations of the Christian tradition in the visual arts in Late Antiquity (ca. 200565 AD ) and traces its development through the early, middle and late periods of Byzantine art. Emphasis will be placed on an examination of traditions that informed the art of the period. Every third year.

## ART-243H. Western Medieval Art. 4 credits.

Covers the art and architecture produced from the decline of the Roman Empire through the Gothic period in Western Europe. Hiberno-Saxon, Carolingian, Ottonian, Romanesque and Gothic art will be covered chronologically and by region in Europe. Emphasis will be given to the historical context that informed the Middle Ages. Every third year.

## ART-275H. Greek and Roman Art. 4 credits.

Focuses on Greek and Roman painting, sculpture and architecture as well as the decorative arts. Works of art will be analyzed in relation to the historical background of these fundamentally different civilizations and in terms of the objects’ original function or context. Students will gain a solid understanding of the visual characteristics and the artists and architects that embody these movements. Every third year.

## ART-280. Topics in Art History. 2-4 credits.

Courses in the history of art as described in the course schedule for each semester.

## ART-497. Senior Thesis - Art History. 2-4 credits.

A supervised independent study in which the student will be expected to produce a 30 to 40 page paper on an approved Art History topic. Because advancement in the field of Art History relies heavily on research and publications, this paper should demonstrate the student's ability to conduct in-depth research and to produce a writing sample suitable for entry into graduate school or a position in the field. Students will be expected to meet with the professor at regular intervals so that the professor may determine the rate of progress and offer guidance and support. Every year.

## Biochemistry/Molecular Biology

Go to information about participating faculty in the Chemistry and Biology departments.

## Requirements for Major (B.A.)

Required in Biology and Chemistry: Biology 170, 212, 310; Chemistry 121, 162, 201, 271, 372; Biochemistry and Molecular Biology 400. Required in Related Departments Physics 200, Mathematics 201 or 131, plus one additional course from Mathematics 127, 202, 205, 227. (Note: Mathematics 201 is a pre-requisite for Mathematics 202 and 205.)

## Requirements for Major (B.S.)

Required in Biology and Chemistry: Biology 170, 212, 310 and one additional biology course from 210, 215, 224, 237, or 316; Chemistry 121, 162, 201, 271, 281, 302, 311, 372, and Biochemistry/Molecular Biology 400. Required in Related Departments Mathematics 201 and 202, Physics 200 and 218.

## Requirements for Minor

Biology 310, Chemistry 201, 271, 372, plus two courses from Biology 210, 212, 215, 237, and 316. A student who satisfies this minor takes a minimum of five courses in chemistry (121, 162, 201, 271, 372) and four courses in biology (170, 310 and two from
$210,212,215,237,316)$. The number of courses required in biology and chemistry for this minor makes it a reasonable minor only for the student majoring in biology or chemistry. For the biology or chemistry major the BMB minor represents typically one to three additional courses beyond those cognates already required for a biology or chemistry major. A student is not allowed to minor in biology or chemistry if also completing the minor in biochemistry/molecular biology.

## Honors in Biochemistry/ Molecular Biology

Honors in Biochemistry/ Molecular Biology requires an overall GPA of 3.5 and will require completion of the equivalent of 10 credits of research approved by the director of the program, culminating in a written thesis and public oral presentation, either at Wittenberg or a regional/national scientific meeting. A three person committee, appointed by the director of the program, will evaluate the written thesis and conduct an oral examination. One member of the committee will normally be the project supervisor. The student is not required to have registered for credit of research but instead must have completed the equivalent of 10 credits ( 400 hours) of research activities.

## Course Listings

## BMB- 400. Primary Literature Seminar. 2 credits.

A series of papers from the current research literature will be presented and discussed by the members of the seminar. This will give students the opportunity to learn to see how concepts and techniques that have been introduced in previous courses are actually applied in a contemporary research project. Papers will be selected in consultation with the faculty member, and the focus of the seminar will alternate from year to year between molecular biology and biochemistry.

Students may take this seminar twice for credit; 2 credits count toward the BMB major. Prerequisites: Biochemistry/Molecular Biology major or minor. Must have previously completed either Chemistry 271 (Biochemistry) or Biology 310 (Molecular Biology) and have permission of the instructor. Every year.

## Biology

Go to information about the faculty and staff.

## Requirements for Major (B.A.)

A student planning to major in biology develops a plan of study based on the following guidelines. The biology major consists of forty to forty-three credits of biology plus eighteen credits in other science departments. In the plan of study, the student must select at least one course from each of the following: (Botanical) - Biology 230, 234, 235, 241, 248, 249, or 346; (Zoological) - Biology 214, 231, 232, 233, 238, 239, 247, 248, 324, 342, or 346. No single course can fulfill both Botanical and Zoological requirements for a student.

## Requirements for Major (B.S.)

Forty to forty-three v of biology plus thirty-three credits in other science departments. It requires careful and nearly complete use of a student's electives and is intended for those students who need the specific and additional sciences required for entry into graduate programs leading to technical science careers or the Ph.D. in a biological field.

The course requirements are the same as listed for the B.A. degree except Area VI (Supporting Science) is replaced by: one semester of Organic Chemistry (Chemistry 201); a year each of Mathematics (Mathematics 201: Calculus I or Math 131: Essentials of Calculus; and one of Mathematics 202: Calculus II, Mathematics 127: Introductory Statistics, or Math 227: Data Analysis) and Physics (Physics 200: Mechanics and Waves and one of Physics 205: Classical and Modern Physics, Physics 218: Introductory Electromagnetism, or Physics 213, 214, and 215: Thermodynamics, Relativity, and Laboratory) are also required. An independent research project (Biology 492: Directed Research or other equivalent experience) is highly recommended.

## Area I: Foundational Courses in Biology

Biology 170: Concepts in Biology: Biological Information, Reproduction, and Evolution is to be taken by all majors and minors as a prerequisite to all other Biology courses except those at the 100-level.

Biology 180: Concepts in Biology: Energy and Resources in Biology is to be taken by all majors or minors as a prerequisite to all other Biology courses, except those at the 100-level.

Note: Biology 170 and Biology 180 may be taken in either order. Students with an advanced placement score of 4 will receive credit for Biology 110N (4 credits). Students with an advanced placement score of 5 will receive credit for Biology 250B ( 5 credits).

Biology 255: Biological Literacy is to be taken by all Biology majors by the end of the fall of the junior year; prerequisites: Biology 170 \& 180

## Area II: Breadth of the Biological Experience

A minimum of four credits from each of the following groups. Note that all courses at the 200level and above have Biology 170 and 180 as prerequisites.

Group 1: Molecules, Organelles, Cells

- Biology 210: Molecular Neurobiology; 5 credits
- Biology 212: The Cell; 5 credits; prerequisite: Biology 170
- Biology 214: Developmental Biology; 5 credits
- Biology 215: Genetics; 5 credits
- Biology 219: Immunology; 5 credits
- Biology 310: Molecular Biology; 5 credits; prerequisite: Chemistry 162
- Biology 316: Molecular Genetics and Bioinformatics; prerequisite Chemistry 162

Group 2: Tissues, Organs, Systems

- Biology 220: Neurobiology; 5 credits; alternate prerequisite: Psychology 110
- Biology 221: Pharmacology; 4 credits
- Biology 223: Survey of Human Diseases; 4 credits
- Biology 324: Animal Physiology; 5 credits; prerequisite: Chemistry 162
- Biology 325: Human Anatomy and Physiology I; 5 credits; prerequisite: 1 upper level Biology course or permission of instructor
- Biology 326: Human Anatomy and Physiology II, 4 credits; prerequisite: 1 upper level Biology course or permission of instructor
- Biology 327: Human Anatomy and Physiology II Laboratory; 1 credit, to be taken concurrently with Biology 326 if desired

Group 3: Organisms

- Biology 230: Woody Plants, 4 credits
- Biology 231: Vertebrate Zoology; 5 credits
- Biology 232: Herpetology; 5 credits
- Biology 233: Ornithology; 5 credits
- Biology 234: Morphology of Nonvascular Plants; 5 credits
- Biology 235: Morphology and Taxonomy of Vascular Plants; 5 credits
- Biology 237: Microbiology; 5 credits
- Biology 238: Entomology; 5 credits
- Biology 239: Marine Invertebrates; 5 credits

Group 4: Populations, Communities, Ecosystems

- Biology 243: Cave Ecology; 4 credits
- Biology 247: Marine Ecology; 5 credits; prerequisite Math Placement 22
- Biology 248: Comparative Communities-Bahamas; 5 credits
- Biology 249: Comparative Communities-Northern Forests; 5 credits
- Biology 341: Limnology; 5 credits; prerequisite: Chemistry 162
- Biology 342: Stream Ecology; 5 credits; prerequisite; Chemistry 162 and Biology 341
- Biology 346: Ecology; 5 credits; prerequisites: one group 2, 3, or 4 course.
- Biology 347: Evolution; 4 credits; prerequisites: At least two other biology courses at the 200-level or higher.


## Area III: Biological Electives

A minimum of five credits of additional credits from any of the above or Biology 258: Extended Field Studies, up to 5 credits *: Biology 250: Topics (topic varies with offering), up to 5 credits; Biology 492: Directed Research, up to 5 credits *; Biology 493: Internship, up to 5 credits *; and Biology 494 Topic Seminar; 1-5 credits (topic varies with offering). Up to five credits of 100level Biology may count here with Department approval.
*Up to five credits of each may count toward the major.

## Area IV: Capstone Experience

Biology 406: Senior Capstone Seminar, 4 credits, taken during the senior year.

## Area V: Chemical Foundations

Ten credits of chemistry: Chemistry 121 and Chemistry 162.

## Area VI: Supporting Science

A minimum of eight credits from the Departments of Chemistry (beyond Chemistry 162), Computer Science, Environmental Studies, Geology (150 or higher), Marine Science, Mathematics (120 or higher), or Physics (107 or higher). It is not required that all the credits be taken from the same department.

The following courses also satisfy the requirements in the related sciences:

- Health, Fitness and Sport 250: Nutrition
- Psychology 107: Statistics
- Psychology 207: Experimental Design
- Psychology 311: Behavioral Neuroscience


## Requirements for Minor in Biology

A minor in biology requires 24 credits, including Biology 170 and 180, plus 14 additional credits in majors-level biology courses. These may be selected by the student in consultation with the biology minor adviser so that diversification or specialization is possible. Advice and consent of the department chair are required for a biology minor.

## Certification for Teaching in Life Science

Students interested in pursuing a course of study leading to a license to teach life science should contact their adviser or the Education Department for specific requirements.

## Special Programs in Biology

## Forestry and Environmental Studies

Wittenberg has a cooperative program with the Duke University Nicholas School of the Environment. The student interested in this area attends Wittenberg for three years and, if accepted, then transfers to Duke for the senior year. After successfully completing the first year at Duke, the student receives the Bachelors of Arts degree from Wittenberg and then completes the requirements for the Master of Environmental Management degree granted by Duke. Additional information about this program may be obtained from the Biology Department or the Admission Office. See Environmental Studies for a description of Wittenberg's interdepartmental minor.

## Marine Biology

A limited number of junior or senior students recommended by the Department may attend the Duke University Nicholas School of the Environment Marine Laboratory's fall or spring academic programs at Beaufort, N. C. A full semester's work may be taken from the course offerings at the Marine Laboratory. Most courses taken at Duke can count toward the student's major, with Department approval. The student pays Wittenberg tuition, and Duke room, board, and fees.

Course work at Wittenberg prior to attending Duke should include some combination of Biology 239: Biology of Marine Invertebrates, Biology 234: Nonvascular Plants, Biology 247: Marine Ecology, Biology 341: Limnology, and Marine Science 200: Oceanography, in addition to Chemistry 121 and 162. The student should consult with the Marine Science program director to develop a plan of study.

During alternate summers the Biology Department offers a two-course program on San Salvador, The Bahamas. Students study marine taxonomy, morphology and structure, and ecology. Each student also conducts independent research.

Wittenberg also offers a minor in Marine Science, which prepares students for advanced study in Marine Biology and Oceanography. See the section on Marine Science for details.

## Pre-Health Professions

The student interested in a career in human or veterinary medicine, dentistry, optometry, nursing, occupational therapy or another health profession needs to plan the sequence of courses carefully in order to complete the prerequisite courses for the various health profession schools and prepare for the national admission tests. Prerequisite courses for the health professional schools typically include one year of biology, two years of chemistry, one year of physics, one year of mathematics, and one year of English. In addition to these requirements, schools may have other courses that they require from the humanities or social sciences. Students with specific questions
should seek guidance from the Pre-Health Professions Adviser. For more information, please see the Pre-Health section.

## Nursing

Wittenberg has a 3-4 cooperative program with the Frances Payne Bolton School of Nursing at Case Western Reserve University. The pre-nursing student spends three years at Wittenberg studying basic science and liberal arts, prior to entering nursing school.

If accepted, after satisfactory completion of the first year at Case Western Reserve University , the student receives the Bachelor of Arts degree from Wittenberg.

At Case Western Reserve University, the student spends four years in the nursing program. The goal of this level is to prepare the student for advanced practical and clinical research in nursing. Satisfactory completion of this program leads to the awarding of the Doctor of Nursing (N.D.) degree by Case Western Reserve University.

Additional information about these nursing programs may be obtained from the Pre-Health Professions Adviser or the Office of Admission.

## Occupational Therapy

Wittenberg has a cooperative program with Washington University (St. Louis) School of Medicine through its program in occupational therapy. The pre-occupational therapy student spends three years at Wittenberg studying basic science and liberal arts, while completing the major portion of the biology major requirements. If accepted by Washington University, the student begins the occupational therapy program in the fourth year. The Bachelor of Arts degree from Wittenberg is conferred at the end of the first year at Washington University, and the Master of Science degree in occupational therapy is awarded at the end of the second year there. Additional information about this program may be obtained from the Pre-Health Adviser or the Office of Admission.

## Course Listings

## BIOL- 104. Topics in Biology Seminar. 1-4 credits.

Study of selected topics relating the person to nature and society and of the conflicts between people and their environment. Topics vary by instructor. Offered subject to demand and availability of faculty.

## BIOLOGY 100 SERIES

These courses are designed to give students an opportunity to examine the way a biologist works in the profession, i.e. how experiments are designed to uncover new facts, the role of observation, the difference between results and conclusions, etc. The subject matter is, for the most part, selected to show the relevance of biology to everyday living, and to allow students to gain some control over decisions about their health and well-being and become knowledgeable citizens. These courses are open to all students but count toward a major in biology only with department approval.

## BIOL- 110N. Survey of Biology. 4 credits.

This course is designed to be a basic introduction to biology, beginning with the basic building blocks and continuing through an introduction to each of the kingdoms of life and fundamental life processes. There will be an emphasis on fundamental principles and the interrelationships between the different topics covered. Open to all students but counts toward a major in biology only with department approval.

## BIOL-111N. DNA, Cloning, Genetic Engineering: Fact or Fiction. 4 credits.

Beginning with the basic structure of DNA and how information is coded by DNA, the student will investigate fundamental aspects of DNA metabolism. With this understanding, the class will discuss recent development in biotechnology including genetic testing and engineering, cloning, and the legal and ethical ramifications. Open to all students but counts toward a major in biology only with department approval.

## BIOL- 114. From Conception to Birth. 4 credits.

During this course, we will discuss the major concepts in human embryology and development. There will also be significant discussion of the ethical and moral issues surrounding the human embryo, such as stem cells and cloning. While there is no laboratory component to this course, you will be required to participate in a panel discussion and submit a written paper on the ethics discussion panel.

## BIOL-120N. Human Health and Pathology. 4 credits.

Course material will include an overview of human biology with an emphasis on practical application of preventive health measures and wellness. Lecture and discussion will revolve around the study of structure, function and pathology of organ systems. Open to all students but counts toward a major in biology only with department approval.

## BIOL- 121N. Physiological Biology. 4 credits.

Student will study contemporary applications in biology at the cellular, organ and system levels, the process of homeostasis and disease-producing processes and mechanisms, and learn fundamentals of biological chemistry, taxonomy and systematics, evolution, molecular biology and ecology. Open to all students but counts toward a major in biology only with department approval.

## BIOL- 122N. Genetics and Disease. 4 credits.

The course examines genetics and diseases, including plagues and epidemics, the development and wise use of antibiotics, reproduction, infertility, development, genetic disorders and modern experimental techniques that permit such medical intervention as gene therapy and "high-tech" babies. Students will consider ethical issues related to these new techniques and genetic
counseling practices. Open to all students but counts toward a major in biology only with department approval.

## BIOL- 123B. How Animals Work. 4 credits.

This course focuses on the physiological ecology of animals: How they work at a systems level and how this affects their interactions with their environment. Topics include the scientific method, basic biological and ecological principles, and how specific animals deal with extreme environments through unique adaptations. This course combines lectures with laboratory exercises examining physiological principles. Open to all students but counts toward a major in biology only with department approval.

## BIOL-124N: Biomedicine, Germ Theory and Health Care Systems 4 credits.

The practice of medicine is shaped by a multiplicity of factors, ranging from the underlying physiology and the biological causes of disease through the cultural and political influences on the health care system. The primary focus of the course will be biological, learning about the physiology of the body. From this grounding in human physiology we will explore our current understanding of how the body functions in health and disease, and then examine how this understanding influences the practice of medicine. We will delve into the history of medicine, including excerpts from Hippocrates, Galen and Hildegard von Bingen, again considering how concepts of health and disease shape the practice of medicine. Finally, we will consider the health care systems in the US and Germany, building from our emphasis on physiology and cultural influences on both how medicine is practiced and how different cultures define wellness and disease. No prerequisites.

## BIOL-125. Basic Human Physiology, 4 credits.

The study of the human body is fascinating and understanding how our bodies function can help students make better decisions about their own long term health. In this course, students will be exposed to some of the fundamental physiological aspects of their body systems including the skeletal, muscular, cardiovascular, respiratory, nervous, sensory, endocrine, and reproductive systems. This course will include a laboratory portion that apply what we explore in the lecture and will be conducted during normal class hours. Students will record and analyze muscle electromyographs (EMG), electrocardiograms (EKG), and reaction time in addition to other activities. No prerequisites.

## BIOL 129: The Science Behind Addiction. 4 credits.

This course is a basic introduction to addiction to a variety of drugs of abuse. Students will consider both the physical and psychological ramifications of alcohol, amphetamines, cocaine, heroin, nicotine, and marijuana as they relate to both their use and abuse today. What makes these drugs so addictive and how can we treat addiction? Open to all students, but counts toward a major in biology only with departmental approval. No prerequisites. Every summer.

## BIOL- 130B. The Botanical World. 4 credits.

This course focuses on the natural world as related to higher plants. The primary goal is to give the students the necessary framework to understand the botanical world around them by covering the basic aspects of the science of botany, general plant structure, chemistry, heredity, growth, and development and reproduction as related to plants. Where appropriate, the importance to society of the various topics will be discussed. Open to all students but counts toward a major in biology only with department approval.

## BIOL- 131N. Woody Plants of the Natural and Urban Environments. 4 credits.

This course is to acquaint the student with the various native and cultivated forms of woody trees, shrubs, and vines as found in natural and urban environments. Topics covered include basic classification, naming, use of taxonomic keys, life histories, basic growth patterns, culture and care. Field trips to local sites will be taken. Open to all students but counts toward a major in biology only with department approval. A student cannot receive credit for both 131 and 230.

## BIOL- 132B. Introduction to Herpetology. 5 credits

We will study the unique anatomy, physiology, natural history, and evolution of reptiles and amphibians. Lectures will start with a taxonomic introduction to the reptiles and amphibians of the world, focusing mainly on those of the United States and particularly those found in Ohio. We will continue with discussions on the evolution and adaptations that have enabled reptiles and amphibians to make the transition from water to land. We will study the anatomical and physiological specializations that occur within the reptiles and amphibians, allowing them to succeed in the terrestrial environment and to reproduce free from water. We will also include specializations for feeding and mobility within the niches that reptiles and amphibians occupy. Our course includes a weekly field experience/lab in which students travel to parks and reserves around the Springfield area. We will collect and photograph central Ohio amphibians and reptiles and will then research the specimens so as to produce presentations on their natural history, taxonomy, habitat/collecting site, evolution, and unique features.

## BIOL- 133. Introduction to Ornithology, 5 credits

This course focuses on the biology, ecology, and identification of birds and their habitats. The semester will follow a lecture-laboratory format with several field trips exploring the anatomy and physiology of birds, their ecological interactions within specific environments, and identification skills to understand the common birds of Ohio. Evaluation is based on quizzes, a project, two lecture exams, and a final exam. There are no required prerequisites.

## BIOL- 140N. Understanding Organic Evolution. 4 credits.

This course explores organic evolution. Using discussion, lecture, selected videos and movies, and numerous articles to allow students to understand organic, physical and cultural evolution. Open to all students but counts toward a major in biology only with department approval.

## BIOL-142N. Ecological Biology and Environmental Issues. 4 credits.

This is an introductory course for non-majors with emphasis on ecological and environmental biology. Students will examine the structure and function of natural ecosystems and the impacts of humans on these ecosystems. Open to all students but counts toward a major in biology only with department approval.

## BIOL- 143N. Cave Ecology. 4 credits.

This course is a basic introduction to cave ecology. Several field trips to caves with projects relating to cave ecology will be carried out during these trips. Much of the semester will be spent examining speleogenesis, the structure and the function of cave ecosystems, as well as the evolutionary biology of obligate cave inhabitants. Every year. Open to all students but counts toward a major in biology only with department approval.

## BIOL- 145N - Introductory Wildlife Management - 4 credits

While a wildlife manager in Mississippi is trying to increase deer browse in a bottomland hardwood forest, a wildlife manager in suburban Chicago spends her nights with a silenced rifle trying to curb urban deer populations, a publically-held resource. Although the goals of wildlife management may be drastically different, they revolve around only three scenarios: we can increase, decrease, or maintain wildlife populations. Our ability to meet our management goals is rooted in the strength of our science. Truly effective management applies ecological principles to wildlife issues while seeking a balance between the needs of humans and the needs of wildlife.
Our goal this semester is to learn the basics of wildlife management, to begin building a toolbox that will serve you well as a wildlife ecologist, natural resource manager, weekend naturalist, informed citizen, or future politician. Prerequisite: sophomore standing.

## BIOL 146N: Biology on the Big Screen - 4 credits

This course will address the accuracy with which movies, TV shows, and media outlets portray biological concepts underlying important contemporary issues. The course will focus on four main topics: emerging infectious diseases, global climate change, genetic modification, and biodiversity. Students will gain an understanding of the biological principles and concepts that underpin these often contentious and frequently debated issues. The course will use primary literature and current research within the field to give students an increased scientific awareness and improved scientific literacy. Movie viewings outside of scheduled class times will be required.

## BIOL 148N: Biology in a Changing World - 4 credits

Our planet is currently experiencing a global biodiversity crisis; extinction rates at present are at least 100 times that of any natural extinction event to have ever occurred in our history. Humans are a driving force in the loss of earth's species and the degradation of ecosystems. Undoubtedly, biological interactions and critical processes may be dramatically altered in our rapidly changing
world. This biology course for non-majors will explore patterns that have historically impacted global biodiversity, how human induced alterations such as climate change and habitat loss are threatening the biodiversity of species, the implications of a widespread loss in biodiversity f or humans, and the ability of current or future conservation practices to shape our fate. The course will draw heavily from empirical research and case studies to highlight the fate of unfortunate species which are currently facing a very uncertain future.

## BIOL- 170B. Concepts of Biology: Biological Information, Reproduction, and Evolution. 5 credits.

This course, part of a two-course series along with Biology 180, serves as the foundation to the biology major. Students will study how biologically necessary information associated with life is stored, reproduced, and subjected to natural selection. These themes will be explored at different biological levels of organization from DNA through ecosystems. There are no prerequisites for this course. It may be taken before or after Biology 180. Every year.

## BIOL- 180B. Concepts of Biology: Energy and Resources in Biology. 5 credits.

This course, part of a two-course series along with Biology 170, serves as the foundation to the biology major. Students will learn how resources and energy are acquired and used in life's processes. These themes will be explored at different biological levels of organization from cells through ecosystems. There are no prerequisites for this course. It may be taken before or after Biology 170. Every year.

## BIOL- 210. Molecular Neurobiology. 5 credits.

Neurobiology is a vast area of study which includes the study of the proteins and molecules within neurons to how the brain functions to elicit a particular behavior. This course will cover basic molecular and cellular biology in the context of the nervous system, specifically the neuron. During the semester, the course will discuss neurotransmitters, synapses, receptors, neural development, and the molecular basis of neurodegenerative diseases. The laboratory component of the course will consist of a semester long project to identify genes expressed in the nervous system. Prerequisites: Biology 170 and 180

## BIOLOGY 212 -Cell Biology 5 credits

Cell biology focuses on the structure and function of the cell, examining individual structures and building toward a synthesis of the dynamic metabolic processes of the cell. These processes include synthesis of cellular components, metabolic pathways, and signaling pathways. Prerequisites: Biology 170

## BIOL-214. Developmental Biology. 5 credits.

Introduction to development, including coverage of descriptive vertebrate embryology. Emphasis given to the experimental analysis of selected molecular and cellular changes during development in animals. Prerequisites: Biology 170 and 180. Writing intensive.

## BIOL-215. Genetics. 5 credits.

This course will examine the scope and significance of modern genetic principles. Lecture and lab topics will include molecular and Mendelian genetics, protein synthesis, recombinant DNA, genetic engineering, effects of stressors upon genetic systems, human genetics, and population genetics. Particular attention will be paid to learning how to apply basic genetic principles to biological problems and to developing analytical skills. Prerequisites: Biology 170 and 180. Writing intensive.

## BIOL-220. Neurobiology. 5 credits.

Basics of neuronal communication and organization of the nervous system (particularly the brain) into various systems. The visual, auditory and motor systems are discussed. Laboratories focus on the anatomy and current understanding of the mammalian brain. Prerequisites: Biology 170 and 180; or Psychology 110N. Writing intensive.

## BIOL-221. Pharmacology. 4 credits.

This course shows the effects of chemicals on the nervous system. Some of the pharmacological agents to be studied will include antidepressants, anticonvulsants and oral contraceptives. In addition, the course will focus on chemicals encountered in the environment, i.e. pesticides, and their effects on wildlife and human populations. Prerequisites: Biology 170 and 180 . Writing intensive.

## BIOL-223. Survey of Human Disease. 4 credits.

Topics in this course include infection (viruses, bacteria, fungi chlamydia, mycoplasma), parasitic, genetic and autoimmune diseases, cancer, and diseases that relate to specific organs and organ systems of humans. Prerequisites: Biology 170 and 180.

## BIOL 229: The Science Behind Addiction. 4 credits.

This course is a basic introduction to addiction to a variety of drugs of abuse. Students will consider both the physical and psychological ramifications of alcohol, amphetamines, cocaine, heroin, nicotine, and marijuana as they relate to both their use and abuse today. What makes these drugs so addictive and how can we treat addiction? Prerequisites: Biology 170 and 180. A student cannot take both Biology 129N and Biology 229 for credit. Every summer.

## BIOL- 230. Woody Plants. 4 credits.

This course acquaints the student with various native and cultivated forms of woody trees, shrubs, and vines as found in natural and urban environments. Topics covered include basic classification, naming, use of taxonomic keys, life histories, basic growth patterns, culture, and care. Field trips to local sites will be taken. A student cannot receive credit for both 131 and 230. Prerequisites: Biology 170 and 180. Every year.

## BIOL- 231. Vertebrate Zoology. 5 credits.

Review of organogenesis and of the general vertebrate body plan followed by a study of comparative aspects of adult structure. Includes an introduction to both the pathways by which the higher vertebrates have evolved and the nomenclature, taxonomy and zoogeography of the vertebrate group. Prerequisite: Biology 170 and 180. Every year.

## BIOL- 232. Herpetology. 4 or 5 credits

We will study the unique anatomy, physiology, natural history, and evolution of reptiles and amphibians. Lectures will start with a taxonomic introduction to the reptiles and amphibians of the world, focusing mainly on those of the United States and particularly those found in Ohio. We will continue with discussions on the evolution and adaptations that have enabled reptiles and amphibians to make the transition from water to land. We will study the anatomical and physiological specializations that occur within the reptiles and amphibians, allowing them to succeed in the terrestrial environment and to reproduce free from water. We will also include specializations for feeding and mobility within the niches that reptiles and amphibians occupy. Our course includes a weekly field experience/lab in which students travel to parks and reserves around the Springfield area. We will collect and photograph central Ohio amphibians and reptiles and will then research the specimens so as to produce presentations on their natural history, taxonomy, habitat/collecting site, evolution, and unique features.

## BIOL- 233. Ornithology. 5 credits.

Survey of taxonomy, morphology and ecology of avian orders. Emphasis placed on Midwest examples, includes observation trips. Prerequisites: Biology 170 and 180. Every year.

## BIOL- 234. Morphology of Nonvascular Plants. 5 credits.

Structure, reproduction and evolutionary relationships of fungi, algae and bryophytes. Prerequisites: Biology 170 and 180. Every year.

## BIOL- 235. Morphology of Vascular Plants. 5 credits.

Structure, reproduction, identification, and evolutionary relationships of vascular plants. Prerequisites: Biology 170 and 180. Every year.

## BIOL- 237. Microbiology. 5 credits.

Basic principles of bacteriology and virology, stressing structure, metabolism, classification and application. Prerequisites: Biology 170 and 180. Every year.

## BIOL- 238. Entomology. 5 credits.

Morphology, taxonomy and behavior of insects. Includes collection, preservation and study of specimens representing many orders. Field and laboratory identification of insects. Prerequisites: Biology 170 and 180. Every year.

## BIOL- 239. Biology of Marine Invertebrates. 5 credits.

General consideration of the morphology, physiology and life histories of invertebrate animals. Laboratory experience in methods of collecting, identifying and culturing many organisms studied with emphasis placed on marine forms. Prerequisites: Biology 170 and 180. Every year.

## BIOL 241. Freshwater Ecology. 5 credits

This course will focus on the characteristics, processes, and community interactions within freshwater ecosystems including ponds, lakes, and wetlands. Students will gain an understanding of the physical, chemical, and biological importance of freshwater ecosystems. This course will place a heavy emphasis on threats to freshwater habitats, strategies for mitigation, conservation, and management, and current and proposed policies which govern aquatic habitats. Laboratory sessions will include excursions to nearby wetlands and lakes and will include a semester long research project. Writing intensive. This course fulfills Group 4 and Botanical requirements for biology majors. Prerequisites: Biology 170 and 180. Alternate years.

## BIOL- 242: Behavioral Ecology. 5 credits

This course will explore how the behavior of organisms contributes to survival and reproductive success of individuals. We will examine the evolution and significance of a wide variety of animal behaviors including life history strategies, foraging decisions, sexual selection and mate choice, cooperation and altruism, parental care, and predator-prey dynamics. This course will draw heavily from primary literature and empirical research of animal behaviors, with an emphasis on current methodology and experimental design. The course will combine weekly discussions, lectures, and labs to provide an overview of the past, present and future of the field of behavioral ecology. A semester-long project will require student groups to design and conduct an observational or manipulative experiment on some aspect of behavioral ecology and present these results in the form of a manuscript and a 15 minute conference style presentation. This course fulfills Group 4 and Zoological requirements for biology majors. Prerequisites: Biology 170 and 180

## BIOL- 243. Cave Ecology. 4 credits.

This course is a basic introduction to cave ecology. Several field trips to caves with projects relating to cave ecology will be carried out during these trips. Much of the semester will be spent examining speleogenesis, the structure and the function of cave ecosystems, as well as the evolutionary biology of obligate cave inhabitants. Prerequisites: Biology 170 and 180. A student cannot take both Biology 143N and Biology 243 for credit. Must be taken with related section of Biology 258.

## BIOL- 245* - Introductory Wildlife Management. 5 credits

*Includes required field trip-laboratory experience (Bio 258)
While a wildlife manager in Mississippi is trying to increase deer browse in a bottomland hardwood forest, a wildlife manager in suburban Chicago spends her nights with a silenced rifle trying to curb urban deer populations, a publically-held resource. Although the goals of wildlife management may be drastically different, they revolve around only three scenarios: we can increase, decrease, or maintain wildlife populations. Our ability to meet our management goals is rooted in the strength of our science. Truly effective management applies ecological principles to wildlife issues while seeking a balance between the needs of humans and the needs of wildlife. Our goal this semester is to learn the basics of wildlife management, to begin building a toolbox that will serve you well as a wildlife ecologist, natural resource manager, weekend naturalist, informed citizen, or future politician. Prerequisite: sophomore standing.

## BIOL- 247. Marine Ecology. 5 credits.

This course will focus on the ecology of marine systems, particularly nearshore benthic communities. Students will become familiar with the primary liturature and 'classic' studies that helped to define marine community ecology, as well as the processes that structure a variety of marine communities. Lab exercises include collection, identification and enumeration of sediment-dwelling invertebrates, comparisons of species diversity of different habitats and general diversity of marine organisms in a variety of habitats. Prerequisites: Biology 170 and 180. Math and Writing intensive. Every year.

## BIOL- 248B. Comparative Communities - Bahamas. 5 credits.

Course designed to acquaint the student with the environmental factors, both ancient and modern, that influence terrestrial and aquatic biological community composition and distribution. The course is offered during the summer session and entails extended field work in The Bahamas. Prerequisites: Biology 170 and 180. Writing intensive. Alternate years (summer session).

## BIOL- 249B. Comparative Communities - Northern Forests. 5 credits.

Course designed to acquaint the student with the environmental factors, both ancient and modern, that influence terrestrial and aquatic biological community composition and distribution. The course is offered during the summer session and entails extended field work in the Minnesota wilderness. Prerequisites: Biology 170 and 180. Writing intensive. Alternate years (summer session).

## BIOL- 250. Topics in Biology. 1-5 credits.

The study of selected topics relating the student to natural, biological phenomena. Topics vary with instructor. The course counts toward a major in biology. This course may be repeated for credit. Prerequisites: Biology 170 and 180.

## BIOL- 255. Biological Literacy. 4 credits.

Study of common sources, methods and techniques used in presenting biological literature. A strong emphasis on bibliographic sources and written and oral presentation of biological materials. Recommended for students planning to enter graduate programs in biology. Prerequisites: Biology 170 and 180. Writing intensive. Every year.

## BIOL- 258B/N. Extended Field Studies. 0-2 credits.

Associated with several courses are extended field study trips lasting four to five days. During this period the student spends 8 to 12 hours per day in specimen and data collection and analysis. Prerequisites: Biology 170 and 180. Every year.

## BIOL- 310. Molecular Biology. 5 credits.

Designed to introduce the fundamental conceptual and laboratory techniques of molecular biology, this course emphasizes the molecular biology of DNA, transcription control, and genetic engineering. Topics include molecular biology of the gene, molecular immunology, molecular control of developmental processes, and intermediary metabolism along with laboratories appropriate to these topics. Prerequisites: Biology 170 and 180 and Chemistry 121 and 162. Writing intensive. Every year.

## BIOL- 316. Molecular Genetics and Bioinformatics. 5 credits.

This course will focus on the molecular basis of heredity, beginning with an introduction to DNA structure, replication, and transcription, then move to a consideration of the entire genetic makeup of an organism: the genome. Students will investigate the components of a gene, the arrangement of genes on the chromosome, and the regulation of gene expression. They will also learn the computational and laboratory methods used in chromosome mapping and genome sequencing. Emphasis will be placed on sequence comparison as a means to learn more about gene structure and prediction, protein structure and function, and evolutionary relationships between species. We will take advantage of the extensive data available through on-line databases of the human genome and other gene sequences. Prerequisites: Biology 170 and 180 and Chemistry 121 and 162.

## BIOL- 324. Animal Physiology. 5 credits.

Emphasis is given to the comparative study of mechanisms of organ systems in the major animal groups, with stress on the ecological physiology of vertebrates. Prerequisite: Prerequisites: Biology 170 and 180 and Chemistry 121 and 162. Every year.

## BIOL- 325. Human Anatomy and Physiology I. 5 credits.

Students will study the structure and function of major organ systems of the human body in both lecture and laboratory. Topics covered include histology and the integumentary, skeletal, muscular, nervous, sensory, endocrine, and reproductive systems. Laboratories will be
coordinated with the lecture and focus on the anatomy and physiology of the systems discussed, as well as an independent research project. Assessment will include three written examinations, two lab practical examinations, review sheets for laboratory exercises, course review sheet, and a final examination. Prerequisite: one upper level Biology course or permission of the instructor. Every year.

## BIOL- 326. Human Anatomy and Physiology II. 4 credits.

Students will study the structure and function of major organ systems of thh human body in both lecture and laboratory. Topics covered include circulatory, lymphatic, respiratory, digestive, and urinary systems as well as nutrition and heredity. Assessment will include three written examinations, five Latin root quizzes, course review sheet, and a final examination. Course may be accompanied by optional one-credit laboratory course. Laboratories will be coordinated with the lecture and focus on the anatomy and physiology of he systems discussed, and will also include a major independent research project. Grading for that laboratory course will be based on the project, review sheets, and one lab practical examination. Prerequisite: one upper level Biology course or permission of the instructor. Every year.

## BIOL- 327. Human Anatomy and Physiology II Laboratory. 1 credit.

This course is optional, but may be taken concurrently with Biology 326. Every year.

## BIOL- 328. Electron Microscopy. 5 credits.

Fine structural analysis of cells by means of transmission and scanning electron microscopy. Both normal and malignant cells of animal tissues are evaluated at the light and electron microscopic levels. Fluorescence and immunomicroscopy are introduced as tools for elucidating subcellular components. Prerequisites: Biology 170 and 180 and Chemistry 121 and 162. Writing intensive. Every year.

## BIOL- 342. Stream Ecology. 5 credits.

Study of the physical, chemical and biological processes of stream ecosystems. A student field research project and oral presentations are required. Prerequisites: Biology 170, 180, and 341, and Chemistry 121 and 162 . Writing intensive. Alternate years.

## BIOL- 346. Ecology. 5 credits.

Survey of biotic communities and populations with emphasis upon structure, influencing factors and techniques of study. Individual investigation into the ecology of species also expected of each student. Writing and math intensive. Prerequisites: One Group 2, 3, or 4 Biology course after Biology 170 and 180 and Math Placement 22. Every year.

## BIOL- 347. Evolution. 4 credits.

Critical examination of the evidence for biological evolution with particular emphasis upon the historical development of the concept; evolutionary mechanisms; species diversity, both past and present; and the geographical distribution of living organisms. No laboratory. Prerequisite: Two biology courses in addition to Biology 170 and 180. Writing intensive. Every year.

## BIOL- 406. Senior Capstone. 4 credits.

The purpose of this course is to encourage student integration of their major subject field across levels of organization, and beyond the clear realms of biology. Biological problems such as biodiversity, genetic engineering and diseases are examined from molecular biology through evolutionary considerations. Prerequisite: senior status and Biology 170 and 180. Writing intensive. Every year.

## BIOL- 492. Directed Research. 1-5 credits.

Investigation of various biological topics by laboratory or field observations, experimentation and data collection. Directed by a biology faculty member. The final results of this work are presented as a paper in proper journal format and/or an oral presentation. Course may be taken more than once; however, only five credits count toward the nonhonors biology major as listed in Area III of the major requirement. Prerequisites: Biology 170 and 180. Writing intensive. Every semester. This course may be repeated for credit.

## BIOL- 493. Internship. 1-5 credits.

The student develops, under the direction of a faculty member and job-site supervisor, a work/study program in which practical experience and biology are used. Prerequisites: Biology 170 and 180. Writing intensive. Every semester. This course may be repeated for credit.

## BIOL- 494. Topic Seminar. 1-4 credits.

Topics of particular interest to major students. Offered subject to sufficient demand by students and availability of faculty. This course may be repeated for credit. Prerequisites: Biology 170 and 180.

## BIOL- 499. Honors Thesis/Project. 1-5 credits.

Prerequisite: 3.50 GPA, permission of the Department Chair. Prerequisites: Biology 170 and 180. Writing intensive.

## Business

Go to information about the faculty and staff.

## Requirements for Major

## Management

56 credits in Business and related disciplines including the following:
Required in Economics: 190 and 205
Required in Accounting: 225 and 226
Required in Business: 210Q, 211*, 250C, 321W, 330, 340, 365S and 460W, plus two additional courses from BUSN 200S, 270, 370W, 381, 465S, 495, 498, 499
Required professional experience: Approved internship or BUSN 381
Marketing
56 credits in Business and related disciplines including the following:
Required in Economics: 190 and 205
Required in Accounting: 225
Required in Business: 210Q, 211*, 250C, 330, 340, 345, 365S, 442W and 460W, plus two additional courses from ART 280, BUSN 200, 270, 381, 495, 498, 499, COMM 280, HFS 222
Required professional experience: Approved internship or BUSN 381

## Finance

56 credits in Business and related disciplines including the following:
Required in Economics: 190 and 205
Required in Accounting: 225 and 226
Required in Mathematics: 131 or 202 or 327
Required in Business: 210Q, 211*, 330, 335, 340, 365S, 460W plus two additional courses from
ACCT 325, BUSN 270, 381, 430, 498, 499, ECON 300, 330, 340
Required professional experience: Approved internship or BUSN 381

## Entrepreneurship

56 credits in Business and related disciplines including the following:
Required in Economics: 190 and 205
Required in Accounting: 225
Required in Business: 210Q, 211*, 200S, 250C, 300, 330, 340, 365S, 460W plus two additional courses from ACCT 226, BUSN 202S, 270, 321W, 370W, 381, 465S, 481, 498, 499
Required professional experience: Approved internship or BUSN 381

## Business Minor (available to all students except, MGMT, MKTG, FIN or ENTR majors)

26 credits in Business and related disciplines including the following:
ECON 190, ACCT 225, BUSN 210, 211*; two additional courses from BUSN 330, 340, 365; any one additional BUSN or ACCT elective

* Note: Acceptable substitute courses for BUSN 211 include COMM 300Z (Social Scientific Methods), PSYC 207 (Experimental Design) and POLS 260Z (Methodology)

Management Minor (available only to students majoring in MKTG, FIN or ENTR)
20 credits in Business and related disciplines, not already used to meet major requirements or electives, chosen from the following: ACCT 226, BUSN 200, 270, 310, 320, 370, 465

Marketing Minor (available only to students majoring in MGMT, FIN or ENTR)
20 credits in Business and related disciplines, not already used to meet major requirements or electives, chosen from the following: BUSN 200, 270, 345, 442, COMM 280, HFS 222

Finance Minor (available only to students majoring in MGMT, MKTG or ENTR)
20 credits in Business and related disciplines, not already used to meet major requirements or electives, chosen from the following: ACCT 226, 325, BUSN 270, 335, 430, ECON 300, 301, MATH 131 or 201

## Entrepreneurship Minor (available only to students majoring in MGMT, MKTG or FIN)

20 credits in Business and related disciplines, not already used to meet major requirements or electives, chosen from the following: ACCT 226, BUSN 200, 202, 270, 310, 320, 355, 370, 481 (481 requires prior approval)

## Course Listings

## BUSN-101. Business Fundamentals. 4 credits.

This course will acquaint students with business fundamentals across all areas of business. Students will be tested on their ability to learn and apply these theories to historical and current situations using articles from the Wall Street Journal (WSJ). The course will have a strong emphasis on strategy, communication, problem solving, and teamwork. Professional levels of written and oral communication will be required. Every year.

## BUSN-200S. Entrepreneurship. 4 credits.

This introductory, available for all majors, will provide a theoretical and practical framework of the entrepreneurship discipline and a basis for further study and practical experience. This course
will primarily address entrepreneurship in a wide variety of areas including for-profit and not-forprofit ventures, education, government, etc. Students will be expected to explore current and potential applications of entrepreneurship in their chosen field of study. Every year.

## BUSN-202S. Leading the Family Enterprise. 4 credits.

This course is designed to prepare students for positions of leadership within a family business as owner, manager, director and/or family leader. Family dynamics within and across generations will be explored. Leadership and ownership transition issues and best practices will be a recurring topic throughout the course. Various leadership structures will be studied in detail, including unitary leadership, sibling teams, cousin collaborative, and non-family leadership models will also be explored. Alternate years.

## BUSN-210Q. Business and Economic Statistics. 4 credits.

The objective of this course is to develop the necessary statistical and probabilistic tools to intelligently use and interpret data gathered in a business environment. Topics include descriptive statistics, probability, sampling, estimation of parameters, tests of hypotheses, simple linear regression and correlation. Must be taken concurrently with BUSN 211.
Prerequisite: Math Placement 22. Every year.

## BUSN-211. Business Research Methods. 2 credits.

This course explores the theory that supports and the practices for collecting and for analyzing both primary and secondary data. A data collection project to solve a business problem or capitalize on a business opportunity, and its analysis, are the core of this course. Must be taken concurrently with BUSN 210Q. Prerequisite: Math Placement 22. Every year.

## BUSN-250. International Business. 4 credits.

Introduction to the broad area of international business. The social, economic and political environments of the multinational firm form the base on which the management structure, marketing processes and financing of the global corporation are studied. Prerequisite: None. Every year

## BUSN 270. Business Ethics and Leadership. 4 credits.

As a writing intensive course this class is a comprehensive study of business ethics and leadership. Specific areas of focus include gaining an understanding of business ethics and leadership theories and frameworks and how such theories are applied in real world situations. The intent is for the student to develop competencies and critical thinking skills to employ the theories and frameworks in their future endeavors. Students will be able to identify, analyze, and explain ethical issues through addressing real right vs right ethical situations in writing and class presentations. In addition students will gain an understanding of the codes of ethics for a number of specific business disciplines. Students will also enhance and demonstrate effective written
communication skills by demonstrating their mastery of disciplinary writing conventions appropriate to the course. Alternate years.

## BUSN-290. Topics in Business. 1-4 credits.

Seminar of selected topics. Open to all students. Offered as required. Some sections writing intensive.

## BUSN 300. Cases in Entrepreneurial Leadership. 4 credits.

This course is designed to study and apply the principles of entrepreneurship at an advanced level following students’ completion of BUSN 200 (Entrepreneurship). Case studies, readings and student-selected needs will be explored across a broad spectrum of contexts in a manner that expands upon the foundation provided in BUSN 200. Prerequisite: BUSN 200. Alternate years

## BUSN-310. Operations Management. 4 credits.

Quantitative, analytical approach to study of the production function. Included are the uses of schematic, graphic, mathematical and statistical analyses of issues in job design, plant location, layout, maintenance, inventory, production and quality control. Prerequisites: BUSN 210Q and ECON 190. Every year.

## BUSN 320. Supply Chain Management. 4 credits.

This course is designed to provide students with an integrated and multi-functional supply chain management view in the context of the organization and its environment. Students are provided with the opportunity to integrate concepts, skills and techniques acquired in this course and in other management courses to develop the analytical and decision-making skills needed to cope with supply chain organizational business realities. The strategic supply chain management course addresses the central theme of (1) how managers develop an astute "game plan" for running a supply chain and (2) how they implement and execute the supply chain with proficiency. Emphasis is on the formulation, application and justification of supply chain management tactical and strategic courses of action. Alternate years.

## BUSN 321. Strategic Logistics \& Operations Management. 4 credits.

This course is designed to provide students with an integrated and multi-functional strategic Logistics and operations management view in the context of the organization and its suppliers and customer environments. Students are provided with the opportunity to integrate concepts, skills and techniques acquired in this course and in other management courses to develop the analytical and decision-making skills needed to cope with strategic supply chain/logistics and operations organizational business realities. The strategic logistics and operations management course addresses the following central themes of (1) quantitative, analytical operational mechanics (2) how managers develop a strategic plan for running a logistics/supply chain and supporting operations (3) how managers implement and execute the supply chain with proficiency in advanced planning and scheduling, inventory, warehousing, distribution and transportation
demonstrate how to establish facility strategy including plant location, layout, maintenance, production and quality control. Prerequisites: Any statistics course. Writing intensive. Every year.

## BUSN-330. Financial Management. 4 credits.

Introduction to basic financial concepts, principles and analytic techniques of financial management. Emphasis is on financial planning and managing assets. Topics include financial objectives, organizational form, current asset management, capital budgeting, cost of capital, financial leverage, dividend policy and valuation. Prerequisites: BUSN 210Q, ACCT 225 and ECON 190. Every year.

## BUSN 335. Cases in Financial Management. 4 credits

This course will employ a case study approach to complex financial management problems in areas such as capital structure, capital budgeting, mergers and acquisitions, and real options. The course builds on the theoretical understanding of finance gained in BUSN 330 and provides in depth practice of application and critical thinking. Prerequisites: BUSN 330. Every year.

## BUSN-340. Marketing Strategy \& Planning. 4 credits.

This course stresses management applications of fundamental theories and con concepts within the areas of market selection, product development, distribution management, pricing and promotional strategy. Prerequisites: BUSN 211, ACCT 225 and ECON 190. Every year.

## BUSN 345. Cases in Marketing Management. 4 credits.

This course is designed to use case histories of real world marketing situations to illustrate the application of marketing theories and research findings. This should give the student ideas as to how they may act or react (from a marketing perspective) should they encounter similar situations in the work careers. Prerequisites: BUSN 211 and BUSN 340. Every year.

## BUSN-352S. Contemporary Issues in Business. 4 credits.

This course explores contemporary issues in developing and managing business organizations, and the use of research to discover trends and build models for best and poor practices. Prerequisites: BUSN 211 and two 300+ Business courses or permission of the instructor. Offered as required.

## BUSN-365S. Managing Effective Organizations. 4 credits.

This course explores the theories and concepts behind understanding, managing, and leading others in organizations and links those theories and concepts to specific human resource management techniques. For instance, in order to make good hiring decisions, managers need to know what characteristics (e.g., personality) predict job performance, how person-job fit affects outcome variables (e.g., job performance and turnover), and how to avoid biases (e.g.,
stereotypes) in the selection process. This course is geared toward all potential managers regardless of the specific field. Prerequisite: BUSN 211. Writing intensive. Every year.

## BUSN-370. Business Law. 4 credits.

First course in law that introduces legal thought, legal analysis and court systems. Emphasizes preventative law, i.e., avoidance of legal conflict, and develops a liability approach with a focus on criminal, tort and contract law. The case method approach is used to develop and apply legal principles. Prerequisite: Junior standing. Writing intensive. Every year.

## BUSN-381. Applied Business I. 1-5 credits.

Applied Business credit units are earned when a student participates in a faculty-guided, applied business project. Although projects differ based on the needs of the client, each has an experiential as well as an academic component. The student is expected to budget a minimum of three hours per week for each credit unit earned. Some projects are group efforts; others require participation by individuals. Prerequisites: Instructor approval. See also BUSN 481. Writing intensive. Every year.

## BUSN-390. Topics in Business. 1-4 credits.

Seminar of selected topics. Restricted to advanced majors in management or those obtaining permission of instructor. Some sections writing intensive. Offered as required.

## BUSN-430. Investments Analysis. 4 credits.

Introduction to the various types of financial investments including stocks, bonds and options. Methods of evaluating the profitability and risk of these investments individually and as part of a portfolio of securities are presented. Prerequisite: BUSN 330. Every year.

## BUSN-442. Creative Promotion Strategy. 4 credits.

A course analyzing the creative element of advertising with special emphasis on applying this understanding to actual business or organization problems. Assessment is based on individual and group work on campaigns as well as class participation. Ad plans and creative/copy plans are presented and defended in class, replacing exams. Class involves lecture and discussion. Prerequisite: BUSN 340 or permission of instructor; non-majors welcome. Writing intensive. Every year.

## BUSN-460. Business Strategy. 4 credits.

Integration of all preceding business courses through the study of the function and responsibility of top-level management. The organization is viewed as a total system from the position of the policy-maker and administrator. The leadership of the chief executive, the environmental and institutional constraints of the organization, and the problems of implementing and integrating organizational objectives and public goals are examined. Prerequisites: BUSN 330, 340, and 365. Writing intensive. Every year.

## BUSN-465. Human Resource Management. 4 credits.

This course provides an overview of major human resource functions (i.e., job analysis, performance assessment, selection, compensation, training and development, safety and health) and discusses how these HR functions are integrated horizontally and vertically within the organization to achieve organizational goals. Students will have the opportunity to interface with Directors of HR and conduct an in-depth analysis of an organization's human resource policies and procedures. This course is geared toward managers who wish to specialize in the human resource field. Every year.

## BUSN-481. Applied Business II. 1-4 credits.

Applied Business credit units are earned when a student participates in a faculty-guided, applied business project. Although projects differ based on the needs of the client, each has an experiential as well as an academic component. The student is expected to budget a minimum of three hours per week for each credit unit earned. Some projects are group efforts; others require participation by individuals. Prerequisites: BUSN 381 and instructor approval. See also BUSN 381. Writing intensive. Every year.

## BUSN-490. Independent Study. 1-4 credits.

Offered as required.

## BUSN-491. Internship. 1-4 credits.

Offered as required.

## BUSN-498. Senior Thesis. 1-6 credits.

Offered as required.

## BUSN-499. Honors Thesis/Project. 1-4 credits.

Prerequisite: Declared major in Business, 3.500 GPA, 3.500 GPA in Business classes, BUSN 330,340, and 365 and approval of the Department Chair. Offered as required.

## Chemistry

Go to information about faculty and staff.

## Requirements of Major (B.A.) - 53 sem. hrs. total (35 in CHEM)

Required in Chemistry
Chemistry 121, 162, 201, 281, 300, 311 or 352, 400, and eight more credits in chemistry. No more than four credits may be applied toward the major from 290, 490, 491, 492 and 499.

Required in Related Departments
Mathematics 201 and 202, Physics 200 and either Phys 205 or 218.
Recommended in Chemistry major requirements with additional courses appropriate to career goals and interest.
The chemistry major should consult with the academic adviser to supplement the minimum
Recommended in Other Departments
The student planning to do graduate work in chemistry should consider taking additional courses in mathematics, computer science, physics, or biology. The student should consult the academic adviser to select these courses.

## Requirements of Major (B.S.) - 78 sem. hrs. total (55 in CHEM)

## Required in Chemistry

Chemistry 121, 162, 201, 271, 281, 300, 302, 311, 321, 352, 382, 400, and
four more credits in Chemistry. Chemistry 491 cannot be used toward the BS major. If the four additional credits do not include a lab experience, the student must complete an approved summer research project. Note that this degree program leads to certification by the American Chemical Society.

## Required in Related Departments

Biology 170, Mathematics 201 and 202, and Physics 200 and 218.

## Departmental Honors

To receive honors in chemistry, the student must apply for departmental honors by the end of the junior year, have an overall GPA of 3.50 and a GPA of 3.50 in chemistry and cognate courses, conduct at least 400 hours of approved laboratory research in chemistry (which can be a computational project), complete Chem 499, and write and successfully defend an honors thesis.

## Requirements for Minor - $\mathbf{2 3}$ sem. hrs.

Chemistry 121, 162, 201, at least one course from 281 or 372, and at least three additional credits in chemistry. A student is not allowed to minor in chemistry if also completing the major or minor in biochemistry/molecular biology.

## Related Programs

Biochemistry/Molecular Biology - See Biochemistry/Molecular Biology Computational Science

Engineering - See Engineering Pre-Medicine, including Pre-Dental and Pre-Veterinary Medicine - See Pre-Medicine

## Course Listings

## CHEM-100N. Chemistry and Society. 4 credits.

Designed to introduce the study of chemistry to the non-science major. Particular focus on science and society connections. Topics vary with instructor. Some laboratory experience may be included, but this course does not satisfy the Natural World requirement for a lab course. Credit cannot be applied toward a chemistry major or minor or toward science course requirements for other science majors. Prerequisite: Math Placement of 22 or 2 is strongly recommended.

## CHEM-105. Chemistry Through Experimentation. 4 credits

This course is designed for students seeking a non-majors chemistry course with a laboratory component. Each three credit class meeting will involve laboratory work, with the data processing and analysis occurring outside of class time. Worksheets and exams will help assess the understanding of the chemistry. Topics include: data analysis, spectroscopy, chromatography, compound analysis through titrations and gravimetric analysis, kinetics, and equilibrium.
Students would also learn the principles of chemical safety. Offered in the summer during the May Term. Credit cannot be applied toward a chemistry major or minor or toward science course requirements for other science majors. Math placement of 22 or 2 is strongly recommended

## CHEM 111N: Introductory Chemistry for Health Sciences. 4 credits

This course is intended for students pursuing a degree in Nursing, or who are seeking to satisfy the Natural World $(\mathrm{N})$ requirement of the Arts and Sciences component of the General Education program. Topics include matter and measurement, chemical structure and reactions, solutions, acids and bases, the four major groups of biomolecules (lipids, carbohydrates, proteins, nucleic acids) and changes in energy that accompany metabolic processes. Relation of these topics to health will be presented. Credit cannot be applied toward a chemistry major or minor. This course is not recommended for those planning to attend medical school. Credit cannot be applied toward a chemistry major or minor or toward science course requirements for other science majors. Prerequisite: None. Every year.

## CHEM-121B. Models of Chemical Systems I. 5 credits.

Introduction to the study of chemistry and to the variety of models that are used to describe atoms, molecules and their reactions. Topics include atomic structure, molecular structure, elementary bonding, stoichiometry, thermochemistry, gases, solutions and acid-base chemistry. Required weekly lab parallels the topics of the course. Prerequisite: Math Placement level 24 or 3. Mathematics 120. Every year. Note: Students with strong high school chemistry backgrounds or international students with strong science backgrounds should consult with the Department Chair about placing out of this course.

## CHEM-162B. Models of Chemical Systems II. 5 credits.

Follows Chemistry 121 and introduces the student to simple kinetics, equilibrium, more acid-base chemistry, simple thermodynamics and electrochemistry, and basic wet and instrumental analytical techniques. Required weekly lab parallels the topics of the course. Prerequisites:
Chemistry 121 and Math placement of 25 or 4 or Mathematics 120 as a pre- or co-requisite. Every year. Note: Students with strong high school chemistry backgrounds or international students with strong science backgrounds should consult with the Chair of the Department about placing out of this course

## CHEM-201. Introduction to Organic Chemistry. 5 credits.

First course in a two-semester organic sequence. Fundamentals of organic structural theory, chemical bonding, nomenclature, and stereochemistry of alkanes, alkenes, alkyl halides, alcohols, and carbonyl compounds. Reaction mechanisms are emphasized as the basis for understanding organic reactions. Techniques used in the synthesis, purification and analysis of organic compounds are emphasized in the laboratory. Prerequisites: Chemistry 162. Every year.

## CHEM-271. Principles of Biochemistry. 4 credits.

Introduction to the study of structural biochemistry and metabolism. Emphasis on the chemistry of macromolecules (including proteins, lipids, carbohydrates and nucleic acids) involved in physiological processes. Enzyme kinetics, thermodynamics, acid-base and redox chemistry are discussed in the biochemical setting. The pathways of metabolism, including but not limited to glycolysis, gluconeogenesis, the citric acid cycle, oxidative phosphorylation and photosynthesis, are studied at a level allowing for an understanding of the chemical principles of catabolism and anabolism along with the regulation of the network of different pathways. Amino acid and nucleotide metabolism are also discussed. Prerequisites: Chemistry 201 and Biology 170. Every year.

## CHEM-281. Analytical Chemistry. 5 credits.

Advanced treatment of equilibria combined with an introduction to common instrumental methods. Includes statistical treatment of data, acid-base and other complex equilibria, spectroscopic, electrochemical, and chromatographic instrumental methods. Laboratory required. Prerequisites: Chemistry 162 and Mathematics 201.

## CHEM-290. Introduction to Research. 1-3 credits.

Introduction to research methodology through the study of a research problem under the close supervision of a member of the faculty. Prerequisite: Permission of the supervising instructor.

## CHEM-300. Junior Seminar. 1 credit

Required of each chemistry major of junior standing. Attendance at weekly one hour-seminars and discussions is required throughout the year. Each student delivers a one-half hour presentation on a chemical topic prepared under the supervision of a member of the Chemistry faculty. Several sessions in the fall are devoted to bibliographic instruction, on-line searching, and oral and written communication used by practicing chemists. The student registers for the course during both semesters; 0 credits in the fall and 1 credit in the spring. Every year.

## CHEM-302. Intermediate Organic Chemistry. 5 credits.

Second course in a two-semester organic sequence. Spectroscopic analysis and multi-step synthesis of organic compounds, concerted reactions of alkenes, reactions of aromatics and carbonyl reactions. Techniques used in the synthesis, purification and analysis of organic compounds are emphasized in the laboratory with a focus on multi-step synthesis and spectroscopy. Prerequisite: Chemistry 201. Every year.

## CHEM-305. Molecular Toxicology . 4 credits

This course will focus upon common environmental toxins and the biochemical processes by which they are absorbed, distributed, metabolized, and excreted from mammalian systems. Particular attention will be paid to understanding these processes at the molecular level. Students will provide one another instruction based upon the textbook and their understanding from other course work. Prerequisites - Chemistry 201 and Biology 170 or permission of instructor.

## CHEM-311. Thermodynamics and Kinetics. 5 credits.

This class offers an in depth look into the energy relationships that govern chemistry. It begins with the four laws of thermodynamics and exploring ideal systems, and ends with looking at complex mixtures and phase diagrams. The last portion of the course examines reaction kinetics and mechanisms. In the lab, students will continue to learn good scientific technique, different aspects of experimental design, and how to write lab reports in the ACS style. Writing Intensive. Prerequisites: Chemistry 281, Math 202, and Pre- or Co-requisite: Physics 218 or 205. Every year.

## CHEM-321. Inorganic Chemistry 5 credits.

Overview of the quantum mechanical model of atomic and molecular structure, including valence bond and molecular orbital theory, symmetry and group theory applied to molecular structure, acid-base models, ionic bonding and structure, transition metal chemistry, and selected topics from organometallic chemistry, bioinorganic chemistry, and chemical biographies and history. Weekly laboratory required, which includes computational chemistry, the synthesis and analysis of inorganic compounds, and applications of green chemistry in experimental design. Prerequisites: Chemistry 201, 281, and either Physics 218 or 205. Alternate year.

## CHEM-352. Quantum Chemistry and Spectroscopy. 5 credits.

This course is an introduction to the physical chemistry principles that concern the structure of individual atoms and molecules. The foundations of quantum mechanics are explored by developing model systems and then applying them to atoms and molecules. There is an emphasis on the analysis of complex problems, the collection of experimental data, and the improvement of scientific communication skills, both oral and written. Laboratory required. Writing intensive. Prerequisite: Chem 281, Math 202, Phys 218. Recommended: Math 215. Alternate year.

## CHEM-372. Advanced Experimental Biochemistry. 5 credits.

The experimental methods of biochemistry are explored from the perspective of essential physical principles and with hands-on experiences in the laboratory. Topics covered typically include chromatography, spectroscopy, X-ray crystallography, multi-dimensional NMR and enzyme kinetics. Substantial lab reports are prepared at the conclusion of the laboratory experiences. Weekly laboratory required. Prerequisites: Chemistry 271, Mathematics 201 and Physics 200. Every year. Writing intensive.

## CHEM-380. Topics in Chemistry. 2-4 credits.

Selected topics of current interest in various areas of chemistry. Prerequisite: Permission of the instructor. This course may be repeated for credit.

## CHEM-382. Advanced Instrumentation. 5 credits.

Advanced study of instrumental methods used for chemical analysis. Includes some basic electronics, common spectroscopic and separation methods. Lab required. Writing intensive. Prerequisites: Chemistry 281, Math 202. Pre- or Co-requisite: Physics 218 or 205.

## CHEM-400. Senior Seminar. 1 credit.

Required of each chemistry major of senior standing. Attendance at weekly one-hour seminars and discussions is required throughout the year. Each student delivers a one-hour presentation on a chemical topic prepared under the supervision of a member of the faculty. Several sessions in the fall are devoted to discussions of written chemical communication skills, the ethical issues in science, the social context in which science transpires in our culture, and career options for chemistry majors. Each student registers for this course during both semesters; 0 credits in the fall and 1 credit in the spring. Writing intensive. Every year.

## CHEM-490. Independent Study. 1-4 credits.

Individual study on a topic beyond the scope of regular courses.

## CHEM-491. Internship. 1-4 credits.

Chemical research or activity during the summer or academic semester at an approved site or program. Prerequisite: Chemistry 281 and prior approval of the department. Every year. This course may be repeated for credit.

## CHEM-492. Directed Research. 1-4 credits.

Laboratory research project (which can include computational research) in collaboration with a member of the faculty. This may be a more intense continuation of a project started in Chemistry 290. Students must submit a comprehensive research report by the end of the semester. Prerequisites: Chemistry 271, 311, 321, or 382 and permission of the supervising instructor. This course may be repeated for credit.

## CHEM-499. Honors Thesis/Project. 0-8 credits.

Prerequisite: 3.50 GPA, permission of the Department Chair.

## Cinema Studies

Go to the faculty and staff page.
This minor in Cinema Studies (CINE) is an interdisciplinary program intended to study film and television as art forms. The proposed program includes study of (1) the expressive elements of film such as cinematography, sound, and editing; (2) an introduction to the history of film with a focus on narrative film; (3) a survey of film genres; and (4) an introduction to film theory. The program offers some advanced study of theory, genre, national and international film, film history, and other topics relevant to filmmaking as an art form and as an industry. The program will also train students to think and write critically about film as an art form. The program will also provide opportunity for study of television as a medium with its own types and genres, history, and theory. A Cinema Studies minor would prepare students for further advanced study in film and related fields.

## Requirements for the Minor

The Cinema Studies minor requires a total of 20 credits distributed as follows: CINE 200 plus 16 credits in at least two different departments. At least two of the courses must be numbered 200 or above. At least one course ( 4 credits) must emphasize the historical development of cinema and at least one (4 credits) must emphasize aesthetic analysis of cinema.

Historical development courses:
COMM 220H American Television History; ENGL 180A Film Noir, ENGL180A Women in Classical Hollywood Cinema; HIST 229A; HONR 300A Hitchcock's Cinema, SPAN 130; and other approved courses.

Aesthetic analysis courses:
COMM 301 Critical Methods: Television Criticism; ENGL 180A Film Noir, ENGL180A 19thCentury Literature into Film, ENGL 180A Jane Goes to the Movies, ENGL 180A Women in Classical Hollywood Cinema, ENGL 380 Screening Fiction; HONR 300A Hitchcock’s Cinema; SPAN 427; and other approved courses.

## CINE- 200. Introduction to Cinema Studies. 4 credits.

Cinema Studies 200 introduces students to cinema as an art form and as an industry. The course introduces students to a technical vocabulary for the expressive elements of film, including mise-en-scene, cinematography, editing, and sound, among others. Cinema Studies 200 also provides an overview of how cinema has developed as a medium and as an industry and provides an overview of genres and types of film, including narrative, documentary, animated, short films, etc. Moreover, the course traces major trends and movements in international film, focusing, as time allows, on sample national cinemas. This course also briefly introduces major concepts in film theory. In general, Cinema Studies 200 approaches film in its capacity to shape and reflect our values and beliefs, as an art form deeply embedded in its culture. The course also introduces
students to analytical approaches to film and to effective strategies for writing about cinema in a number of genres, including the film review, shot by shot analysis, and researched essays on cinema. The course will also briefly introduce students to the study of television and select other digital media. Finally, Cinema Studies 200 prepares students for more advanced study in cinema and media studies. Prerequisites: English 101. Every year.

## CINE- 270. Film Literacy in the Curriculum. 1 credit.

FLIC modules accompany selected courses in several disciplines presenting students with the opportunity to do additional research in Cinema Studies and earn credit for that work. Students will work with a faculty member from the Cinema Studies minor to design and complete a project that expands on a course topic, working in conjunction with a professor who has agreed to work with the FLIC module. Students must register both for a course offering the FLIC option and for the FLIC module. FLIC modules allow students the opportunity to enrich their learning by acquiring interdisciplinary perspectives on film and television. This course may be repeated for credit, but no more than four credits may be counted for the minor. Prerequisite: CINE 200. Every semester.

## CINE- 490. Independent Study. 1-4 credits.

Independent research project designed in consultation with the supervising professor. Prerequisite: CINE 200, declaration of the Cinema Studies minor and permission of the instructor. This course may be repeated for credit, but no more than four credits may be counted for the minor. Every semester.

## CINE- 492. Internship. 1-4 credits.

Supervised work experience in some area related to cinema or television. Prerequisite: CINE 200, declaration of the Cinema Studies minor and permission of the instructor. This course may be repeated for credit, but no more than four credits may be counted for the minor. Every semester.

The following courses are approved for the Cinema Studies minor:
Art
241. Introduction to Photography (Prerequisites: none)
341. Advanced Photography (Prerequisites: ART 241A and permission of instructor)

Chinese
151. Modern Chinese Film and Fiction. 4 credits. (Prerequisites: none)

Communication
220H. Topics: American Television History. 4 credits. (Prerequisites: none)
301. Critical Methods: Television Criticism. 4 credits. (Prerequisites: ENGL 101E and COMM 280 or 290S)
English
180A. Film Noir. 4 credits. (Prerequisites: ENGL 101)

180A. 19th-Century Literature into Film. 4 credits. (Prerequisites: ENGL 101)
180A. Jane Goes to the Movies. 4 credits. (Prerequisites: ENGL 101)
180A. Shakespeare on Film. 4 credits. (Prerequisites: ENGL 101)
180A. Women in Classical Hollywood Cinema. 4 credits. (Prerequisites: ENGL 101)
343. Advanced Screenwriting. 4 credits. (Prerequisites: ENGL 101, ENGL 240)
344. Summer Screenwriting Institute. 4-6 credits. (Prerequisites: ENGL 101 and permission of instructor)
380. Screening Fiction. 4 credits. (Prerequisites: ENGL 180, ENGL 200 and CINE 200)

History
202H. Film and History. 4 credits. (Prerequisites: none)
225R. Topics: Religion and Film. 4 credits. (Prerequisites: none)
229A. American Film. 4 credits. (Prerequisites: none)
Honors
300A. Hitchcock's Cinema. 4 credits. (Prerequisites: permission of Honors Program and add form)

Spanish
130. Hispanic Literature: Introduction to Spanish and Latin American Film. 4 credits. (Prerrequisito: none)
263: El Cine y el Cambio Social (Film and Social Change). 2 credits. (Prerequisites: Spanish 112 or 150 or placement)
427. The Silver Screen. 4 credits. (Prerequisites: Any 300-level course taught in Spanish)

In addition, topics courses in many departments such as Communication, English, History, Languages, and Music may be approved to meet Cinema Studies minor requirements as the chosen topics warrant. Other types of courses may also be offered with a film studies emphasis and be approved for Cinema Studies credit. Current Cinema Studies courses will be listed in the master schedule each semester.

## Communication

Go to faculty and staff page.

## Requirements for Major

The Communication major consists of 36 credits, distributed as follows: Communication 200, 300, 301 and 403; eight credits from 270S, 280, and 290S; eight credits from 320, 322, 323, 324, 327, 328, 329, 330, 350, 351, 360, and 361; and four credits in an elective in Communication. Attendance at departmental colloquia also is required.

## Recommended Courses

The Communication faculty strongly encourages students to explore internship possibilities. Both the department and the Career Center have resources to assist students in identifying potential internship sites. Students can also earn 1-8 credits of academic credit for a Communication internship through Communication 491. While these credits do not apply to the major, they do count towards the degree.

## Related Areas of Study

Students interested in Communication may wish to take course offerings from other departments on campus. For example, Students interested in Journalism may pursue the Journalism minor, which includes courses in English (e.g., English 241 Beginning Journalism, English 321
Advanced Feature Writing) and Art (e.g., Art 241A Introduction to Photography). Students interested in Business, Public Relations, and/or Marketing may pursue a minor or second major in Business. More broadly, students may also wish to further the ethical basis of their education by taking courses such as Philosophy 103 Ethics and Identity, Religion 171S Urban Life and Social Ethics, Religion 172S Poverty and Social Ethics, and Religion 176S Racism and Social Ethics. A student should consult with an academic adviser to consider further course work that would complement each individual's program of study.

## Requirements for Minor

The Communication minor consists of 20 credits, distributed as follows: Communication 200; four credits from 270S, 280, and 290S; four credits in Communication at the 300-level; and eight credits in electives in Communication or other approved courses (except 491). Attendance at departmental colloquia also is required.

## Course Listings

COMM- 120. Topics in Communication. 1-4 credits
Includes courses exploring communication processes and/or applications in a variety of contexts. Some courses may be writing intensive. Prerequisites: None.

## COMM- 190. Public Speaking. 4 credits.

Addresses basic theoretical principles of effective public speaking necessary for pluralistic audiences, concentrating on content, organization, audience analysis, ethics, language, and delivery. Students apply these principles to several oral presentations, some requiring the use of PowerPoint. Every year.

## COMM- 200. Introduction to Communication Studies. 4 credits.

An introduction to communication theory in practical and relevant contexts (e.g., public speaking, relational communication, organizational communication, small-group communication). Writing intensive. Prerequisite: English 101. Every year.

## COMM- 220. Topics in Communication. 1 to 6 credits.

Courses entail an exploration of topics in communication studies in areas such as rhetoric, media, interpersonal, or organization communication. Students may be awarded 5 or 6 credits for study abroad only. Alternate years.

## COMM- 222A. Graphic Storytelling. 4 credits

Introduces how meaning is constructed through graphic storytelling, the combination of words and pictures to communicate ideas, with attention to the medium's history, aesthetics, production, and reception. Alternate years. Prerequisites: None.

COMM- 224. Group Dynamics. 4 credits.
Explores the theory and practice of effective communication behaviors in group discussions. Structured group activities allow for application of scholarly theories of successful group interaction. Every year.

COMM- 225. Field Study in Communication. 1-6 credits

Explores issues in communication studies in off campus settings. May be repeated for credit. Alternate years. Prerequisites: None.

## COMM-251: American Television History. 4 credits

This course explores the development of television as a medium of communication and its transformative effects on American institutions. May Term only. Every other year.

COMM- 270S. Interpersonal Communication. 4 credits.
Introduces message production and interpretation in a face-to-face context. The primary objective of this course is to illustrate how choices in interpersonal communication behaviors are
basic to our character as human beings and the nature of our interpersonal relationships. Every year.

## COMM- 280. Reasoning and Communication. 4 credits.

Study of and practice in practical reasoning, critical thinking, listening, reading, writing, speaking and relational skills, and informed deliberation of critical contemporary issues. Writing intensive. Prerequisite: English 101. Every year.

## COMM- 290S. Media Literacy. 4 credits.

Introduces students to media studies with special emphasis placed on developing critical interpretations of mass communicated messages. Examines topics such as the origins of mass communication systems, the audience, the current structure of media industries, and message content. Writing intensive. Prerequisite: English 101. Every year.

## COMM- 300. Social Scientific Methods. 4 credits.

Introduces social scientific research processes in the study of communication. Primary emphasis is on how to formulate a valid research question and conduct library research for an appropriate literature review. Addresses how to adhere to standards for scholarly writing, and how to critically evaluate others' research studies. Writing intensive. Prerequisites: Communication 200 and Communication 270S, 280, or 290S; math placement score 22. Every year.

## COMM- 301. Critical Methods. 4 credits.

Develops students' abilities to describe, analyze, interpret, and evaluate messages using the scholarly methods of the communication critic. Students review and apply multiple critical approaches (e.g., Neo-Aristotelian, semiotics, and ideological criticism). Writing intensive. Prerequisites: Communication 200 and 280 or 290S. Every year.

## COMM- 320. Topics in Communication and Culture. 4 credits.

Includes courses a) analyzing the relationship between one's culture and one's communication practices and b) exploring communication processes in a variety of cultural contexts and across cultural differences (e.g., Communication and Gender; Intercultural Communication). Some courses may be writing intensive. May be repeated for credit. Prerequisites: Communication 200 and Communication 270S, 280, or 290S; or permission of instructor. Alternate years.

## COMM- 322. Interpersonal Conflict. 4 credits.

An advanced service-learning course in interpersonal communication that focuses on the communication behaviors that occur when individuals are in conflict. Requires the student to perform 30 hours of community service as part of a course project. Prerequisites: Communication 200 and Communication 270S, 280, or 290S; or permission of instructor. Alternate years.

## COMM- 323. Interpersonal Influence. 4 credits.

An advanced course in interpersonal communication that adopts a language-action perspective as it focuses on the interaction processes apparent when people attempt to directly influence the behaviors of other people. The personal ethics of interpersonal influence attempts are emphasized. Prerequisites: Communication 200 and Communication 270S, 280, or 290S; or permission of instructor. Alternate years.

## COMM- 324. Family Communication. 4 credits

This advanced course examines topics related to 1) family communication and basic family processes, 2) communication in family subsystems, 3) communication during family stress, and 4) family interaction, health and well-being. Research and theories from communication will be used to explain issues related to the family. Discussion topics include, for example, marital, parent-child, sibling, and intergenerational interactions in the family. Research pertaining to marital satisfaction, divorce, courtship, and the impact of the family on its children (and viceversa) will also be examined. Prerequisites: COMM 200 and 270S or permission.

## COMM-325: Relational Communication, 4 credits

This course exposes students to advanced research trends and theory in the social scientific study of close relationships, focusing on issues related to the nature of intimate relationships, processes, functioning, relationship issues, and communication. Readings and discussions relate to mate selection, love, friendship, power, conflict, and relationship dissolution. Research on topics such as attraction, nonverbal communication, stress, sexuality, and violence will be examined. We will also focus on the nature of relationship interaction as it is associated with relationship satisfaction, distress, and mental health. Prerequisites: COMM 200 and COMM 270S. Every three years.

## COMM- 327. Health Communication. 4 credits.

An advanced seminar that investigates a wide range of scholarship about health communication. Emphasis is on the nature of the communication processes that influence and/or are influenced by health and health care contexts, such as communication between health care provider and patient, as well as public health communication. Prerequisites: Communication 200 or permission of instructor. Alternate years.

## COMM- 328. Intercultural Communication. 4 credits.

An advanced seminar that investigates the nature of the communication processes that influence and/or are influenced by intercultural contexts. Specifically, the ways in which cultural values and orientations shape communication styles, preferences, and expectations will be considered. Ethics, cultural identity, conflict, and communication competence will be emphasized. Prerequisites: Communication 200 or permission of instructor. Alternate years.

## COMM- 329. Nonverbal Communication. 4 credits

This advanced seminar provides a comprehensive study of nonverbal communication, including the major types, theories and research methods, and how nonverbal behaviors function in the total communication process. Alternate years. Prerequisites: COMM 200 or permission of instructor.

## COMM- 330. Analysis of Persuasion. 4 credits.

Explores theories of persuasion with the goal of helping students become critical receivers of persuasion in contexts such as political rhetoric, print and electronic advertising, visual persuasion, and social movements. Writing intensive. Prerequisites: Communication 200 and Communication 270S, 280, or 290S; or permission of instructor. Alternate years.

## COMM- 350. Topics in Media. 4 credits.

Courses entail an advanced exploration of such topics as the nature, function, history, processes, and effects of media and communicating in mediated contexts (e.g., Media Ethics, ComputerMediated Communication). Emphasis is not on production, but on the critical interpretation of the media. Some courses may be writing intensive. May be repeated for credit. Prerequisites: Communication 200 and 290. Alternate years.

## COMM- 351. Media Law. 4 credits.

Examines how the law helps shape the activities of mass media industries in the United States with an emphasis on understanding First Amendment principles as they relate to mass communication. Prerequisites: Communication 290S or permission of instructor. Alternate years.

## COMM- 360. Topics in Rhetoric. 4 credits.

Courses entail an advanced exploration of rhetoric (e.g., Contemporary Perspectives on Rhetoric, Feminist Rhetorical Theory, Rhetoric of Social Movements). Writing intensive. May be repeated for credit. Prerequisites: Communication 200 and 280. Alternate years.

## COMM- 361. Gender and Communication. 4 credits.

Explores critically the relationship among gender, communication, and various cultural institutions, practices, and contexts, focusing particularly on rhetorical constructions of gender and the resulting politics. Writing intensive. Prerequisites: Communication 200 and 270S, 280, or 290S; or permission of instructor. Alternate years.

## COMM-362. Political Rhetoric. 4 credits

An advanced course in which students utilize rhetorical theory to analyze political messages. Analytical focus is on contemporary political discourse in the United States. Prerequisites: COMM 200 and COMM 280 or 290S, or permission. Alternate years.

## COMM-363. Environmental Communication. 4 credits

An advanced course in which students utilize rhetorical theory to analyze public, private, and technical discourses about the environment. Includes the study of environmentalism as a social movement and contemporary environmental issues, both in the United States and within a larger global context. Prerequisites: COMM 200 and COMM 280 or 290, or permission. Alternate years.

COMM- 403. Communication Senior Seminar. 4 credits.
Capstone experience. Through their work in small-group projects, students will practice research, writing and critical thinking skills that are part of the process of conducting communication research, culminating in a public presentation of their results. Writing intensive. Prerequisites: Communication 200, 300, and 301; senior standing. Every year.

## COMM- 490. Independent Study. 1 - 4 credits.

No more than four credits may be counted for the major. Prerequisite: Permission of instructor. Every year.

COMM- 491. Internship. 1-4 credits.
Prerequisite: Permission of instructor. Every year.

## COMM- 495. Practicum in Communication. 1-4 credits

Combines formal instruction with supervised field work in communication processes and/or applications. May be repeated for credit.

COMM- 499. Senior Honors Thesis/Project. 1-4 credits.
Prerequisite: 3.50 GPA and permission of the Department Chair.

## Community Service

Believing students should gain an understanding of the role, responsibility, and challenge of service in community life, Wittenberg requires completion of thirty hours of community service for graduation, achieved by registering for Community Service 100 and satisfactorily completing the course requirements.

## CMSV- 100. Community Service. 0 credits.

To complete this class, students must: (1) Attend Community Service Orientation; (2) Complete 27 hours of direct service (20 hour minimum at one site); (3) Participate in a mid-semester reflection session; and (4) Submit completed paperwork: service log, site mentor evaluation, selfevaluation, and reflection essay by the assigned deadline.

Students should register for Community Service 100 and complete it prior to their senior year. The Community Service Office coordinates the service requirement at Wittenberg and serves as a liaison between the students and community sites.

## Computer Science

## Requirements for Major In Computer Science (B.A.)

For the Computer Science Major:

Required in Computer Science
Forty credits: 32 credits as Computer Science 150Q, 171, 250, 255, 265, 275, 285 and 353; 6 additional credits in courses numbered above Computer Science 255; 2 credits from one of the following: Computer Science 460, 490, or 499.

Required in Mathematics:
Four credits: Math 131Q or 202Q.

## Requirements for the Computer Science Major with a Concentration in Cybersecurity:

Forty-two credits: 26 credits as Computer Science 150Q, 171, 250, 255, 265, 275, and 295; 16 credits from the ATIC CYBER program.

Required in Mathematics:
Four credits: Math 131Q or 202Q.
Requirements for Minor in Computer Science
Required in Computer Science
Twenty-two credits: Computer Science 150, 250, 255, and 8 additional credits in courses numbered above COMP 150.

## Special Programs in Computer Science

Engineering - See Engineering.
Mathematics - See Mathematics.

## Course Listings

COMP-121Q. Computing in the Arts and Sciences. 4 credits.
Broad introduction to computing designed for the general liberal arts student. Emphasis on problem-solving through spreadsheets, databases, graphics and elementary programming. Operating systems, computer networks, and issues related to computers in society are also addressed. Laboratory required. Prerequisite: Math Placement score of 2 suggested. Every year.

## COMP-150Q. Computer Programming I. 5 credits.

Introduction to computer science through the use of programming. Designed primarily for the student who expects to take further courses in computer science. Topics include programming in
a high-level language, problem-solving, algorithm design, control constructs, data constructs, input output, procedural abstraction and the role of computing in society. Students in COMP 150 are required to sign up for one lab section of COMP 151. Prerequisite: Math Placement score of 2 suggested. Every year.

COMP- 151. Lab for Computer Programming I. 0 credits.
Students in COMP 150 are required to sign up for one section of COMP 151. Graded on S/NC basis. Every year.

## COMP - 171. Discrete Mathematics. 2 credits.

This course studies mathematical topics useful in computer science including logic, set theory, combinatorics, mathematical induction, recursion, recurrence relations, and graph theory. Prerequisites: Math Placement score of 2 suggested.

## COMP- 250. Computer Programming II. 4 credits.

Continuation of Computer Science 150. Disciplined programming using one or two high-level languages with specific emphasis on program design, style, efficiency and documentation. Includes the theory and application of abstract data types using arrays, lists, stacks, queues, trees and networks. Also provides an overview of computer science. Prerequisite: COMP 150 or equivalent. Writing intensive. Every year.

## COMP- 255. Principles of Computer Organization. 5 credits.

Considers the organization and architecture of the computer from the digital logical level to the conventional machine level to the operating system level. Programming assignments in Assembly language are used to demonstrate and reinforce the various architectural structures and techniques studied. Laboratory required. Prerequisite: COMP 150Q. Every year.

## COMP- 265. Principles of Programming Languages. 4 credits.

This course emphasizes the principles and programming styles associated with the four major language paradigms: imperative, functional, object-oriented and declarative; examination of contemporary programming languages. Topics include syntax and semantics, statement and subprogram control, data types and data control, design and implementation issues. Prerequisite: COMP 250. Every year.

## COMP- 275. Sequential and Parallel Algorithms. 4 credits.

Systematic study of algorithms and of their complexity. A number of symbolic and numeric algorithms from the areas of searching and sorting, string and pattern matching, matrix and vector processing, and graph and tree algorithms are studied. Sequential and parallel algorithms are
compared. The issues of intractable problems, P and NP algorithms, and NP completeness are studied. Prerequisite: COMP 250 and 171. Every year.

COMP- 280. Topics in Computer Science. 1-5 credits.
Study of special topics not included in other departmental offerings. Offered occasionally according to the needs and interests of students and/ or faculty. Possible topics include Analysis of Algorithms, Compiler Theory, Networks, Optimization Techniques, Parallel Processing, and Simulation Methods. Prerequisites vary. This course may be repeated for credit.

## COMP- 285. Theory of Computation. 4 credits.

Covers topics in the theory of computation. Topics include the study of finite state machines, pushdown automata, linearly bounded automata, Turing machines, languages, phase-structure grammars (regular, context-free, context-sensitive, unrestricted), parsing, decidability, computability, computational complexity, and the Chomsky Hierarchy. Prerequisite: COMP 171 and 250. Usually offered in alternate years.

## COMP- 290. Databases and Web-Based Computing. 4 credits.

The primary topic of this course is databases and how they are used in database-driven web sites. We will cover some theoretical aspects of the field, but the primary emphasis will be on practical applications. Topics include design and use of databases through common software, the ER and Relational Data models, PHP, MySQL and development of a web-based database. Assignments will be both theoretical and applied. Prerequisite: COMP 150. Alternate years.

## COMP- 295. Introduction to Networking - 2 credits

The principles and practices of computer networking. Topics include network terminology, topology, local- and wide-area networks, the OSI model, routing, TCP/IP and other protocols, congestion, and quality of service. Prerequisites: COMP 150, and a corequisite of COMP 250.

## COMP- 331. Introduction to Computer Hardware. 4 credits.

This course covers the design of digital electronic circuits including both combinatorial logic and synchronous sequential logic. FPGA based circuit boards programmed using VHDL are used. Prerequisite: COMP 255. Usually offered in alternate years.

## COMP- 350. Artificial Intelligence. 4 credits.

Introduction to the major areas of artificial intelligence and the use of computer language with both symbolic and numeric processing capabilities such as Common Lisp. The AI areas include knowledge representation, language understanding vision, expert systems, neural networks and robotics. Programs to implement techniques associated with these areas are written primarily in this language. Social, ethical and philosophical viewpoints related to AI are addressed.

Prerequisite: COMP 250, and either MATH 210Q or COMP 171 or permission of instructor. Usually offered in alternate years.

## COMP- 351. Operating Systems. 4 credits.

Process management, I/O devices, interrupt structures, resource and memory management, and file systems. Students study aspects of several operating systems and work in detail on one. Prerequisite: COMP 255. Writing intensive. Usually offered in alternate years.

## COMP- 353. Software Engineering. 4 credits.

Overview of the discipline of software engineering. The phases of software development requirements, specification, implementation, testing - are described. Agile and waterfall methodologies are applied to structure the process. Metrics for measuring progress and quality are discussed. Consideration is given to organizational issues, including requirements gathering, team structure, and project scheduling. Prerequisites: COMP 250, Senior standing.

## COMP- 370. Computer Graphics. 4 credits.

Explores computer graphics. Emphasis is on the techniques used and mathematics behind the standard graphics algorithms. Graphics software is developed based on a small number of primitive graphics operations. Co-requisite: COMP 275. Usually offered in alternate years.

## COMP- 380. Topics in Computer Science. 1-5 credits.

(See course description for COMP 280). This course may be repeated for credit.

## COMP- 460. Seminar/Colloquium. 2 credits.

Combined individual and group research presentations involving advanced computer science material. Required of all computer science majors. Writing intensive. Every year. This course may be repeated for credit.

COMP- 480. Topics in Computer Science. 1-5 credits.
(See course description for COMP 280). This course may be repeated for credit.
COMP- 490. Independent Study. 1-4 credits.
Individual study by the advanced student of a topic beyond the scope of regular courses. Prerequisite: Approval of faculty member directing the study. This course may be repeated for credit.

## Criminology and Criminal Justice

## Degree completion program for SCE students

The Criminology \& Criminal Justice degree completion program enables a student who has completed a two-year degree in Criminal Justice to complete a major in the field and to earn a BA at Wittenberg. The program may be completed entirely in evening courses or in a combination of evening and day courses.

Most CRCJ courses are cross-listed in other departments and can be taken either during the day or in the evening. The evening program is managed administratively by the School of Community Education, in coordination with the Department of Sociology.

## Requirements for the major

Beyond the CJ two-year degree, the student must earn at Wittenberg
Twenty or twenty-one credits in CRCJ courses:
CRCJ 370/SOCI 370 Criminology and Criminological Theory
CRCJ 307/SOCI 307 Research Methods or SOCI 301 GIS in Criminology;
CRCJ 492 A capstone internship or thesis
In addition, two elective courses in CRCJ that are selected from the approved list below complete the courses for the major

## Elective Courses

CRCJ 201 / PHIL 200R. The Art of Living Ethically.
CRCJ/SOCI 212: Topics in Criminology and Criminal Justice.
CRCJ 214 / SOCI 214. Penology and Social Control
CRCJ 250 / SOCI 250S. Sociology of Deviance
CRCJ 301 / SOCI 301 (to be renumbered when finalized)
CRCJ 312/SOCI 312 Special Topics in Criminology and Criminal Justice
CRCJ 376S/ SOCI 376S. Law and Society
CRCJ 380 / SOCI 380. Identity, Self and Society
Students who have not completed an introductory course in Sociology also will need to complete SOCI 101S: Introduction to Sociology.

Criminal Justice Students must meet all other degree requirements to earn a B.A. at Wittenberg.

## Course Listings

## CRCJ - 201. Topics in Criminology 2-4 credits

Courses in areas of criminology and criminal justice not covered in regular course offerings. Every year. This course may be repeated for credit.

## CRCJ - 212. Topics in Criminology 4 credits

Courses in areas of criminology and criminal justice not covered in regular course offerings. Every year. This course may be repeated for credit.

## CRCJ - 214S. Penology and Social Control 4 credits

This course will examine topics related to penology, social control, and the use of imprisonment in modern societies. In the first half of the course, the role of prisons and other punishments are reviewed in historical context, while the remainder of the material will pertain to issues in modern corrections. Inmate prison population growth, incapacitation, recidivism, rehabilitation, and prison program evaluation will be prevalent topics, as well as trends in sentencing, alternative sanctions, prison violence, and inmate subculture. No prerequisites.

## CRCJ - 301. Topics in Criminal Justice 2-4 credits

Courses in criminology and criminal justice that cover material different from that of regular offerings. Alternate years. This course may be repeated for credit.

## CRCJ - 314 . Women and Crime 4 credits

This course considers historical and contemporary issues of girls and women involved in crime. We will examine such topics as the gender difference in offending, theoretical explanations for female offending, the social construction of offending women, the social construction of masculinities leading to violence against women, and the sexualization and criminalization of women's bodies. We will also explore the challenges for women working in the CJ system.

## CRCJ-370. Criminology 4 credits

Theories of the nature and extent of crime, factors conditioning criminal behavior, methods of punishment and rehabilitation, and programs of crime prevention. Occasional writing-intensive sections. Every years

## CRCJ-376S. Law and Society 2-4 credits

Study of the functioning of both the formal structure and informal mechanisms of the legal domain within a society. Topics include the use of law as social control, the conflict-resolution function of the law and the structure of legal organizations. May be taught from either a sociological or anthropological perspective. Prerequisites: One sociology course of at least three credits. Writing intensive. Alternate years.

## East Asian Studies

Go to faculty and staff page.

## Requirements for Major

The major in East Asian Studies requires a minimum of 44-46 credits listed below. 28 to 30 credits must include: one East Asian history course, four credits; East Asian Studies 400 Senior Seminar, four credits; eight to ten credits above Chinese or Japanese 112 or equivalent; and four credits each from a minimum of any three of the following areas: economics, psychology, communication, literature (either in English translation or designated upper-level language courses), political science, religion, or sociology. Sixteen credits may be made up of electives. Twelve or more credits toward the major must be at the 300 or higher course level; these credits may not be taken abroad.

## Requirements for Minor

The minor in East Asian Studies requires 22 credits, 14 credits of which must be taken at Wittenberg and must include Chinese or Japanese 111 and 112 or competency, and four credits each from at least two of the following areas: economics, history, literature, communication, psychology, political science, religion or sociology. A minimum of eight credits must be at the 200 or higher course level.

## Course Listings

## EAST- 100C. Introduction to East Asia: Continuity and Change. 4 credits.

Introductory survey of the societies of China, Japan and Korea. Primarily designed for the student with no background knowledge of East Asia, this course examines the broad themes that shape these countries. Every year. Writing intensive. No prerequisites.

## EAST- 190. Topics in East Asian Studies. 2-4 credits (1-8 credits for study abroad).

Study of selected topics in East Asian Studies. Topics vary by instructor. This course, designed to be of interest to the entire campus community, counts as an elective toward a major or minor in East Asian Studies, and may be repeated for credit. Taught in English, readings in English. Prerequisite: None

## EAST- 290. Topics in East Asian Studies. 2-4 credits (1-8 credits for study abroad).

Study of selected topics in East Asian Studies. Topics vary by instructor. This course counts as an elective toward a major or minor in East Asian Studies, and may be repeated for credit.

## EAST- 400. Senior Seminar. 4 credits.

Capstone course in which the senior East Asian Studies major integrates the major strands of East Asian history and society around a specified theme and writes an extensive research paper. Every year. Writing intensive. Prerequisite: Must be a senior East Asian Studies major.

## EAST- 490. Independent Study. 1-4 credits.

Course allows the advanced student the chance to do a directed independent research project. Writing intensive. Every year.

## EAST- 491. Internship. 1-4 credits.

At least one semester of work in some capacity related to East Asia in either the private sector or government. Student must write a paper related to the work experience. Every year. This course may be repeated for credit.

## EAST- 499. Honors Thesis/Project. 1-4 credits.

Prerequisite: 3.50 GPA, permission of the Department Chair.

## Chinese

111. Beginning Chinese I. 5 credits.

112F. Beginning Chinese II. 5 credits.
130. Chinese Topics. 4 credits.
151. Modern Chinese Film and Fiction. 4 credits.
211. Intermediate Chinese I. 5 credits.
212. Intermediate Chinese II. 5 credits.
230. Chinese Topics. 1-6 credits.
311. Directed Reading of Chinese Newspapers. 4 credits.
312. Directed Readings of Chinese Literature. 4 credits.
330. Chinese Topics. 4 credits.
490. Independent Study. 4 credits.

## Economics

220C. Economics of Developing Areas. 4 credits.
260C. East Asian Economies. 4 credits.
290. Economies in Transition. 4 credits.

## History

101. Topics. 2 to 4 credits.

101C. Modern Japan. 4 credits.
161C. Pre-Modern East Asia. 4 credits.
162C. Modern East Asia. 4 credits.
202. Hiroshima's Shadow. 4 credits.

301C. Culture of Dissent in Japan. 4 credits.

## Japanese

111. Beginning Japanese I. 5 credits.

112F. Beginning Japanese II. 5 credits.
130. Japanese Topics. 4 credits.

150A/C. Survey of Japanese Literature. 4 credits.
211. Intermediate Japanese I. 5 credits.
212. Intermediate Japanese II. 5 credits.
230. Japanese Topics. 1-6 credits.
311. Advanced Japanese I. 4 credits.
312. Advanced Japanese II. 4 credits.
430. Topics in Japanese Language and Literature. 4 credits.
490. Independent Study. 1-4 credits.

## Political Science

205C. Chinese Politics. 4 credits.
210C/S. East Asian Politics. 4 credits.
354. Chinese Foreign Policy. 4 credits.
355. East Asian Foreign Relations 4 credits.

## Religion

134C/R. Chinese and Japanese Religious Traditions. 4 credits.
333C/R. Buddhist Thought and Scriptures. 4 credits.
335C/R. Confucianism and Its Critics. 4 credits.
336C/R. Religious Daoism and Chinese Popular Religion. 4 credits.
339. Monkeys, Samurai, and Gods. 4 credits.

## Sociology

241C/S. Women and the Family in East Asia. 4 credits.
275C/S. Contemporary Japanese Society. 4 credits.
276. Contemporary Korean Society. 4 credits.
300. Topics: East Asian Legal Systems 4 credits.

301C/S. Medicine in East Asia. 4 credits.
Theatre \& Dance

013P. Chinese Folk Dance. 1 credits.
017P. Tai Chi Quan and Sword Dance. credits.

## Economics (including Financial Economics)

Go to faculty and staff page.

## Economics Major:

## Required in Economics

Economics 190S, 205, 300, 310, 311, 400, and four additional courses, at least two of which must be at the 300-level or higher.

## Required in Related Department

Business 210 or its equivalent and Mathematics 131 or Mathematics 201 or their equivalent.

## Financial Economics Major

## Required in Economics

Economics 190S, 205, 300, 280 or 310, 301, 400

## Required in Business

Business 210 or its equivalent, 225, 330, 430 or 325

## Required in Related Department

Mathematics 131 or Mathematics 201 or their equivalent.
Students majoring in Financial Economics cannot also major in Economics and cannot minor in Economics or Business.

## Recommended for graduate study in economics

The student planning graduate study in economics is strongly advised to take Mathematics 201, 202, 205, 210, and 212.

## Courses

Economics 190S is the introductory course in the discipline and is required.
Courses at the 200-level apply basic analytical tools to economic problems and policy issues.
Courses in the 300 series develop theoretical and analytical tools in some depth so that more complex problems and policy issues can be considered. Prerequisites vary.

## Requirements for Minor

Economics 190S and Economics 205, plus four upper-level courses, at least two of which must be at the 300-level or higher.

## Course Listings

## ECON- 110. Economic Issues. 2 - 4 credits.

This course introduces students to economic principles through the exploration of one or more current economic issues. Specific issues will be determined by each instructor. This course does not count toward the requirements for either the major or minor in economics. Some sections may have a MATH level 22 prerequisite. ECON 110 may not be repeated for credit. Students who have already completed ECON 190S may take ECON 110 only with permission of the instructor.

## ECON- 190S. Principles of Economics. 4 credits.

Introduction to basic principles of economics. Topics covered include supply and demand, marginal analysis, perfect competition, profit maximization, aggregate demand and supply, the level of employment, inflation, fiscal policy, monetary policy, and international trade.
Prerequisite: none Every year.

## ECON- 205. Macroeconomic Stabilization Policy. 2 credits.

Macroeconomic Stabilization Policy is a two credit course building on the fundamentals learned in Economics 190. The course is intended to elevate the understanding of economics, financial economics, and Business majors to a level that allows them to understand the macroeconomic environment in which institutions operate and to easily transition to upper level economics courses that employ macroeconomic analysis. Economics 205 also covers the relationship between foreign exchange rate systems and the domestic economy. The course will be of interest to any student desiring further study of how central banks and governments respond to the problems of inflation and unemployment using monetary and fiscal policy. Prerequisite: Economics 190S. Every year.

## ECON- 220C. Economics of Developing Areas. 4 credits.

Introduction to the concepts, measures, theories, and strategies of modern economic growth and development relevant to the low-income nations of Asia, Africa, and Latin America. The course builds on the theories and models introduced in Economics 190, explores the inter-relationships between human development and economic growth, and allows each student to investigate the development experience of a particular nation. Writing intensive. Prerequisite: Economics 190. Alternate years.

## ECON- 231. European Economic History. 4 credits.

Examination of the evolution of capitalism in Europe from the 15th century to the present, the impact of European capitalism on economies and societies in the Middle East, Africa, Asia and the Americas, the rise and demise of centrally planned state socialist economies in Russian and the Eastern European countries, and the prospects for European economic integration. Topics
presented in this course emphasize the use of principles of economics to understand historical change and the methods of empirical analysis that are commonly used by economic historians. Writing intensive. Prerequisite: Economics 190. Alternate years.

## ECON- 240. American Economic History. 4 credits.

Exploration of the record and cause of long-run economic growth and development of economic institutions as the American economy evolved from a lightly populated, colonial outpost in the 17th century to world dominance by the 20th century. Topics presented in this course emphasize the use of principles of economics to understand historical change and the methods of empirical analysis that are commonly used by economic historians. Writing intensive. Prerequisite: Economics 190. Alternate years.

## ECON- 260C. East Asian Economies. 4 credits.

Study of specific problems and institutions of the East Asian economies. Topics include development, trade, and commercial policies as well as fiscal and monetary policies in the region. Prerequisites: Economics 190. Writing intensive. Alternate years.

## ECON- 250. Urban and Regional Economics. 4 credits.

Study of why cities exist, how they evolve and go through various stages of growth and sometimes decay, and how different economic activities are arranged within cities and regions. This course helps the student to examine critically urban economic problems such as poverty, housing, transportation, congestion, pollution and crime. Prerequisite: Economics 190. Some sections writing intensive. Every third year.

## ECON- 265. The Economics of Sports. 4 credits.

This course in applied economic analysis examines the economic forces that have changed sports in recent decades. Economic models will be used to investigate such issues as why professional athletes have such large salaries, why cities use tax incentives to attract teams to their markets, and how money affects the competitive balance of sports leagues. Prerequisite: Economics 190. Alternate years.

## ECON- 275. Economies in Transition. 4 credits.

This course explores the process and results of the decisions of the nation states of East Asia, the former Soviet Union, and Eastern Europe to move from centrally planned socialist economies toward market-based capitalist economies. The central focus of the course is the examination of the strategies pursued and the progress made during transition in these economies at the macro and sectoral levels, the institutions that have evolved, and the human welfare consequences of the transition process. Writing intensive. Prerequisite: Economics 190. Alternate years.

## ECON- 280. Managerial Economics. 4 credits.

This course, intended for majors in Financial Economics and Business, teaches microeconomic theory and applications that will enhance future managers' ability to use microeconomic thinking in their daily work. Topics include: competitive markets, elasticities, production, cost, imperfectly competitive markets, pricing strategies, and game theory. Prerequisites: Economics 190 and Math120 or Math Placement Level 25. Students cannot receive credit for both ECON 280 and ECON 310.

## ECON- 290. Topics. 1-5 credits.

Study of some area of current interest in economics. Open to the major and the non-major. Some sections writing intensive. Prerequisite: Economics 190S. This course may be repeated for credit.

## ECON- 300. Econometrics. 4 credits.

Revolves around constructing and statistically testing economic models. Lectures focus on discussing methodology in economics and learning the fundamentals of regression analysis. In addition, a large portion of the course is devoted to research projects in which students use a simple computer regression package to test economic theory against empirical evidence, analyze economic policies and forecast economic variables. Writing intensive. Prerequisites: Economics 190S, Math 131Q or its equivalent, and Business 210Q or its equivalent. Every year.

## ECON- 301. Financial Markets and Institutions. 4 credits.

Provides a basic understanding of money and financial institutions and their impact on the economy. The following are examined: the role of financial intermediaries, the role of government in financial markets, central banking, money creation, monetary policy, pricing of financial assets, interest rate determination, mortgage markets, option markets and futures markets. Prerequisites: Economics 190S and Mathematics 120Q and any statistics course. Every year.

## ECON- 310. Intermediate Microeconomic Theory. 4 credits.

Detailed study of the theories of consumer behavior, production, the distribution of income and social welfare. Prerequisites: Economics 190S and Mathematics 120 or its equivalent. Every year. The student cannot receive credit for both 280 and 310.

## ECON- 311. Intermediate Macroeconomic Theory. 4 credits.

Detailed study of the determination of output and income, employment, and the price level. Issues examined include the causes of inflation and recession and the fundamentals of economic growth. Prerequisites: Economics 190S and Mathematics 120 or its equivalent. Every year.

## ECON- 315. Labor Economics. 4 credits.

Explores the determinants of the supply of and demand for labor, wages and working conditions, and the productivity of labor. It is concerned with both the microeconomic decision making of individuals, households, and firms, and the macroeconomic outcomes of their decisions. This course will explore contemporary issues relating to labor markets, including public policy debates over discrimination, affirmative action, and government regulation. Prerequisite: Economics 190S. Alternate years.

ECON- 320. History of Economic Thought. 4 credits.
Study of the ideas of great economists and the evolution of economic analysis. Prerequisites: Economics 190S. Writing intensive. Alternate years.

## ECON- 330. International Trade and Finance. 4 credits.

Study of the principles governing the gains from international trade, the effects of international trade restrictions, and fluctuations in exchange rates and the impact of international trade on domestic employment and inflation. Attention will also be given to international economic institutions and their policies. Prerequisites: Economics 190S and Mathematics 120 or its equivalent. Alternate years.

ECON- 340. Public Finance. 4 credits.

Examination of government revenue and expenditure policies and their consequences for the allocation of public goods, income distribution, employment and the price level. Prerequisite: Economics 190S. Writing intensive. Every year.

## ECON- 350. Environmental and Natural Resource Economics. 4 credits.

Examines economic approaches to coping with environmental problems and natural resource scarcity. Emphasis is given to the clear definition and enforcement of property rights as a means to avoid environmental problems. Models for pricing various renewable and nonrenewable natural resources are explored. The role of population change in environmental and natural resource issues is considered. Prerequisites: Economics 190S and Mathematics 120 or its equivalent. Writing intensive. Alternate years.

## ECON- 360. Industrial Organization. 4 credits.

Study of theories of industry structure and performance in markets that do not meet the assumptions of perfect competition. Monopoly, monopolistic competition, and various models of oligopoly are covered. Prerequisites: Economics 280 or 310 or permission of the instructor. Writing intensive. Alternate years.

## ECON- 365. Law and Economics. 4 credits.

Since the early 1980s, a new field has emerged that closely connects economic analysis and legal analysis in some core areas of both the private law (property, contracts, and torts) and the public law (civil procedure and criminal law procedure), as well as constitutional law, bankruptcy law, securities regulation, and more. This course is an introduction to the scholarship associated with this new field. Prerequisite: Economics 310 or permission of the instructor. Alternate years.

## ECON- 390. Advanced Topics. 1-4 credits.

Study at an advanced level of some topic of current interest in economics. Prerequisites: Economics 190S and permission of instructor. Some sections writing intensive. This course may be repeated for credit.

## ECON- 400. Senior Seminar in Economics. 4 credits.

This capstone course for both the Economics and Financial Economics majors requires students to synthesize their knowledge of economics by applying rigorous economic analysis to contemporary policy issues or historical questions of interest. Depending on instructor and student preferences, the course may take different forms, including: A series of short papers and student presentations based on current issues in economics and political economy, a semesterlong research project culminating in a thesis, or a hybrid form, with some students opting for shorter papers and others a major project. Some sections may require group work culminating in papers and presentations. In any event, students will be expected to apply economic theory and use econometrics to examine economic questions. Grades will be based on the quality of papers, presentations, and class participation. Seminar format. Writing intensive. Prerequisites: ECON 280 or 310, ECON 301 or 311, ECON 300, MATH 131Q or 201Q, and senior standing. Every year.

## ECON- 490. Independent Study. 1-4 credits.

Some sections writing intensive. Prerequisites vary. This course may be repeated for credit.

## ECON- 491. Internship. 1-4 credits.

Requires at least one semester of work in some capacity related to the economics profession in either the private sector or government. Over the following semester the student writes a research paper related to the work experience. Prerequisites: Economics 190S, 310 and 311. Writing intensive. Every year. This course may be repeated for credit.

## ECON- 499. Honors Thesis/Project. 1-5 credits.

Prerequisite: 3.50 GPA, permission of the Department Chair.

## Education

Go to faculty and staff page.

## Teacher Education Program

The Teacher Education Program is designed to permit the student to meet the licensure requirements for teaching in the State of Ohio. Students may seek licensure in Early Childhood Education, Middle Grades Education, Special Education: Intervention Specialist, Adolescent Young Adult (AYA) Education (most secondary areas of teaching) and Multi Age education for Art, Drama/Theater, Foreign Language, and Music. The student seeking licensure should contact the Education Department for advising help as early in the program of study as possible to ensure that the program requirements can be met within the four undergraduate years.

The theme of the teacher education program is "Educational Leaders for Constructive Social Change." Our mission is to integrate the ideals of moral responsibility, social consciousness, and vocational commitment into the lives of teachers in such a way that their character, competence, and community involvement establish them as leaders for constructive social change. The faculty has developed performance outcomes by which teacher education candidates are assessed beginning in the introductory courses. A complete list of performance outcomes and teacher education policies and programs are described on the education department website and in the Teacher Education Handbook, which is available from the Education Department Office and the Education Department website. Candidates pursuing teacher licensure must also successfully complete a state-approved examination prior to licensure. The examination measures the extent of professional knowledge and curriculum content for the specific areas of licensure pursued.

## Policy on Admission to the Teacher Education Program

Admission to the Teacher Education Program is selective. Any student who wishes to complete licensure requirements must apply for and be admitted to the program. To be considered for admission, the student must

1. have a cumulative GPA of at least 2.5 at the time of application,
2. demonstrate writing proficiency by earning a grade of C- or higher in English 101 or by placing out of the course,
3. demonstrate mathematics competency by earning a grade of C- or higher in Mathematics 118 or by earning a grade of C - or higher in a four credits course that fulfills the general education math requirement, course designated by a "Q" (see specific licensure program requirements). Note: In special circumstances, the Department will accept petitions to the math requirement for minors, using a passing score of 175 on the Praxis I test as an alternative.
4. earn grades of C- or higher in Education 103 or 104, 120, and for students pursuing a major in education, Education 203, 204, 253, and 254.
5. display knowledge, skills, and dispositions appropriate for teaching, including a satisfactory level of competence on the 18 performance outcomes assessed in the education program..

Students pursuing a major in education must apply for admission to the Teacher Education Program no later than spring semester of the sophomore year. Students pursuing a minor in education must apply no later than fall semester of the junior year. The Education Department acts on applications for admission twice during each semester. Students denied admission may reapply once, provided that the circumstances contributing to the initial denial have been addressed.

Prior to admission to the Teacher Education Program, students may enroll only in 100- and 200level courses. All 300- and 400-level courses require admission to the Teacher Education Program (or department approval).

## Criteria and Procedures for Permission to Student Teach

Only applicants who have been admitted to the Teacher Education Program may be approved to student teach. According to its mission and goals, the Education Department considers each candidate's ability to take on the challenge and honor of serving students in our schools. To make decisions on who is ready to student teach, we use the following criteria:

1. complete $100 \%$ of all required licensure and content courses offered prior to the student teaching term and/or receive the approval of the Education Department. Minors must also receive the endorsement of the major Department. Note: Candidates should consult Department advising sheets for a full listing of all required education methods and content courses.
2. attain a cumulative GPA of at least 2.50 at the time of student teaching,
3. complete all program licensure courses with at least a grade of C- in each, and with a total education GPA of at least 2.75.
4. display knowledge, skills, and dispositions appropriate for teaching, including a satisfactory level of competence on the performance outcomes assessed in the education program.
5. Middle school, AYA and Multi-age candidates must attain a 2.50 GPA in each teaching/licensure field and a grade of C - or above for each course each teaching/licensure field.
6. AYA and Multi-age candidates must have recommendations of the candidate's major department affirming a competent level of preparation in the teaching field according to the approved Ohio academic content standards.

No courses required for licensure can be taken pass/fail without the permission of the Education Department Chair and the Director of Teacher Licensure.

Student teaching is scheduled typically during spring semester. All candidates enroll in EDUC 496 during the student teaching semester. Early Childhood and Intervention Specialist candidates also enroll in EDUC 475. Since student teaching is a full-time load, no other additional coursework may be scheduled during that time unless permission is granted by the Director of Licensure and Field Placements. In planning for spring vacation, candidates must follow the calendar of the school system in which they are assigned to student teach and plan their Spring Break in line with the school's vacation schedule. Travel to and from the student teaching site is the responsibility of the candidate.

Non-traditional internships and opportunities for student teaching abroad are available on a limited basis. Planning for such experiences should begin early. Acceptance is selective.

## Requirements for Major

The student may earn a major in education by completing the Education course requirements for Early Childhood Education Licensure, P-3; Middle Grades Licensure, 4-9; or Dual Licensure in Early Childhood Education, P-3 and Intervention Specialist K-12 (special education license for learners with mild/moderate education needs).

Education course requirements
Required for Early Childhood Education Licensure (P-3): 52 credits, Education 103 or 104, 105, 120, 203, 204, 253, 254, 321, 322, 323, 324, 343, 344, 405, 475, 495 and 496.

Required for Middle Grades Education Licensure: 46 credits, Education 103 or 104, 105, 120, $253,254,304,312,313,342,405,495,496$ and two of the following concurrent course options: 336 and 386, 337 and 387, 338 and 388, and 339 and 389.

Required for Dual Licensure in Early Childhood Education (P-3) and Intervention Specialist / Special Education (K-12): 62 credits, Education 103 or 104, 105, 120, 203, 204, 213, 214, 253, 254, 321, 322, 323, 324, 343, 344, 352, 353, 405, 422, 423, 433, 475, 495, and 496.

Courses from related departments required for licensure in Early Childhood (P-3) and Dual Licensure in Early Childhood (P-3)and Intervention Specialist (K-12): Four credits from art/music/drama, Math 118, and Math 119.

Also, the student pursuing Middle Grades Education licensure must complete an approved program of study in two teaching fields selected from: reading and language arts, mathematics, science and social studies. (There are at least 20 credits required in each field.) See the Education Department for specific courses.

## Requirements for Minor

A student may earn a minor in education by completing at least 22 credits in the following courses: Education 103 or $104,105,120,213,214,312,313,342$ and one of the following concurrent course options: 346 and $386 ; 347$ and 387 ; 348 and 388 ; and 349 and 398 or equivalents as approved by the department.

A student seeking an AYA license (7-12) or a Multi-Age license (P-12) must complete 36 credits, which must include 495 Student Teaching and 496 Senior Seminar.

Multi-Age licenses are available in art, drama/theatre, and foreign language (French, German or Spanish); AYA licenses are available in earth sciences (geology), chemistry, physics, life sciences (biology), language arts (English), mathematics, and integrated social studies (history).

See the Education Department or the respective academic departments for specific courses in education and in the major for the respective teaching fields.

## Requirements for Endorsement in Reading:

The Reading Endorsement enhances teachers' knowledge and instructional skill in reading and writing beyond the foundation required of beginning teachers. To have an earned endorsed for reading, the student must have met the requirements of the Ohio Reading Core and complete the following graduate courses: Education 515, 525, 535, 585, and 605.

## Requirement for the Early Childhood Generalist and the Middle Grades Generalist Endorsements:

An earned Early Childhood license that is endorsed with the generalist program allows an Early Childhood Educator to teach grades $4 \& 5$.

An earned Middle Grade license that is endorsed with the generalist program allows a Middle Grades Educator to add two additional areas of concentration in grades 4-6.

To add the Generalist Endorsement to an Early Childhood license, the following gradtate courses are required: Education 441, 442, 443, 444, 445.

To add the Generalist Endorsement to an earned Middle Grades license, two of the following courses are required, depending on the content areas being added: Education 441, 442, 443, 444.

## Course Listings

## EDUC- 103S. Sociological Perspectives in Education. 4 credits.

An examination of the foundations of education and teaching as conceived through a sociological perspective. The course develops theoretical and practical perspectives by considering different models for studying and analyzing social problems and by considering cases and disputes emerging from the daily practice of teaching. More specifically, the course considers the social and institutional roles of parents, teachers, administrators, and other stake-holders in public education. Issues of class, ethnicity, and gender will be examined as they afford legal and organizational power within the institutional structure. How institutions and individuals are responsive or resistant to change is examined as well as the pressing economic and social contexts which make change imperative. Reading in the course will revolve around specific sociological studies relating to the profession of teaching and to such social issues as school violence, social mobility, and equal opportunity. The course will have a field experience and clinical component in which students will be matched with teachers and students at a Springfield City
School . Through these experiences, students will have the opportunity to gather data and write brief case studies regarding specific social practices and responses. Field experience of approximately 10 hours is required. Students seeking licensure through the teacher education program are required to take either this course or Education 104. No prerequisites. Every year.

## EDUC- 104R. Philosophical Perspectives in Education. 4 credits.

An examination of the foundations of education and teaching through a philosophical perspective. The course develops theoretical and practical perspectives through the close analysis of philosophical texts and by considering cases and disputes emerging from the daily practice of teaching. More specifically, the course examines fundamental questions concerning education as a moral practice. It is guided historically and philosophically by the writings of educational theorists. The writings of Plato, Rousseau, and Dewey will be consulted among others as well as fiction and nonfiction accounts that provide students a diverse and sociallyspecific context. The questions revolve around the ethical standards of the teaching professional and the legal and moral demands placed on practitioners as they consider the developmental needs of their students. The course provides an introduction to the politics of teaching, and practical approaches to moral education. The course has a field experience and clinical component in which students will be matched with teachers and students at a Springfield City School . Students will be required through these experiences to both determine moral and ethical issues and debate theoretical and practical approaches to solving them. Field experience of approximately 15 hours is required in grades 6-8. Students seeking licensure through the teacher education program are required to take either this course or Education 103. No prerequisites. Every year.

## EDUC 105—Educational Psychology. 2 credits

This course is designed for students intending to major or minor in education or similar disciplines. In this courses students will identify and articulate key learning and cognitive process theories around how learning occurs and how learners construct knowledge, acquire skills, and develop habits of mind. In addition, students will identify and articulate the theoretical foundations about human motivation and behavior. Likewise, students will identify and articulate an understanding of the major components of classroom planning, management, and instruction that have been addressed in the study of the teaching/learning process as well as how these general techniques can be modified to address individual differences. Finally students will be able to describe various educational research methods and apply this knowledge to evaluate educational research studies. This course has no pre-requisites but concurrent enrollment with EDUC 120 is required.

## EDUC- 120. Introduction to Students with Special Needs. 2 credits.

An examination of how schools and society respond to students who have special needs, including students with disabilities, students who are alienated from school, and students whose linguistic or cultural backgrounds differ from mainstream society. The course focuses on disability as the context for examining student diversity and the schools. The course provides an overview of legislative mandates relating to students with disabilities, of teacher roles for identifying and referring students, of available educational programming options, and of approaches for creating more inclusive school environments. The course challenges prospective teachers to make connections between what is known about human development and diversity and what is believed about human dignity and the purposes of American education and about what is known about current educational practices and what is possible in terms of educational
vision. This course will have an Early/Middle Childhood focus when paired with Education 111 and a Middle Childhood/Adolescence focus when paired with Education 112. Field experience of 5 hours with students or adults with disabilities is required. No prerequisites, but concurrent registration in Education 111 or 112. Every year.

## EDUC 203W. Early Childhood Development \& Education. 3 credits

The course focuses on the physical, social, emotional, intellectual, and moral development of children from birth through 8 years old. Emphasis is placed on the interactions of nature and environment that help to explain the wide range of diversity of students at age levels. This course explores the historical, philosophical, psychological and social foundations of early childhood education as they relate to present day practice. Developmentally appropriate practice in program design and implementation, authentic assessment, family involvement and the professional role of child advocate define the template applied to the exploration of a variety of early childhood programs. Course work includes attention to technology as a tool for instruction, assessment and communication. The course examines social issues, changing views of early childhood, new findings in brain development, the critical importance of learning in the early years, and factors that impact early learning. Students use local, state and national curricular guidelines to design developmentally appropriate instruction and learning experiences and safe and healthy learning environments (e.g. childhood illnesses, communicable diseases). Students design strategies for observing, interpreting and presenting formative and summative assessment data related to the young child's cognitive, emotional, social, and physical growth and development. The importance of family involvement including sensitivity to family structures and assistance to families in need, and professional roles (including advocacy for the needs of young children and collaboration with appropriate agencies), are stressed. In addition, procedures concerning the administration, organization, and operation of early childhood programs are addressed. This course is writing intensive. Prerequisite of EDUC 105 or instructor permission. Concurrent registration with EDUC 204 is required.

## EDUC 204. Practicum I: Early Childhood. 1 credits

This is a field-based course that provides students the opportunity to integrate and apply knowledge of best practices for teaching in the early childhood classroom. Students will engage in preschool classroom observations, student interviews, small group work, co-teaching, and developmentally appropriate whole group teaching and assessment. Performance in the practicum will be observed and evaluated with formative feedback being provided throughout the semester by the course instructor. Practicum class will meet periodically throughout the semester for instructional and reflective discussions. Concurrent registration with EDUC 203 is required. Every semester.

## EDUC- 206S; Survey of Urban Education and Schooling; 2 credits

This course explores the current state of schooling in urban America and requires students to consider personal assumptions and experiences about urban schooling. Specific essential questions explored:

1. What are the unique characteristics of the urban environment at the district, school, and classroom level?
2. How do social service providers, the faith community, governmental agencies, health care, and historical implications intersect with today's urban school?
3. What are the implications of the current student achievement gap between America's urban and nonurban schools?
4. What are my personal cultural assumptions about the urban community? How might these assumptions affect my future work?
5. Why is stewarding our urban schools critical and how might my future work be grounded in stewardship of urban education and schooling?

This course also includes an overnight field experience that is arranged with an urban school district or urban charter school. During the field experience candidates focus on interactions with urban families, total school ecology, and interactions between the school and the surround neighborhood. No prerequisites.

## EDUC- 207: Exemplary Practices in Urban Schooling. 2 credits

This course provides an in-depth look at contemporary exemplary practices in urban education. Practices at the district, school and classroom level will be explored, with much of the emphasis on the school and district organization level. Specific essential questions explored:

1. What are the organizational and general pedagogical practices being used by successful urban schools in America?
2. How are key players brought together to partner in successful urban schools in America?
3. How can schools be organized to advance the education of the young and to inspire the public's confidence in urban schooling?

To consider these questions, each student will be required to complete an analysis of a Council of Great City Schools’ member school district and synthesize results from peers to uncover knowledge on exemplary practices in urban schooling.

## EDUC 213W. Adolescent Development and Education. 3 credits.

The course focuses on the physical, social, emotional, intellectual, and moral development of young adolescents and adolescents from approximately ages 9-18. Emphasis is placed on the interactions of nature and environment that help to explain the wide range of diversity of students at age levels. This course explores the historical, philosophical, psychological and social foundations of adolescence as a developmental phase, providing a basis for the educational topics
of the course focusing on teaching, planning, and the particular curricular and instructional demands of the high school setting. Specific areas to be examined are structures and personnel of secondary schools, classroom management, assessment, unit planning, lesson planning, and developmentally appropriate and culturally relevant instruction. Short-range and long-term planning is thoroughly investigated and formally integrated through the examination of local, state, and national curricular guidelines, high school texts, and state-mandated testing requirements. Prerequisite of EDUC 105 or instructor permission. Concurrent registration with EDUC 214 is required.

## EDUC 214. Practicum: Middle/Secondary. 1 credit.

This is a field-based course that provides students the opportunity to integrate and apply knowledge of best practices for teaching in middle school or high school classrooms. Students will engage in classroom observations, administrator and teacher interviews, analyses of curricula and textbooks, and developmentally appropriate and culturally relevant whole group teaching and assessment. Performance in the practicum will be observed and evaluated with formative feedback being provided throughout the semester by the course instructor. Practicum class will meet periodically throughout the semester for instructional and reflective discussions. Concurrent registration with EDUC 213 is required.

## EDUC 253. Phonics for Reading and Writing. 3 credits.

This course introduces students to the developmental nature of reading and writing with an emphasis on the importance of decoding in relation to fluency and comprehension. The course focuses on the related cueing systems that children use as they read a text: graphophonic, syntactic, and semantic. Students will learn about the key concepts of reading (i.e., concepts of print, phonological/phonemic awareness, alphabetic principle, phonics, morphology) and orthography (i.e., alphabet, pattern, meaning). Students will demonstrate that they are able to explain and give examples of the principles necessary to teach readers to use phonics and structural analysis to unlock unknown words in text. They will learn how to teach phonics and other decoding strategies using a range of materials and instructional methods that enable children to hear sounds and make the speech-print connection. Students will also begin to develop an understanding of the assess-evaluate-plan-teach cycle as it relates to reading and writing instruction. Concurrent enrollment in EDUC 254 Practicum II.

## EDUC 254. Practicum II: Early Childhood. 1 credit.

This is a field-based course that provides students the opportunity to integrate and apply knowledge of best practices for teaching phonics-based reading and writing in selected local schools. Throughout the semester, students will be conducting observations, administering phonics assessments, and implementing phonics-based small group/whole group reading and writing lessons in K-3 classrooms. The course instructor will be observing and evaluating
students' performance, providing formative feedback throughout the semester. Practicum class will meet periodically throughout the semester for instructional and reflective discussions. Prerequisite: Concurrent registration in EDUC 253. Every semester.

## EDUC- 304. Responsive Schools for the Middle Grades. 2 credits

This course explores the unique physical, cognitive, and social development of middle grades students and the school organizational structures that best meet those needs. The historical, theoretical, and philosophical foundations that led to the development of exemplary middle school programs and practices will be discussed. Emphasis is placed on: historical perspective of middle level programs and schools; components of highly successful middle level schools and programs; current trends, issues, and problems in middle level schooling; and middle level research. Candidates examine the implications of shifting demographics on middle level education, including the study of urban and rural middle level schools, and practices for meeting the needs of young adolescents and their families.

A field experience of at least 15 contact hours in an urban middle school provides candidates with opportunities to practice and reflect upon their own developing philosophy of middle level education.

## EDUC- 312. Reading and Writing in the Content Areas. 3 credits.

This class provides preparation for teaching literacy in middle school, high school, and multi-age classrooms. The focus is on planning, selecting, and using research-based strategies for literacy instruction and assessment, and creating a literate environment in content-area classrooms. Students become increasingly knowledgeable about their content standards and professional resources for their disciplines. Strategies for disciplinary reading, vocabulary instruction, questioning/discussion skills, and writing are emphasized. This is also a writing intensive course. Prerequisite: Concurrent registration in EDUC 313. Spring semester

## EDUC 313. Literacy Practicum. 1 credit.

This is a field-based course that provides students the opportunity to integrate and apply knowledge of disciplinary literacy practices in selected local schools. Throughout the semester, students will be conducting observations, writing content area lessons, and implementing small group/whole group lessons in grades 7-12 classrooms. The content area lessons will incorporate practices that provide support for students in comprehending texts, discussing, writing, or understanding academic vocabulary. The course instructor will be observing and evaluating students' performance and providing formative feedback throughout the semester. Practicum class will meet periodically throughout the semester for instructional and reflective discussions. Prerequisite: Concurrent registration in EDUC 312. Spring semester.

## EDUC 321. Integrated Math and Science Methods K-3. 6 credits.

This course is designed for education majors seeking licensure in early childhood and/or intervention specialist. In this course teacher candidates will examine the principles, methods, and materials used to help young learners develop an understanding of mathematics and science in the early childhood classroom. Specifically, local, state, and national curricular standards and guidelines are used to design instruction and assessment using a variety of methods. Topics will include the integration of mathematics and science learning and instruction, scientific inquiry and discovery learning, cognitively guided instruction, problem based learning, differentiation, the development of numeracy and a numerate society, the relationship between the physical world and the living environment, thematic learning, issues in health and fitness, and use of technology today. Instruction is also provided in selecting and using a variety of instructional media, resources, and technology specific to both fields. Prerequisites: Admission to teacher education, completion of or concurrent enrollment in Math 119. Every semester.

## EDUC 322. Practicum III: EC Math \& Science. 1 credit.

This is a field-based course that provides students the opportunity to integrate and apply knowledge of best practices for teaching mathematics and science in selected local schools. Throughout the semester, teacher candidates will engage in K-3 classroom observations, student interviews, small group work, co-teaching, and whole group teaching and assessment related to the math and science curriculum. The course instructor will observe and evaluate teacher candidates' performance in the practicum, and will provide formative feedback throughout the semester. Practicum class will meet periodically throughout the semester for instructional and reflective discussions. Prerequisite: Concurrent registration with EDUC 321. Every semester.

## EDUC 323W. Integrated Literacy \& Social Studies Methods. 6 credits.

An examination of the principles, methods, and materials used to help young learners develop an understanding of literacy and social studies in the early childhood classroom. Specifically, local, state, and national curricular standards and guidelines are used to design instruction and prepare a variety of methods for assessing student understanding. Topics include the multiple components of reading including phonemic awareness, phonics, fluency, word study and comprehension and the creation of a knowledge base and understanding of strategies for integrating instruction in reading, writing and the other language arts with Social Studies. In addition, students will develop skill in constructing tasks that engage pre-K-3 students in exploring, creating, and connecting to the past, present, and future. Integrated activities are designed to include American heritage, people in societies, world interactions, decision-making and resources, democratic processes, and citizenship rights and responsibilities. Instruction is also provided in selecting and using a variety of instructional media, resources, and technology specific to both fields. This course is writing intensive. Prerequisites: Admission to teacher education; concurrent registration with EDUC 324. Every semester.

## EDUC 324. Practicum IV: Early Childhood Literacy. 1 credit.

This is a field-based course that provides students the opportunity to integrate and apply knowledge of best practices for the literacy instruction. Students will engage in K-3 classroom observations, student interviews, small-guided reading lessons, co-teaching, and whole group teaching and assessment related to literacy. Performance in the practicum will be observed and evaluated with formative feedback being provided throughout the semester by the course instructor. Practicum class will meet periodically throughout the semester for instructional and reflective discussions. Prerequisite: Concurrent registration with EDUC 323. Every semester.

## EDUC- 336. Teaching Language Arts in Middle Grades. 3 credits.

This course provides a thorough examination and application of the various methods of teaching the language arts, classical, adolescent, and young adult literature. Interdisciplinary teaching and integration of middle school content through language arts is also an emphasis. A survey of literature will serve as a bridge to other topics of concern such as the history of language and its acquisition, dialects, gender and cultural diversity, analysis of the various functions and forms of media/multimedia, and the integration of reading, writing, speaking, listening, viewing, and visually representing. This course focuses this body of knowledge and skills using local, state, and national curricular guidelines and standards in English and language arts. Students will construct lessons and units, select and use a variety of print and nonprint texts and instructional media, and select and design a variety of assessments to measure student learning. Prerequisites: EDUC 213/214. Concurrent registration with EDUC 386 required. Spring Semester odd years.

## EDUC- 337. Teaching Mathematics in Middle Grades. 3 credits.

This course examines the principles, methods, and materials used to help students develop an understanding of mathematics in middle school grades. Topics include middle school curricula (including local, state, and national guidelines), the use of concrete materials, relating mathematics to the real world and to other areas of the curriculum, selecting appropriate mathematical tasks, teaching for problem solving, organizing instruction (including various forms of whole-group, small-group, and individualized instruction), using oral and written discourse, using a variety of assessment tools, individual differences in learners, calculators and computers, and current issues in mathematics education. Prerequisites: EDUC 213/214. Concurrent registration with EDUC 387. Fall Semester even years.

## EDUC- 338. Teaching Science in Middle Grades. 3 credits.

This course provides an examination of the nature of science to enable students to engage in scientific inquiry and make decisions that are evidence-based and reflect a thorough understanding of the interrelationships among science, technology and society. Prerequisites: EDUC 213/214. Concurrent registration with EDUC 388 required. Fall Semester odd years.

## EDUC- 339. Teaching Social Studies in Middle Grades. 3 credits.

This course examines the principles, methods, and materials used to help students develop an understanding of social studies in the middle school classroom. Local, state, and national curricular standards and guidelines are used to design instruction and prepare a variety of methods for assessing student understanding. Learning to teach social studies in ways that foster understanding and engagement for every student requires that you develop and draw on different kinds of knowledge, backgrounds, and dispositions. In addition to developing an understanding of ideas in regard to social studies, learning to teach social studies involves learning about learners, about the understandings and perceptions they hold, and the processes through which they learn. It also involves developing skill in constructing lessons that engage middle and secondary students in exploring, creating, and connecting to the past, present, and future. Students will develop ways of observing, thinking, and analyzing that will prepare you to be lifelong learners as well as teachers. Prerequisites: EDUC 213/214. Concurrent registration with EDUC 389. Fall Semester even years.

## EDUC- 342. Including Students with Special Needs in Middle and Secondary Grades. 2 credits.

An examination of characteristics, needs, and educational programming for students identified with disabilities and those who are gifted in the middle or secondary grades. The course builds on information presented in Education 120 and provides prospective teachers with knowledge and skills for identifying and accommodating students with special needs in general education settings. Field experience of approximately 10 hours involving observing and teaching students with special needs at the middle grades or high school level is required. Prerequisites: Permission to student teach or permission of the instructor. Concurrent registration with student teaching is required unless alternative student teaching arrangements have been approved. The class will meet during the five weeks preceding student teaching. Every year.

## EDUC 343. The Inclusive Classroom PreK-3. 1 credit.

This course is designed for prospective early childhood and dual intervention specialist education educators. The course builds on information presented in EDUC 120 and provides prospective teachers with the knowledge and skills for identifying and accommodating students with special learning needs in general education and inclusive settings. The course examines characteristics of students with special learning needs, provides a rationale for needs-based decision making, and teacher roles on intervention assistance teams and multidisciplinary IEP planning teams, and intervention-based evaluation procedures. In addition this course would address the multi-tiered process of response to intervention. The course addresses the rights and expectations in the referral, evaluation, and intervention process. Skills for promoting parental involvement, collaborative problem solving, team planning, and co-teaching are also addressed as are skills for promoting inclusive environments on a school-wide basis. Field components are connected to the practicum EDUC 322. Prerequisites: admit to the Teacher Licensure program. Concurrent registration in 321 is required. Course will be offered every semester.

## EDUC 344. Inclusive Practices for Students. 1 credit.

This course is designed for prospective early childhood and dual intervention specialist educators. The course builds on information presented in EDUC 120 and provides prospective teachers with the knowledge and skills for designing and implementing individualized instruction to increase meaningful engagement of all students in instruction. The course addresses making individualized accommodations and use of technology to support instruction for students with identified learning needs. In addition, the course explores promoting self esteem and social interaction for students in inclusive settings. Field components are connected to the practicum 324.
Prerequisites: admit to the Teacher Licensure program. Concurrent registration in 323 is required. Course will be offered every semester.

## EDUC- 346. Teaching Language Arts in Secondary Schools. 3 credits.

This course provides a thorough examination and application of the various methods of teaching the language arts, classical, adolescent, and young adult literature. Interdisciplinary teaching and integration of secondary school content through language arts is also an emphasis. A survey of literature will serve as a bridge to other topics of concern such as the history of language and its acquisition, dialects, gender and cultural diversity, analysis of the various functions and forms of media/multimedia, and the integration of reading, writing, speaking, listening, viewing, and visually representing. This course focuses this body of knowledge and skills using local, state, and national curricular guidelines and standards in English and language arts. Students will construct lessons and units, select and use a variety of print and nonprint texts and instructional media, and select and design a variety of assessments to measure student learning. Prerequisites: EDUC 213/214. Spring Semester odd years.

## EDUC- 347. Teaching Mathematics in Secondary Schools. 3 credits.

This course examines the principles, methods, and materials used to help students develop an understanding of mathematics in secondary school grades. Topics include secondary school curricula (including local, state, and national guidelines), the use of concrete materials, relating mathematics to the real world and to other areas of the curriculum, selecting appropriate mathematical tasks, teaching for problem solving, organizing instruction (including various forms of whole-group, small-group, and individualized instruction), using oral and written discourse, using a variety of assessment tools, individual differences in learners, calculators and computers, and current issues in mathematics education. Prerequisites: EDUC 213/214. Concurrent registration with EDUC 387 required. Fall Semester even years.

## EDUC- 348. Teaching Science in Secondary Schools. 3 credits.

This course provides an examination of the nature of science to enable students to engage in scientific inquiry and make decisions that are evidence-based and reflect a thorough understanding of the interrelationships among science, technology and society. Prerequisites: EDUC 213/214. Concurrent registration with EDUC 388 required. Fall Semester odd years

## EDUC- 349. Teaching Social Studies in Secondary Schools. 3 credits.

This course examines the principles, methods, and materials used to help students develop an understanding of social studies in the secondary classroom. Local, state, and national curricular standards and guidelines are used to design instruction and prepare a variety of methods for assessing student understanding. Learning to teach social studies in ways that foster understanding and engagement for every student requires that you develop and draw on different kinds of knowledge, backgrounds, and dispositions. In addition to developing an understanding of ideas in regard to social studies, learning to teach social studies involves learning about learners, about the understandings and perceptions they hold, and the processes through which they learn. It also involves developing skill in constructing lessons that engage middle and secondary students in exploring, creating, and connecting to the past, present, and future. Students will develop ways of observing, thinking, and analyzing that will prepare you to be lifelong learners as well as teachers. Prerequisites: EDUC 213/214. Concurrent registration with EDUC 389 is required. Fall Semester even years.

## EDUC 352. Middle and Secondary Intervention. 2 credits.

This course is designed for prospective dual intervention specialist educators. The course builds on information presented in EDUC 120 and provides prospective teachers with the knowledge and skills for designing and implementing individualized instruction for students with special learning needs. This course examines the characteristics, needs, and educational programming for students in the middle and secondary grades identified as having mild/moderate cognitive, behavioral, sensory, and/or physical disabilities. Instruction and activities focus on procedures for designing content instruction that is accommodative for students with special needs, for teaching learning strategies and self-regulated learning, and helping students plan for postsecondary school. Field components are connected to the practicum EDUC 353. Prerequisites: admit to the Teacher Licensure program. Concurrent registration in EDUC 353 is required. Course will be offered each spring semester.

## EDUC 353. Practicum: High School Intervention. 1 credit.

This is a practicum course taught and supervised by university faculty. Throughout the semester faculty will observe, evaluate and provide formative feedback to students who are in high school special education settings. Students will be conducting observations and student assessments; individual and small group lessons and whole class inclusive co-teaching. Class will meet periodically as a whole group for reflective discussions.

## EDUC 386. Language Arts Practicum. 1 credit

This is a field-based course that provides students the opportunity to integrate and apply knowledge of best practices for language arts in selected local schools. Throughout the semester, students will be conducting observations, writing language arts lesson plans, and implementing small group/whole group language arts lessons in local school classrooms. The course instructor will be observing and evaluating students’ performance and providing formative feedback throughout the semester. Practicum class will meet periodically throughout the semester for
instructional and reflective discussions. Prerequisite: Concurrent registration in EDUC 336 or EDUC 346. Fall semester odd years.

## EDUC 387. Mathematics Practicum. 1 credit.

This is a field-based course that provides students the opportunity to integrate and apply knowledge of best practices for mathematics in selected local schools. Throughout the semester, students will be conducting observations, writing mathematics lesson plans, and implementing small group/whole group mathematics lessons in local school classrooms. The course instructor will be observing and evaluating students’ performance and providing formative feedback throughout the semester. Practicum class will meet periodically throughout the semester for instructional and reflective discussions. Prerequisite: Concurrent registration in EDUC 337 or EDUC 347. Fall semester even years

## EDUC 388. Science Practicum. 1 credit.

This is a field-based course that provides students the opportunity to integrate and apply knowledge of best practices for science in selected local schools. Throughout the semester, students will be conducting observations, writing science lesson plans, and implementing small group/whole group science lessons in local school classrooms. The course instructor will be observing and evaluating students’ performance and providing formative feedback throughout the semester. Practicum class will meet periodically throughout the semester for instructional and reflective discussions. Prerequisite: Concurrent registration in EDUC 338 or EDUC 348. Fall semester odd years.

## EDUC 389. Social Studies Practicum. 1 credit

This is a field-based course that provides students the opportunity to integrate and apply knowledge of best practices for social studies in selected local schools. Throughout the semester, students will be conducting observations, writing science lesson plans, and implementing small group/whole group social studies lessons in local school classrooms. The course instructor will be observing and evaluating students’ performance and providing formative feedback throughout the semester. Practicum class will meet periodically throughout the semester for instructional and reflective discussions.
Prerequisite: Concurrent registration in EDUC 338 or EDUC 348. Fall semester even years.

## EDUC- 390. Topics Course. 1-4 credits.

## EDUC 405W. Addressing Reading Difficulties. 4 credits.

This course examines theories and recent research concerning reading and writing assessment and instruction with a focus on the diverse needs of learners. Candidates will engage in designing instruction for individuals and small groups that utilizes current best practices related to oral language, concepts of print, phonological/phonemic awareness, alphabetic principle, phonics and decoding, fluency, vocabulary, comprehension, spelling, or writing. The clinical component will provide practice using principles of authentic assessment, interpretation of results, planning
interest-based and strengths-focused lessons, explicit and inductive instruction, and on-going evaluation of the progress of learners. The course culminates in an assessment report that includes the results of literacy assessments administered, areas of need for instruction and student responses to instruction, and recommendations for teachers and parents. Concurrent enrollment in Student Teaching I (EDUC 495) Fall semester only.

## EDUC 422W. Early Childhood Intervention. 2 credits.

This course is designed for prospective dual intervention specialist educators. The course builds on information presented in EDUC 120 and provides prospective teachers with the knowledge and skills for designing and implementing individualized instruction for students with special learning needs in Early Childhood and Elementary settings. This course examines the historical and legal foundations for the fields of learning disabilities, cognitive disabilities, and behavior disorders as well as the rationale for a mild/moderate service delivery models for young students. The course includes an examination of the roles of the intervention specialist in the referral and evaluation process with specific attention to conducting formal and informal assessments, interpreting assessment data, and participating in multidisciplinary team meetings and intervention-based evaluation procedures. In addition, the course provides skills for designing IEPs, implementing research-based techniques for directive instruction, strategy instruction, social skill instruction, functional learning, self-regulated learning, and use of technology to support instruction in inclusion and resource programs. Field components are connected to the practicum EDUC 423. This course will be designated as a writing intensive course.
Prerequisites: admit to the Teacher Licensure program. Concurrent registration in EDUC 423 is required. Course will be offered each fall semester.

## EDUC 423. Practicum: Early Childhood Intervention. 1 credit

This is a practicum course taught and supervised by university faculty. Throughout the semester faculty will observe, evaluate and provide formative feedback to students who are in Early Childhood P-3rd Special Education settings. Students will be conducting observations and student assessments, individual and small group lessons, and whole class inclusive co-teaching. Class will meet periodically as a whole group for reflective discussions.

## EDUC- 433. Skills for Collaborative Problem Solving in Special Education. 2 credits.

Examination of special education teacher roles as consultant, collaborative problem solver, and co-teacher and the skills required to fulfill these roles. The course focuses also on issues and practices of inclusion, collaboration, co-teaching, conferencing, and working with families, school and community personnel. Prerequisites: Admission to teacher education. Education 345 or concurrent registration in Education 345. Also concurrent registration in Education 430 and 432. Every year.

## EDUC 441 English/language Arts in the Upper Elementary Grades. 2 credits.

This course provides an overview of the English/Language Arts content and curriculum found in Ohio's 4th-6th grade classrooms. Specific topics will include the foundations of reading, language
in writing, and communication skills. Special attention is focused on developmentally appropriate pedagogy. Prerequisite: EDUC 323 or concurrent enrollment.

## EDUC 442 Math in the Upper Elementary Grades. 2 credits

This course provides an overview of the Mathematics content and curriculum found in Ohio's 4th-6th grade classrooms. Specific topics will include, mathematical processes, number sense and numeration, algebraic concepts, informal geometry and measurement, and data organization and interpretation. Special attention is focused on developmentally appropriate pedagogy. Prerequisite: EDUC 321 or concurrent enrollment.

## EDUC 443 Science in the Upper Elementary Grades. 2 credits

This course provides an overview of the Science content and curriculum found in Ohio's 4th-6th grade classrooms. Specific topics will include, Earth science, life science, physical science, science in personal and social perspectives, and science as inquiry and science processes Special attention is focused on developmentally appropriate pedagogy. Prerequisite: EDUC 321 or concurrent.

## EDUC 444 Social Studies in the Upper Elementary Grades. 2 credits.

This course provides an overview of the Social Studies content and curriculum found in Ohio's 4th-6th grade classrooms. Specific topics will include, geography, world history, United States history, Ohio history, government, citizenship, and democracy, economics, and social studies as inquiry and processes Special attention is focused on developmentally appropriate pedagogy. Prerequisite: EDUC 323 or concurrent enrollment.

## EDUC 445 Principles, Practices and Learning in Grades 4-6. 2 credits.

The developmental, socio-cultural, and pedagogical foundations related to schooling in grades 46 are explored in relationship to the specific needs and characteristics of students ages $8-12$. The course expands early childhood and middle childhood candidates’ understanding of the teaching and learning processes specific to the upper elementary grades.

## EDUC 475. Integrating the Arts. 2 credits.

This course is designed for prospective early childhood education educators. The goal is for teacher candidates to learn how to teach about dimensions of the human experience that support arts integration, including multiple ways of knowing, brain-based teaching and learning, creativity and creative problem solving, artistic and aesthetic development, and curriculum integration. An arts integration paradigm employed throughout the course shows potential teachers how to teach with, about, in, and through the arts. This course is an examination of arts integration research, the necessary knowledge base and teaching strategies needed to use the arts as tools for learning concepts and skills in science, social studies, math, and reading/language arts. Required fieldbased components \& assignments will be carried out in the student teaching placement.

Prerequisites: EDUC 321 and EDUC 323 and a four credits in music, art, theater, and/or dance. Concurrent enrollment in
EDUC 495 is required. Course will be offered every spring.
EDUC- 490. Independent Study. 1-4 credits.
EDUC- 492. Internship. 1-4 credits.
EDUC- 495. Student Teaching. 12 credits.
EDUC 496. Student Teaching Seminar. 2 credits.
This course is designed as a capstone experience for students to analyze, synthesize, and evaluate their preparation as a teacher while completing their student teaching. This course will require students to reflect and consider their identity as a leader for constructive social change in light of national, state, and institutional standards. A special focus will be placed on students’ development as it relates to Wittenberg Education Department's conceptual framework. In addition, students will gain practical knowledge and experience on searching for a job and participating in an interview. All students will be expected to produce a professional portfolio that will help them transition from teacher candidacy into professional life. Concurrent registration with EDUC 495 is required.

## EDUC- 499. Honors Thesis/Project. 1-4 credits.

## Engineering

An engineering degree can be pursued at Wittenberg through a binary engineering program (commonly referred to as a " $3-2$ " program). This entails studying at Wittenberg for three years, typically followed by two years at a participating school of engineering. The student who completes this program will earn a Bachelor of Arts degree from Wittenberg and bachelor’s degree in the specific field of engineering from the engineering school.

Two engineering schools currently participate in this program: the Case Institute of Technology of Case Western Reserve University and the Fu Foundation School of Engineering of Columbia University. Admission to these schools is guaranteed for students recommended by Wittenberg.

During the student's first three years, spent in residence at Wittenberg, the student completes the courses required for a major concentration, Wittenberg's general education requirements, and any additional basic science and mathematics courses that are needed to form the core of the engineering curriculum. The student usually selects either physics or chemistry for a major. After three years at Wittenberg, the courses required to complete the program in engineering are taken in residence at the engineering school.

In addition to the binary programs, there are other options for the student who wishes to go into engineering. These include informal arrangements with other schools that closely resemble the binary programs and graduate work in engineering after completion of the bachelor's degree at Wittenberg.

Courses required by the schools of engineering include integral and differential calculus, differential equations, the calculus-based introductory physics courses, the introductory chemistry courses, and introductory computer science. Certain areas of engineering have additional requirements that may be satisfied by courses offered at Wittenberg.

Additional information about this program may be obtained from the Office of Admission.

## English

Go to faculty and staff page.

## Requirements for Major

## The English Major

Majors must take 37 credits in English, including:
o English 270A Literary Form and Interpretation
o English 280A British Literary Genealogies
o English 290A American Literary Genealogies
o Three 300 level seminar courses
o Eight additional credits from any of the following categories of courses: seminars, words at work courses, and topics in literary immersion.
o Senior Thesis Tutorial (or independent honors thesis)
o One-credit capstone course (includes senior presentation and e-portfolio)
Majors must complete at least twenty credits at the 300 level or above. Of those twenty credits, 4 credits must be in pre-1900 literature. All twenty credits cannot be in the literature of one cultural tradition (i.e., American, British, and/or World Anglophone).

English Major with Honors
A student who has completed five English courses (including 270A, 280A, 90A) and who maintains a GPA of at least 3.50 may submit an honors thesis proposal to the department for approval; if the project is approved, the student may enroll in English 499 senior year and complete supervised individual research. The completed thesis must meet departmental standards for honors. Work may be distributed over two semesters.

## Requirements for Minor

## General English Minor

At least 20 credits: English 270A, 280A, 290A, and eight credits at the 300- level. Declaration must be made by the end of spring semester of the junior year.

## Journalism Minor

The journalism minor consists of 20 credits, including 12 credits in three required courses:

English 241, Communication 290S, and either English 320 or English 321. The remaining elective credits may be chosen from among English 244, English 320, 321, or 324, Art 241A Introduction to Photography, Communication 351 Media Law, English 492 or Communication 491 Internship, and other approved courses. At least two courses should be numbered 300 or higher. Senior minors will also submit a portfolio of their journalistic work with a brief reflective essay.

## Creative Writing Minor

Minors must take 21 credits, including:
English 240 Introduction to Creative Writing
Sixteen credits from the following list:
English 340: Topics in Advanced Fiction Writing
English 341: Topics in Advanced Poetry Writing
English 342: Topics in Advanced Creative Nonfiction Writing
English 343: Topics in Advanced Screenwriting
English 344: Summer Screenwriting Institute
Theatre/Dance 240: Playwriting
All of the above sixteen credits cannot be in the same genre of creative writing; students must take four credits each in at least two different genres.

406 Capstone in Creative Writing (one credit)

## Certification for Teaching in English

Students interested in pursuing a course of study leading to a license to teach English should contact their adviser or the Education department for specific requirements.

## Course Listings

ENGL-100. Introduction to Expository Writing and the Culture of the United States for Non-native Speakers of English. 4 credits.

Preparation to take English 101 and to enter into academic life at the college level in the United States. Writing intensive. Every year.

ENGL-101E. Expository Writing. 4 credits.
Practice in the basic principles of expository writing. A prerequisite to all other English courses, except English 100. To meet the general education writing goal, each student must complete this course with a grade of C- or above. Should be taken in the first year of college. Every year.

## ENGL-180A. Themes and Traditions in Literature. 4 credits.

This introductory course designed to fulfill the general education goal in the arts is devoted to the study of literary works connected by a common aesthetic or cultural theme, e.g., Medicine and Literature, Women in Literature. Intended primarily for the first- or second-year student, the course is to help students reflect on the nature of literary experience and the methods of literary analysis. Writing and discussion devoted to the close analysis of texts are central parts of the course. Prerequisite: 101E. Most sections are writing intensive. Every year. This course may be repeated for credit, if the section is on a different theme or tradition.

## ENGL-190A/C. Topics in Non-Western Culture. 4 credits.

Study of significant books and other art forms from non-Western societies, e.g., Afro-Caribbean literature. Prerequisite: 101E. Most sections are writing intensive. The course may be repeated for credit, if the section is on a different theme or tradition.

## ENGL-240. Introduction to Creative Writing. 4 credits.

Beginning course in creative writing - fiction, poetry, drama, creative nonfictionfocusing on the basics of writing creatively: description, image, rhythm, sound, metaphor, voice, storytelling, and character. First-year students by permission of instructor. Prerequisite: English 101E. This course is a prerequisite to all advanced creative writing courses. Writing Intensive. Every year. Falls within the Words at Work category.

## ENGL-241. Beginning Journalism. 4 credits.

Introduction to the concepts and concerns of the practicing journalist, with primary emphasis on news writing and secondary emphasis on beginning copy-editing skills. Students discuss such topics as freedom of the press, rights and responsibilities, and the post-Watergate press, and are expected to write for the weekly student newspaper. Prerequisite: English 101E. Writing intensive. Every year. Falls within the Words at Work category.

## ENGL-242. Writing Center Theory and Practice. 4 credits.

This course is designed primarily to prepare writing advisors for the Wittenberg Writing Center. Emphasis on writing processes, interpersonal dynamics, evaluation of writing-in-progress, and rhetorical theory as it pertains to working one-to-one with writers. By permission of instructor only. Prerequisite: English 101E. Writing intensive. Every year. Falls within the Words at Work category.

## ENGL-243. Business Writing. 4 credits.

This course focuses on writing skills for professional situations, including conventional formats for letters, memos, and formal reports. Also looks at use of conventional structures for typical documents such as brochures, résumés, and proposals. Emphasis on peer critique, editing, and revision. Prerequisite: English 101E. Writing intensive. Alternate years. Falls within the Word at Work category.

## ENGL-244. Opinion Writing. 4 credits.

Intermediate course with emphasis on journalistic opinion writing such as editorials, commentaries, columns, and reviews. Reading will include examples of such writing; students will practice writing, critiquing, revising, and editing skills. Prerequisite: English 101E and English 241. Writing intensive. Falls with the Words at Work Category.

## ENGL-245. Writing for Teachers. 4 credits

An intermediate course in composition for prospective teachers. Students will review the history of writing instruction, study key issues in composition and assessment theory, and develop their own writing. The course will also examine the day-to-day work of a writing class: from designing assignments to responding to drafts and finished products. Writing intensive. Fall semester oddnumbered years. Falls within the Words at Work Category.

## ENGL-270A . Literary Form and Interpretation. 4 credits.

This course will provide an in-depth exploration of two literary genres and introduce students to reading and writing practices in the field. The course will focus on close reading and analytical skills, and will introduce students to the materials or methods of research in the field. This course will also introduce students to critical approaches to literature. This class can be taken concurrently with a literary genealogy course (English 280A, English 290A) if the student has already taken English 180A or English 190A/C. Writing Intensive. Every semester.

## ENGL-280A British Literary Genealogies. 4 credits.

A thematic study of British and World Anglophone literature covering at least three literary periods, including study of pre-1800 literature. Prerequisite: English 180A, 190A/C or English 270A. Writing Intensive. Every year.

ENGL-290A. American Literary Genealogies. 4 credits.
A thematic study of American texts covering at least three literary periods, including pre-1800 literature, and representing the racial, gender, and generic diversity of American literature. Prerequisite: either English 180A/190A or C, or English 270A. Writing intensive. Every year.

ENGL-320. Advanced News Writing. 4 credits.
This course builds on basic journalistic skills by exploring advanced techniques in writing, editing, reporting, layout, investigation, research, and conducting interviews. Emphasis on workshop critiques, editing, and revision. Prerequisite: English 241. Writing intensive. Alternate years. Falls within the Words at Work category.

## ENGL-321. Advanced Feature Writing. 4 credits.

The course offers practice in writing feature stories for newspapers and magazines. Types of stories might include profiles, human-interest stories, lifestyle and travel stories, etc. Emphasis on workshop critiques, editing, and revision. Prerequisite: English 241. Writing intensive. Alternate years. Falls within the Words at Work Category.

ENGL-324. Summer Journalism Institute. 4 or 6 credits.
The four-week course provides in-depth training in feature writing based on a week of interviewing at a pre-selected locale. The course will combine discussion, lecture, writerworkshop, interviewing, fieldwork, revision, and extensive individual consultation. Students will workshop their stories, edit them and produce a final product. Prerequisites: Permission of the department. Falls within the Words at Work category.

ENGL-327. Advanced Rhetoric and Grammar. 4 credits.
This course focuses on grammatical terminology and structure, and offers an overview of rhetorical theory. The course will also examine the manner in which language changes as a result of social, political, and cultural influences. Fall semester even-numbered years. Falls within the Words at Work category.

## ENGL-335. Topics in Advanced Composition. 2-4 credits.

This course focuses on a form of professional writing for which English serves as a preparatory major. All sections emphasize critical reading and writing skills, but the form of professional writing will vary from section to section (e.g., the critical edition, the public intellectual, grant writing, etc.) Writing intensive. Every year. Prerequisite: English 101E. Other prerequisites may vary by section. This course may be repeated for credit if the focus is different. Falls within the Words at Work Category.

## ENGL-340. Topics in Advanced Fiction Writing. 2-4 credits.

Repeatable course consisting of rotating subjects of interest to the developing fiction writer seeking to extend skills from English 240. Topics may include adapting fiction for other media, literary schools and their movements, the short story, the novella, the novel, flash fiction, among others. Class activities will include reading and discussing the
narrative strategies and techniques of contemporary fiction as well as extensive workshop critiques of students' own work. Emphasis on dramatic structure and conflict, dialogue, and other important matters of craft. May be repeated once for credit if the focus is different. Prerequisite: English 240. Writing intensive. Every year. Falls within the Words at Work Category.

## ENGL-341. Topics in Advanced Poetry Writing . 2-4 credits.

Repeatable course consisting of rotating subjects that may be of interest to the developing poet seeking to extend skills from English 240. Topics may include poets and mentorship, poetic forms, perennial themes in poetry, poetic schools and movements, among others. Class activities will include reading and discussing the strategies and techniques of contemporary poetry as well as extensive workshop critiques of students' own poems. Emphasis on language, lineation, figural speech, and other important matters of craft. May be repeated once for credit if the focus is different. Prerequisite: English 240. Writing intensive. Every year. Falls within the Words at Work Category.

## ENGL-342. Topics in Advanced Creative Nonfiction Writing. 2-4 credits.

Repeatable course consisting of rotating subjects of interest to the developing creative nonfiction writer seeking to extend skills from English 240. Topics may include food writing, travel narrative, literary journalism, the personal essay, the lyric essay, among others. Class activities will include reading and discussing the forms and techniques of contemporary nonfiction as well as extensive workshop critiques of students' own essays. Emphasis on defining subject and point of view, narrative technique, and other important matters of craft. May be repeated for credit once if the focus is different. Prerequisite: English 240. Writing intensive. Every year. Falls within the Words at Work Category

## ENGL-343. Topics in Advanced Screenwriting. 2-4 credits.

Repeatable course consisting of rotating subjects of interest to the developing screenwriter seeking to extend skills from English 240. Topics may include writing for television, for film, for the web, for video games, for the documentary, among others. Class activities will include reading and discussing the format and structure of screenplays as well as extensive workshop critiques of students' own work. Emphasis on dramatic structure, dialogue, visual narrative, and other important matters of craft. May be repeated for credit once if the focus is different. Prerequisite: English 240; Theatre/Dance 240 strongly recommended. Writing intensive. Alternate years. Falls within the Words at Work Category.

## ENGL-344: Summer Screenwriting Institute. 4 or 6 credits.

This course combines work shopping and individual conferences with instruction by professional screenwriters and producers in writing with an understanding of production considerations. Prerequisites: Permission of the department. Falls within the Words at Work Category.

## ENGL-350. Studies in Medieval Literature and Culture. 4 credits.

Seminar in the literature and culture of the medieval period. Particular sections may offer a general overview or may focus on a specific theme or genre within the period. Writing intensive. Prerequisites: English 270A and English 280A.

ENGL-351. Studies in Renaissance Literature and Culture. 4 credits.
Seminar in the literature and culture of the Renaissance period. Particular sections may offer a general overview or may focus on a specific theme or genre within the period. Writing intensive. Prerequisites: English 270A and English 280A. Alternate years.

ENGL-352. Studies in Restoration and Eighteenth-Century Literature and Culture. 4 credits.

Seminar in the literature and culture of the Restoration and eighteenth century. Particular sections may offer a general overview or may focus on a specific theme or genre within the period. Writing intensive. Prerequisites: English 270A and English 280A. Alternate years.

ENGL-353. Studies in Romantic Literature and Culture. 4 credits.
Seminar in the literature and culture of the Romantic period. Particular sections may offer a general overview or may focus on a specific theme or genre within the period. Writing intensive. Prerequisites: English 270A and English 280A. Alternate years.

ENGL-354. Studies in Victorian Literature and Culture. 4 credits.
Seminar in the literature and culture of the Victorian period. Particular sections may offer a general overview or may focus on a specific theme or genre within the period. Writing intensive. Prerequisites: English 270A and English 280A. Alternate years.

ENGL-355. Studies in Twentieth-Century Literature and Culture. 4 credits.
Seminar in the literature and culture of the twentieth century. Particular sections may offer a general overview or may focus on a specific theme or genre within the period. Writing intensive. Prerequisites: English 270A and either English 280A or 290A. Alternate years.

ENGL-356. Studies in American Renaissance. 4 credits.
Seminar covering representative works from the period of America's literary emergence, 18361865. Includes Emerson, Thoreau, Whitman, Douglass, Jacobs, Hawthorne, Poe, Melville and Dickinson. Writing intensive. Prerequisites: English 270A and 290A. Alternate years.

## ENGL-360. Studies in the Novel. 4 credits.

Seminar in the British, American, or World Anglophone novel. Individual sections of this course may focus on a theme or a historical period, e.g., The Rise of the Novel, The Contemporary American Novel, or Romance and Realism in the Novel. Writing Intensive. Prerequisites: English 270A and either English 280A or 290A. This course may be repeated for credit, if the theme or historical period is different.

## ENGL-361. Studies in Poetry. 4 credits.

Seminar in British, American, or World Anglophone poetry. Individual sections of this course may focus on a theme or a historical period, e.g., the epic, the sonnet, or pastoral poetry. Writing Intensive. Prerequisites: English 270A and either English 280A or 290A. This course may be repeated for credit, if the theme or historical period is different.

## ENGL-362. Studies in Drama. 4 credits.

Seminar in various themes and periods of British, American, or world drama, e.g., Tragedy, Development of American Drama, Early Modern Drama. Writing intensive. Prerequisites: English 270A and either English 280A or English 290A. This course can be repeated for credit if the theme or period is different.

## ENGL-363. Major Author. 4 credits.

Seminar providing broad coverage of the work of a major author from the Anglo-American tradition, e.g., Chaucer, George Eliot, Hemingway. Emphasizes the scope and diversity of the canon and illustrates the author's change, growth and development seen in representative works. Writing intensive. Prerequisites: English 270A and either English 280a or English 290A.

## ENGL-364A. Shakespeare. 4 credits.

Seminar providing an overview of Shakespeare's canon and development by looking at his work in Renaissance and contemporary contexts, emphasizing both textual study and theatrical performance. Writing intensive. Prerequisites: For majors, English 270A and English 280A. For non-majors, one introductory literature course and junior standing

## ENGL-365. Topics in Literary Immersion. 2 credits.

Focusing on depth rather than breadth, this course will emphasize close analysis of a single long work-e.g., novels of 600+ pages or other particularly complex literary works--or the corpus of a single author, or two to three closely related texts. With attention to narrowly focused discussions, this course emphasizes detailed, rigorous close textual analysis. Prerequisite: English 101e. Can be repeated for credit if the topic is different.

## ENGL-370. Studies in African American Literature. 4 credits.

Seminar in the various traditions of African American writing. Individual sections may focus on the writing of African American women, the 20th-century novel, or other themes, forms, or historical developments. Writing Intensive. Prerequisites: For majors, English 270A and English 290A. For non-majors, one introductory literature course and junior standing. Alternate years.

ENGL-371. Studies in World Anglophone Literature. 4 credits.
Seminar in the various traditions of World Anglophone literature. Particular sections may offer a general overview or may focus on a specific theme or genre within the period. Writing intensive. Prerequisites: English 270A and either English 280A or 290A. Alternate years.

ENGL-372A. Women in Literature I. 4 credits.
Seminar in writing by and about women, mostly in English, with some works in translation. Begins with the medieval period and extends to 1816. May include works by Marie de France, Margery Kempe, Christine de Pizan, Elizabeth I, Mary Wroth, Aphra Behn, Fanny Burney, Mary Wollstonecraft and Jane Austen. Women’s Studies credit. Writing intensive. Prerequisites: for majors, English 270A and English 280A or 290A. For non-majors, one introductory literature course and junior standing. Alternate years.

## ENGL-373A. Women in Literature II. 4 credits.

Seminar in writing by women from 1816 to the contemporary period. May include works by Mary Shelley, Harriot Jacobs, the Brontes, Emily Dickinson, Elizabeth Barrett Browning, George Eliot, Virginia Woolf, Sylvia Plath and Toni Morrison. Women’s Studies credit. Writing intensive. Prerequisites: For majors, English 270A and either English 280A or 290A. For nonmajors, one introductory literature course and junior standing. Alternate years.

## ENGL-380. Topics in English. 4 credits.

Seminar in a topic in the field of literature or language as specified in the master schedule each term, e.g., The Beat Generation, The Literature of Madness or Orphans in American Literature. Most sections are writing intensive. Prerequisites: English 270A and either English 280A or English 290A. This course may be repeated for credit if the topic is different.

## ENGL-404. Senior Tutorial. 2-4 credits.

This capstone course requires students to undertake a major research project (20-25 pages) based upon knowledge gained in a previously-completed 300 level literature course. Prerequisites: English 270A, English 280A, English 290A, at least 12 credits of 300 level literature seminars, and English major. Writing Intensive Every year. Note: Only Education licensure students are eligible to take the course for two credits.

## ENGL-405. Senior Exercises. 1 credit.

A suite of interconnected activities demonstrating understanding of and reflection on the learning goals of the English major. Includes oral presentation at the Senior Symposium and the preparation of an e-portfolio that includes a resume, reflective letter, and examples of student writing.

## ENGL-406 Capstone in Creative Writing. 1 credit.

Revision of major work or collection of shorter works from previous creative writing course and participation in a public reading. Includes preparation of a portfolio of writing within a single genre, multiple genres, or blended genres (fiction, poetry, scriptwriting, and/or creative nonfiction). Students will work individually with creative writing faculty to develop and polish their writing for publication submission and movement toward further study and/or career options. Required of and open to senior creative writing minors only.

ENGL-490. Independent Study. 1-4 credits.
Individual project in language or literature as arranged by the student with the supervising professor and the Chair. A maximum of four credits in 490 or 492 may count toward the English major. May be writing intensive. Every year.

## ENGL-491. Internship. 2-4 credits.

Supervised learning-work experience at various on- or off-campus sites generally taken the senior year. Requires 35 hours of work contact per credit. Involves a written project, a journal, or other assignments. May be writing intensive. Every year. This course may be repeated for credit.

## ENGL-499. Honors Thesis/Project. 1-4 credits.

Prerequisite: 3.50 GPA and permission of the Department Chair.

## Environmental Science Major

## Requirements for Major (B.A.)

Complete 57-61 credits of coursework, including core environmental science courses, cognate courses, foundational and advanced courses focused on an approved theme of study, and a capstone experience. Students select a theme of study in consultation with their advisor.

Available themes include conservation biology, aquatic ecosystems, stream resources, forestry, water resources, and wildlife management.

## Required in Environmental Science

Environmental Science 101, 250, and 494.

## Required in other Departments

Four credits in social science from Economics 350, or Political Science 221S or 321. Four credits in statistics from Mathematics 127Q or 227Q, Business 110Q, or Psychology 107Q.

At least 24 credits of foundational courses from two or more departments the following list of approved courses, selected in consultation with an advisor in the Environmental Science Program and focused on an approved theme of study:

BIOL 170B Concepts of Biology: Biological Information, Reproduction, and Evolution
BIOL 180B Concepts of Biology: Energy and Resources in Biology
BIOL 245 Introductory Wildlife Management
CHEM 121B Models of Chemical Systems
CHEM 162B Chemical Structure and Analysis
GEOL 150B Physical Geology
GEOL 160B Environmental Geology
GEOL 170B Geology of the Critical Zone
GEOL 291 Spatial Analysis in the Natural Sciences
PHYS 200B Mechanics and Waves
At least 12 credits of advanced courses from the following list of approved courses, selected in consultation with an advisor in the Environmental Science Program and focused on an approved theme of study:

BIOL 230 Woody Plants
BIOL 232 Herpetology
BIOL 233 Ornithology
BIOL 235 Morphology of Vascular Plants
BIOL 316 Molecular Genetics and Bioinformatics
BIOL 341 Limnology
BIOL 342 Stream Ecology

BIOL 346 Ecology
BIOL 347 Evolution
CHEM 201 Introduction to Organic Chemistry
CHEM 281 Analytical Chemistry
GEOL 240 Process Geomorphology
GEOL 315 Watershed Hydrology

## Requirements for Major (B.S.)

Complete 66-77 credits of coursework, including core environmental science courses, cognate courses, foundational and advanced courses focused on an approved theme of study, and a capstone experience. Students select a theme of study in consultation with their advisor.

Available themes include conservation biology, aquatic ecosystems, stream resources, forestry, water resources, and wildlife management.

Required in Environmental Science
Environmental Science 101, 250, and 494 and at least one additional credit from Environmental Science 490, 491, or 492.

Required in other Departments
At least eight credits in social science from Economics 350, or Political Science 221S or 321. Four credits in statistics from Mathematics 127Q or 227Q, Business 110Q, or Psychology 107Q and at least four credits from Mathematics 131Q, 201Q and 202Q or Computer Programming 150.

At least 24 credits of foundational courses from two or more departments from the following list of approved courses, selected in consultation with an advisor in the Environmental Science Program and focused on an approved theme of study:

BIOL 170B Concepts of Biology: Biological Information, Reproduction, and Evolution
BIOL 180B Concepts of Biology: Energy and Resources in Biology
BIOL 245 Introductory Wildlife Management
CHEM 121B Models of Chemical Systems
CHEM 162B Chemical Structure and Analysis
GEOL 150B Physical Geology
GEOL 160B Environmental Geology
GEOL 170B Geology of the Critical Zone
GEOL 291 Spatial Analysis in the Natural Sciences
PHYS 200B Mechanics and Waves
At least 12 credits of advanced courses from the following list of approved courses, selected in consultation with an advisor in the Environmental Science Program and focused on an approved theme of study:

BIOL 230 Woody Plants
BIOL 232 Herpetology
BIOL 233 Ornithology
BIOL 235 Morphology of Vascular Plants
BIOL 316 Molecular Genetics and Bioinformatics
BIOL 341 Limnology
BIOL 342 Stream Ecology
BIOL 346 Ecology
BIOL 347 Evolution
CHEM 201 Introduction to Organic Chemistry
CHEM 281 Analytical Chemistry
GEOL 240 Process Geomorphology
GEOL 315 Watershed Hydrology
Capstone Experience
A significant capstone experience in environmental science is required prior to ESCI 494: Senior Seminar. For students pursuing the B.A. degree, extended field studies, field seminars, or projectbased courses provide ample opportunities for students to satisfy this requirement. For students pursuing the B.S. degree, the capstone experience must be from an independent study, directed research, or internship, including summer research or internship opportunities. These students are required to present the results of their work at a campus or professional research symposium (separate from the Senior Seminar poster presentation). Either the experience or its presentation must be credit-bearing (1-4 credits). Students will work in consultation with their advisors and the program director to determine appropriate capstone experiences.
Relationship to Other Majors and Minors
Environmental science provides students with an interdisciplinary approach to understanding and examining environmental problems.

## Requirements for a Minor in Environmental Studies

The Environmental Studies minor consists of a minimum of 20 credits distributed along concentrated tracks to insure coherence and depth of study related to the environment. Students may choose from the following tracks of study: policy and management, earth sciences, and life sciences. Each track is comprised of five course levels:

Level 1: Introductory core course
Level 2: Introductory topical course
Level 3: Advanced topical or methods course
Level 4: Geographic Information Systems course
Level 5: Applications course through independent study or internship
Within each level, students select one course. To insure breadth of study, at least 16 credits of course work beyond the core course will be from outside the student's major department.

## Environmental Studies Minor Tracks

Policy and Management (16-20 credits)
Level 1: One course from Environmental Science 100 or 101 (4-5 credits)
Level 2: One course from Political Science 221S or 223 (4 credits)
Level 3: One course from Political Science 320 or 321 or Economics 350 (4 credits)
Level 4: One course from Geology 291 (2-5 credits)
Level 5: Environmental Studies 490 or 491 (2-4 credits)
Earth Sciences (16-22 credits)
Level 1: One course from Environmental Science 100 or 101, or Geology 110B, 111B, 112B, 113B, 150B, 160B, or 170B (4-5 credits)
Level 2: One course from Geology 240 or 290N, or Marine Science 200 (4-5 credits)
Level 3: One course from Geology 315 ( $4-5$ credits)
Level 4: One course from Geology 291 (2-4 credits)
Level 5: Environmental Studies 490 or 491 (2-4 credits)
Life Sciences (17-22 credits)
Level 1: One course from Environmental Science 100 or 101 or Biology 130B, 131N, 141N, $142 \mathrm{~N}, 143 \mathrm{~N}$, or 180 B ( $4-5$ credits)
Level 2: One course from Biology 232, 236, 238, 243, 247, 248B, or 249B or Marine Science 200 (4-5 credits)
Level 3: One course from Biology 341, 342, or 346 (5 credits)
Level 4: One course from Geology 291 (2-4 credits)
Level 5: Environmental Studies 490 or 491 (2-4 credits)

## Course Offerings

ENVS 490. Independent Study. 1-4 credits.
Individual research on a specialized topic or problem with an emphasis on the environment. Requires permission of the director of the Environmental Studies Program and the supervising faculty member. Open to only the Environmental Studies minor. This course may be repeated for credit.

## ENVS 491. Internship. 1-4 credits.

Work-study opportunity to experience the multidisciplinary nature of practical environmental problems, to relate course material to these problems, and to observe decision-making processes associated with their solution. Requires permission of the director of the Environmental Studies

Program and the supervising faculty member. Open to only Environmental Studies minors. This course may be repeated for credit.

## ESCI 100N. Global Climate Change. 4 credits.

This course will examine the science of global climate change and human-introduced climate forcing. It will survey the environmental impacts of global climate change and what this means for the habitability of the earth for humans and other species. Topics will include global climate, stakeholder analysis related to energy use and global climate change, and examining the consequences of rapid climate change. Students will investigate a climate change issue of importance to them (locally, regionally, or globally). The course is designed primarily for nonscience majors. Prerequisite: Math placement score 22.

## ESCI 101B. Introduction to Environmental Science. 5 credits.

An introduction to environmental science, including concepts used by environmental scientists to frame the study of environmental problems and human impacts on the natural environment and its resources, including climate, water, soils, vegetation, and wildlife. The laboratory experience focuses on the tools and methods used by environmental scientists to study the environment, natural resources, and human impacts associated with the extraction and use of resources.

## ESCI 250. Environmental Research Methods. 5 credits.

Study and application of the methods environmental scientists use to investigate environmental questions, including sampling strategies, tools, sample collection and analysis, and presentation. Prerequisites: ESCI 101 and one additional course from the foundational courses approved for the environmental sciences major.

## ESCI 280. Topic in Environmental Science. 1-4 credits.

Study of selected topics related to environmental science. Topics covered vary according to disciplinary interests of the instructor or current issues in environmental science. Offered subject to demand and availability of an instructor. Prerequisites: ESCI 101 or permission of instructor. ESCI 490. Independent Study. 1-4 credits.

Individual study of an environmental topic or problem not normally covered in the curriculum. Requires permission of the director of the Environmental Science Program and the supervising faculty member. Open only to environmental majors and minors. This course may be repeated for credit.

## ESCI 491. Internship. 1-4 credits.

Work-study opportunity to experience the multidisciplinary nature of practical environmental problems, to relate course material to these problems, and to observe decision-making processes associated with their solution. Requires permission of the director of the Environmental Science

Program and the supervising faculty member. Open only to environmental majors and minors. This course may be repeated for credit.

## ESCI 492. Directed Research. 1-4 credits.

Investigation of an environmental issue or problem by laboratory or field observations, experimentation, data collection, and analysis. Requires permission of the director of the Environmental Science Program and the supervising faculty member. Open only to environmental majors and minors. This course may be repeated for credit.

## ESCI 494. Senior Seminar. 2 credits.

Senior Seminar is required for all environmental science majors during their senior year. Students share their capstone experience, involving project work, independent research, or professional experience in environmental science, as part of a broader discussion of existing and emerging environmental issues and problems, methods of analysis, integration of interdisciplinary knowledge, and ethical issues associated with their study. Students will prepare and present posters pertaining to their capstone experience in a poster symposium.
Prerequisite: Environmental Science major with senior standing and permission of the instructor. Every year.

## ESCI 499. Honors Thesis/Project. 1-4 credits.

Prerequisite: 3.50 GPA and permission of the Program Director.

## Geology

Go to faculty and staff page.

## Requirements for Major

Because of the diversity of career opportunities, as well as individual student interest in the geological sciences, a student majoring in geology can elect either of two degrees: a Bachelor of Arts or a Bachelor of Science. The Bachelor of Science is for a student who eventually intends to pursue a career as a geologist, usually after graduate study. The courses required for the Bachelor of Science are those that a student typically needs for acceptance into a graduate program in geology, as well as those suggested by the American Institute of Professional Geologists. A student electing the Bachelor of Arts may wish to combine geology with expertise in another discipline (major) or plan a career in a field in which geological knowledge would be useful, law or environmental science, for example.

## Requirements for Major (B.A.)

The B.A. in Geology requires a minimum of 33 credits in geology and 5 credits in chemistry.

## Required in Geology

Geology 150, or Geol 160 and 151, or one course from the Geol 110 Series (110-115) and 151, Geol 230, 240, 260, 340, 392 and 492, and a minimum of 6 additional credits in geology, of which three may be Geol 470, or five may be from a summer field course, or four from an internship or independent study. It is strongly recommended that students regularly seek the advice of their faculty adviser concerning course selection and program planning.

## Required in Related Departments

Chemistry 121.

## Requirements for Major (B.S.)

The B.S. in Geology requires a minimum of 43 credits in geology and 28 credits in the natural sciences, mathematics, and computer science.

Required in Geology
Geology 150, or Geol 160 and 151, or one course from the Geol 110 Series (110-115) and 151, Geol 230, 240, 260, 320, 340, 392, 411, 412, and 492, and three additional credits in geology at the 400 level.

## Required in Related Departments

Chemistry 121, a minimum of 15 credits in biology (from Biol 170 and 180 and higher-level courses), chemistry (from Chem 162 and higher-level courses), or physics (from Phys 200 and higher-level courses), and eight credits of college level mathematics (Math 131 or 201, 127 or 227, and higher-level courses) or computer science (Comp 150 and higher-level courses). It is
strongly recommended that students regularly seek advice of their faculty adviser concerning course selection and program planning .

Recommended Courses (Either Degree)
Recommended in Geology
Additional courses in the department. A summer field course conducted by one of many universities is strongly recommended. Credit so gained may count toward the Wittenberg degree, and three to five credits may count toward the geology major.

Recommended in Other Departments
Courses in computer programming, statistics, technical writing, and foreign language are recommended strongly. For interdisciplinary fields such as geophysics, geochemistry, hydrogeology, oceanography, and the environmental sciences, additional courses in the Departments of Mathematics and Computer Science, Physics, or Chemistry or the Environmental Studies and Marine Science programs.

## Requirements for Major in Earth Science

The B.A. in Earth Sciences requires a minimum of 31 credits in geology, 34 credits in education, and 28 credits outside these departments.

An interdisciplinary program in earth science was established to meet the needs of the student seeking certification to teach the subject in high school. The program stresses a broad scientific background with emphasis in geology. The minimum requirements appear below:

Required in Geology
Geology 150, or Geol 160 and 151, or one course from the Geol 110 Series (110-115) and 151, Geol 230, 240, 260, 315, 340, 392, and 492.

Required in Education
A minor in Education. Students should consult the Department of Geology and the Department of Education to plan a complete program that meets the Ohio licensure standards.

Required in Other Departments
Biology 180, Chemistry 121, Physics 107: Astronomy, Physics 200: Mechanics and Waves, and a course in statistics (Math 127 or 227, Psyc 107, or BUSN 210) .

Certification for Teaching in Earth Science
Students interested in pursuing a course of study leading to a license to teach earth science should contact their adviser or the Education Department for specific requirements.

## Requirements for Minor

## The minor in Geology requires a minimum of 20 credits in geology.

Geology 150, or Geol 160 and 151, or one course from the Geol 110 Series (110-115) and 151 plus a minimum of 15 additional credits in geology, chosen in consultation with and approved by a Geology faculty adviser. The student must demonstrate the relevance of the courses elected to the design of the overall curricular program.

Suggestions for Environmental Focus
A student who plans to pursue a career in environmental studies should take Geol 150 Physical Geology or Geol 160 Environmental Geology, Geol 291 Spatial Analysis in the Natural Sciences, and Geol 315 Watershed Hydrology. A student seeking a more scientific program in environmental studies should consult with the Geology Department Chair or other Geology faculty about additional courses and a possible major or minor in geology with an environmental focus.

## Related Areas of Study

Students interested in Geology may also have interests in interdisciplinary programs that would complement or focus their study, including Computational Science, Environmental Studies, and Marine Science, and, as cognates in their degree programs, including Biology and Geography.

## Course Listings

Geology 110 Series: The Geology 110 series is a series of introductory courses in physical geology that address disciplinary or topical interests of the instructors teaching them or current issues of interest to faculty or students. These courses are intended for the non-science student. Any one of these courses will count as credit toward the major and serve as prerequisite for upper level courses with the successful completion of Geology 151 (Physical Geology Lab Practicum).

## GEOL- 110B. Introductory Geology. 4 credits.

Intended for the non-science student. Emphasis on concepts and methodology of the science of geology and its application to problems of human concern about the earth. A score of 22 on the Math Placement Exam is strongly recommended. Every year.

## GEOL- 111B. Volcanoes and Earthquakes. 4 credits.

This course focuses on the geology of volcanic eruptions and earthquakes. A geologic understanding of these hazards, by means of class study of such topics as volcanic eruption products and how the type of ground beneath buildings affects the severity of earthquake shaking, allows educated citizens to make informed decisions that can lessen damage and loss of life caused by these geologic hazards. A score of 22 of the Math Placement Exam is strongly recommended. Every year.

## GEOL- 112B. The Hydrologic Cycle. 4 credits.

Intended for the non-science student. Study of concepts and methodology related to the hydrologic cycle, the role of water in shaping Earth's surface and shallow subsurface, and its significance to humans and the environment. A minimum score of 22 on the Math Placement Exam is strongly recommended. Every year.

## GEOL- 113B. Ohio Geology. 4 credits.

Intended for the non-science student. Treats the geologic history of Ohio , from ancient oceans, rivers, and swamps preserved in sedimentary rocks, to massive glaciers that sculpted the landscape. Every year.

## GEOL- 114B. Geology of the National Parks. 4 credits.

Intended for the non-science student. Focuses on understanding geologic processes and interpreting geologic history through case studies of several National Parks. Math Placement score of 22 or above strongly recommended. Offered subject to demand and availability of an instructor .

## GEOL- 115B. Topics in Physical Geology. 4 credits.

Intended for the non-science student. Study of selected topics related to physical geology. Topics covered vary according to disciplinary interests of the instructor or current issues in physical geology. Offered subject to demand and availability of an instructor.

## GEOL- 116N: Time Earth. 4 credits

Intended for the non-science major. This course explores significant processes and events in Earth's history, including plate tectonics, the origins of the planet and life, mass extinctions, and glaciations. Every year. No prerequisites.

## GEOL- 150B. Physical Geology. 5 credits.

Treatment of geologic processes acting on and within the earth and the physical laws that govern them. Intended for science and geology students and anyone else interested in a more comprehensive treatment of the subject. A score of 22 on the Math Placement Exam is strongly recommended. Every year.

## GEOL- 151. Physical Geology Lab Practicum. 1 credit.

Laboratory portion of Geology 150. Available for students who have completed a course in the Geology 110 series (Geology 110-115) and wish to take advanced geology courses or major in Geology or Earth Science. Students who have completed Geology 160 and wish to major in Geology or Earth Science are also required to take this course. Prerequisites: Geology 160 or one course from the Geology 110 Series, and permission of the Department Chair. A score of 22
on the Math Placement Exam is strongly recommended. Will meet for one 3-hour lab per week. Offered subject to demand and availability of an instructor .

## GEOL- 160. Environmental Geology. 5 credits.

Introduction to applied geology for science and non-science students. The geologic basis for natural processes that are hazardous to humans and cause environmental problems associated with use of the natural or modified environment is discussed. Topics include flooding, mass wasting, soil erosion, water supply use, and pollution and waste disposal. Every year.

Note: Students may not enroll in more than one of the following introductory geology courses: Geol 110-115, Geol 150, or Geol 160. Any one of these courses may serve as an introductory course for the major or as a prerequisite for upper-level courses, but for those students who have taken Geol 110-115 or 160 and intend to major, Geol 151, a one credit lab experience, is required.

## GEOL- 170B: Geology of the Critical Zone 5 credits

A trans-disciplinary examination of Earth's critical zone, the intersection between the geosphere, the biosphere, and the hydrosphere. Humans greatly alter processes in this zone of important biogeochemical interactions. This course will be of interest to students wanting to explore natural environmental processes as well as those altered by humans (e.g. pristine vs. polluted, short and long term controls of carbonclimate cycles). This course is for science majors and will include a laboratory component.

## GEOL- 230. Mineralogy and Optical Mineralogy. 5 credits.

Study of the common minerals, in hand-sample and through the polarizing light microscope, with emphasis on mineral identification in rock classification and interpretation of the origin of rocks. The course offers students an introduction to a hands-on technique used in geology for the gathering of mineral and rock data (the use of polarizing microscope). Prerequisites: Geology 150 (Physical Geology), or Geology 110 (Introductory Geology). Alternate years.

## GEOL- 240. Process Geomorphology. 5 credits.

Study of the origin and evolution of earth surface processes and their associated landforms. Topographic map and air photo interpretation and field trips illustrate process-form relationships as well as demonstrate techniques used by geomorphologists to analyze these relationships. Prerequisites: Geology 150 and 210 or permission of instructor. Alternate years.

## GEOL- 260. Sedimentology. 5 credits.

The study of sediments and sedimentary rocks. Comprehensive treatment of sedimentary processes, modern environments where those processes operate, and application to the interpretation of ancient environments as preserved in the rock record. Required for geology majors and highly recommended for students interested in marine
science. Prerequisites: Geology 150, 160, or one course from the Geol 110 Series in combination with Geology 151. Every year.

GEOL- 270. Field Seminar. 1-3 credits. Problem-based field study of a specific geologic province or region. Preliminary work on campus includes an introduction to general field tools and methods and background on the geology and geologic history of the province or region being visited. Field work may involve detailed descriptions of outcrops and field surveys using methods specific to the field problem being addressed. Prerequisite: Geology 150 or one course from the Geol 110 Series. Every year. This course may be repeated for credit.

## GEOL- 280. Special Topics. 4 credits.

Special topics in geology chosen for their current or general interest. Open to any interested student. Some topics courses have prerequisites of Geology 110 or 150 ; others have none. Offered periodically. This course may be repeated for credit.

## GEOL- 290N. Hazard Mitigation: Volcanoes and Earthquakes. 4 credits.

Environmental, interdisciplinary approach to volcanic and earthquake hazards (U.S. and world) and their mitigation (loss-reduction). Academic perspectives examined include geological, political, social, psychological and economic. Course is multi-cultural and global in focus for case studies. Critical analysis of readings and discussion are stressed. Writing intensive. No prerequisites. Open to all majors but designed especially for the non- (natural) science major. Alternate years.

## GEOL- 291. Spatial Analysis in the Natural Sciences. 2 credits.

A raster-based approach to problem solving, this course introduces the student to the utility and availability of raster data and the methods for incorporating and analyzing it relative to interdisciplinary problems, particularly in the natural sciences. Prerequisite: A 100-level course in biology, environmental studies, or geology. Alternate years.

## GEOL- 292. Earth Materials Analysis. 2 credits.

An introduction to the three most widely used methods of instrumental analytical analysis of solid geologic materials (minerals, rocks, sediment, soils, fossils). Physical theory of X-ray generation, interaction with solids, and detection by powder diffractometry is covered. Physical theory of scanning electron microscopy and geologic applications, and physical theory of X-ray fluorescence and energy dispersive spectroscopy are also covered. Laboratory experience includes standard sample preparation techniques. Prerequisites: Geology 230 Mineralogy and Optical Mineralogy. Alternate years.

## GEOL- 315. Watershed Hydrology. 4 credits.

Study of surface and subsurface hydrology of small watersheds and the dual role of water as an agent of erosion, shaping the watershed and causing flooding, and as a resource. A minimum
score of 22 on the Math Placement Exam is required. Prerequisite: Geology 150, 160, or one course from the Geol 110 Series in combination with Geology 151. Alternate years.

GEOL- 320. Structural Geology. 5 credits.
Study of rock deformation and related geologic structures. Review of modern geotectonic theory. Problem-solving-oriented laboratory sessions. Prerequisites: Geology 150 (or 110 and 250), 200 and 210.

## GEOL- 340. Earth History. 5 credits.

The objectives of the course are to (1) develop the skills, and learn to use the tools with which to decipher Earth's history, and (2) learn the general history of Earth and its life forms (as preserved in the fossil record) with emphasis on North America. Prerequisite: Geology 150, Geol 160 and 151, or one course from the Geol 110 Series and 151, and Geology 260. Writing intensive. Alternate years .

## GEOL- 392: Junior Seminar. 1 credit.

Required of all Geology majors during the spring semester of their junior year. The purpose of this course is to prepare students in the skills necessary for them to conduct their senior research and to produce a written proposal for that research. Prerequisite: Junior standing. Every year.

## GEOL- 411. Sedimentary Petrography. 3 credits.

Detailed microscopic and hand sample study of sedimentary rocks. Emphasis on the identification and origin of features in siliciclastic and carbonate rocks. Prerequisite: Geology 230 (or concurrent enrollment) and Geology 260. Alternate years.

## GEOL- 412. Igneous and Metamorphic Petrography. 5 credits.

Introduction to phase diagrams and the study of igneous and metamorphic rocks emphasizing their origin, classification and identification. Megascopic and microscopic techniques emphasized. Prerequisites: Geology 230 and Chemistry 121. Alternate years .

## GEOL- 420. Economic Geology. 4 credits.

Study of the characteristics of major occurrences of natural resources (metals, non-metals and fuels) and analysis of scientific observations concerning the origin of these deposits. A wide variety of weekly laboratory exercises and outside readings complements lectures. Prerequisite: Geology 200.

## GEOL- 460. Geology Seminar. 1-5 credits.

Exploration of topics beyond the scope of regularly offered courses or collaborative research experience. Prerequisite: permission of supervising instructor. Offered as the need arises. This course may be repeated for credit.

## GEOL- 490. Independent Study. 1-6 credits.

Individual research on a specialized topic or problem pertaining to some aspect of geology of special interest to the student. Prerequisite: Permission of supervising instructor. This course may be repeated for credit.

GEOL- 491. Internship. 1-4 credits.
Generally an off-campus work-study experience in a geological setting. Permission and approval must be granted by the Geology Department. This course may be repeated for credit.

## GEOL- 492: Senior Seminar. Zero credits fall semester, 1 credit spring semester.

Required of all Geology majors during their senior year. Each student works on a research project under the supervision of a faculty member. The project culminates in a written thesis, a public poster presentation, and a public oral presentation. Each student registers for this course during both semesters, 0 credits in the fall and 1 credit in the spring. Prerequisite: Senior standing and completion of Junior Seminar. Every year.

GEOL- 499. Honors Thesis/Project. 0-4 credits.
Prerequisite: 3.50 GPA and permission of the Department Chair.

## Health Science

Professors Jeff Ankrom (Economics), Jeffrey Brookings (Psychology), Robert Davis (English), Margaret Goodman (Biology), Paul Nelson (Religion), Cathy Pederson (Biology), Jay Yoder (Biology), Mary Jo Zembar (Psychology), Associate Professors Stefne Broz (Communication), Stephanie Little (Psychology), Nancy McHugh (Philosophy), Christine McIntyre (Languages)

## Requirements for the Minor

The Health Science minor will require a total of 20 credits from:

## 1. Coursework

a. Minimum of 8 credits reflecting the basic human sciences
b. Minimum of 8 credits reflecting the interdisciplinary nature of health science

A maximum of 12 of the required 20 credits for the Health Science minor may come from the student's major and/or another minor department. For example, a student with a major in Biology and minor in Psychology will only be allowed to apply 10 credits from these two departments to the health science minor (e.g., 10 credits from Biology, OR 10 credits from Psychology, OR 5 credits from Biology and 5 credits from Psychology).
2. A significant professional experience in a clinical setting or medically related research setting. Students may take Health Science 490: Clinical Internship or Health Science 492: Directed Medical Research to fulfill this requirement (0-4 credits may be counted toward the minor). In addition, other significant professional experience deemed sufficient by the Health Science Committee may also fulfill this requirement.
(We have had a successful formal Clinical Internship program running for approximately 3 years, with students using a Biology Internship number. This program can service up to 60 students per year, and we feel ready to handle large numbers of interested Health Science minors.)

## Course offerings.

## Learning Goal 1: Basic human sciences (minimum of 8 credits):

Biology 104: Conception to Birth. 4 credits.
Biology 120: Human Health and Disease. 4 credits.
Biology 125: Basic Human Physiology 4 credits
Biology 129: The Science Behind Addiction 4 credits
Biology 215. Genetics. 5 credits.
Biology 220: Neurobiology. 5 credits.
Biology 221: Pharmacology. 4 credits.
Biology 223: Survey of Human Diseases. 4 credits.

Biology 229: The Science Behind Addiction. 4 credits
Biology 237: Microbiology. 5 credits.
Biology 250: Molecular Genetics and Bioinformatics. 5 credits.
Biology 325: Human Anatomy and Physiology I. 5 credits.
Biology 326: Human Anatomy and Physiology II. 4 credits.
Biology 328: Electron Microscopy. 5 credits.
HFS 250: Nutrition. 4 credits.
HFS 280: Applied Anatomy. 4 credits
HFS 280: Care/Prevention of Athletic Injury. 4 credits
Psychology 280: Psychopharmacology. 4 credits
Psychology 311B: Behavioral Neuroscience. 5 credits.
Theatre and Dance 215N. Dance Kinesiology. 4 credits.

## Learning Goal 2: Interdisciplinary nature of health science (minimum of 8 credits):*

Communication 327: Health Communication. 4 credits.
Education 111: Human Development and Learning Theory: Birth through Middle Childhood. 2 credits.

Education 113: Human Development and Learning Theory: Adolescence through Young Adult. 1 credits.
Economics 290: Topic: Health Economics. 4 credits.
English 180: Literature and Madness. 4 credits.
Honors 300R: Bioethics. 4 credits.
Political Science 209S: Topics: Comparative Health Care Policy. 4 credits
Philosophy 200: Topic: Race, Gender, Science, and Medicine. 4 credits.
Psychology 212: Health Psychology. 4 credits.
Psychology 231: Child Development. 4 credits.
Psychology 232: Psychology of Adolescence. 4 credits.
Psychology 243: Community Psychology. 4 credits.
Psychology 251: Abnormal Psychology. 4 credits.
Psychology 253: Introduction to Counseling. 4 credits
Psychology 280: Introduction to Clinical Psychology. 4 credits
Psychology 280: Child Abnormal Psychology. 4 credits.
Religion 213R/C: Religion and Medicine. 4 credits
Religion 378R: Bioethics. 4 credits.
Spanish 430. Intensive Spanish Conversation (Medical Spanish). 2 credits.
Sociology 380: Identity, Self and Society. 4 credits
HEAL 490: Clinical internship 0-4 credits
HEAL 492: Directed Research: Medical Emphasis 0-4 credits.

## Learning Goal 3: Significant professional experience (0-4 credits):

Each student is required to complete either an internship experience in a medically related setting or medically related research. Up to 4 credits from Learning Goal 3 may be included in the minimum 20 credits required for the minor. The project need not be taken for credit, may be paid or volunteer, but must be of a scope worthy of receiving academic credit. At the conclusion of the internship experience or research project, the student will present the results of the research in written, oral, or professional poster format (format to be chosen in consultation with the student's research or internship advisor).

Health Science 490: Clinical internship 1, 2
Health Science 492: Directed medical research 1
Other significant professional experience deemed sufficient to meet this requirement
1 These projects must receive final evaluation by at least one member of the Health Science Committee in order to satisfy this minor requirement.

2 Prerequisites: junior or senior standing, completion of the Community Service requirement, and permission of the Clinical Internship Director.

## Health, Fitness, and Sport

Go to faculty and staff page.

## Exercise Science

## Requirements for the Major - 42 credits

Required Courses in HFS - $\mathbf{3 0}$ credits
HFS 170. Introduction to Exercise Science . 4 credits
HFS 204. Applied Anatomy. 4 credits
HFS 250N. Nutrition. 4 credits
HFS 270. Care and Prevention of Sport Injuries (w/CPR \& First Aid). 2 credits
HFS 370. Exercise Physiology. 4 credits
HFS 373. Exercise Testing and Prescription. 4 credits
HFS 375. Exercise for Special Populations. 4 credits
HFS 377. Principles of Strength and Conditioning. 4 credits
HFS 470. Senior Capstone. 2 credits
HFS 491: Internship. 2 credits

## Required Courses in Other Departments - 4 credits

BIOL 125B. Human Physiology. 4 credits

## Elective Courses for Major - 8 credits

HFS 220. Event and Facility Management. 4 credits
HFS 224. Sport Law. 4 credits
HFS 230S. Contemporary Issues in Sport Sociology and Psychology. 4 credits
HFS 273. Motor Learning. 2 credits
HFS 275. Biomechanics. 2 credits
PSYC 201Q or equivalent: Statistics. 4 credits
PSYC 207. Experimental Design. 4 credits
Note: For students intending to pursue graduate school in an allied-health field (e.g. medical school, physical or occupational therapy school, etc.), Applied Anatomy (HFS 204) and Human Physiology (BIOL 125B) may be substituted with Human Anatomy and Physiology I (BIOL 325) and Human Anatomy and Physiology II (BIOL 326/327)

## Required Credits for Minor - 20 credits

## Required Courses for Minor (12 credits)

HFS 170: Introduction to Exercise Science. 4 credits
HFS 204: Applied Anatomy. 4 credits
HFS 370: Exercise Physiology. 4 credits

## Elective Courses for Minor (8 credits)

HFS 273: Motor Learning. 2 credits
HFS 275: Biomechanics. 2 credits
HFS 230S: Contemporary Issues in Sport Sociology and Psychology. 4 credits HFS 250N: Nutrition. 4 credits
HFS 373: Exercise Testing and Prescription. 4 credits
PSYC 201Q or equivalent: Statistics. 4 credits
PSYC 207: Experimental Design. credits

## Sport Management Major

## 42-46 Credits

Required Sport Management courses (20 credits):
(4) Introduction to Sport Management (HFS 150)
(4) Sport Marketing (HFS 222)
(4)Applied Projects in Sport Management/Approved Internship (HFS 380)
(4) Ethics in Sport Management (HFS 301)
(4) Sport Management Policy - senior-level capstone course (HFS 401)

Required Business \& other courses (14 credits):
(4) Financial Accounting (ACCT 225) - requires MATH 22
(2) Research Methods (BUSN 211) + (4) Statistics course (e.g., BUSN 110)
(4) Leading and Managing Effective Organizations (BUSN 365)

Sport Management, HFS \& other Elective courses (8 credits):
Choose at least one from each category:
Sport \& the Market:
(4) Economics of Sport (ECON 265)
(4) International Sport Management (HFS 221)
(4) Sport Law (HFS 224)
(4) Event \& Facility Management (HFS 220)

Sport \& Society:
(4) Contemporary Issues in Sport Sociology and Sport Psychology (HFS 230)
(4) Sport in Culture (HFS 240)
(4) History of Women in Sport (HFS 245)
(4) Coaching Young Athletes (HFS 225)

Depending on the topic, the following could fulfill either category:
(1-4) Independent Study in Sport Management (HFS 490)
(1-4) Internship in Sport Management (HFS 491)

## Sport Management Minor

The Sport Management Minor is comprised of 22-26 credits in the departments of Health, Fitness and Sport, Business, and Economics. Students are required to take HFS 150, BUSN 211 and eight credits from the following, HFS 220, HFS 221, HFS 222, and HFS 301. Additionally, 8 credits are required from ECON 265, BUSN 365S, HFS 230L or HFS 240, HFS 490 or HFS 491, or any other HFS Sport Management course (HFS 220-224). Because ECON 265 has a prerequisite (ECON 190) the number of credit credits for this minor can range from 22-26 credits.

## Course Listings

## HFS- 120. Lifeguard Training. 2 credits.

This course is designed to certify a student to guard at a pool and/or a non-surf waterfront facility. The student is also certified in Professional CPR (adult, child, infant) and First Aid. Entry requirements include (1) swim 20 lengths of the pool non-stop using the front crawl and breaststroke, (2) retrieve a brick from a depth of 12 feet and carry it 20 yards, and (3) dive to a minimum depth of 5 feet and swim underwater a minimum of 15 yards. For certification, the student is required to pass the American Red Cross written test with a minimum score of $80 \%$ and satisfactorily perform 3 rescue scenarios. The grade for this class is based on 20 quizzes. The student must concurrently register for HFS 044P (Lifeguard Training) for one credit of physical activity credit. To receive a pass grade in this course, the student must (1) complete 20 lengths of the pool in a minimum of 10 minutes; (2) swim 20 yards, get a brick, and carry it back in 1:30; and (3) swim 8 lengths of the pool in 3:30 or less.

## HFS- 150. Introduction to Sport Management. 4 credits.

This is a team taught course and each member will lecture and provide course materials in their respective area of expertise. The course will cover the foundations of sport business as an occupation and industry, the sport management function and best practices, sport finance, sport economics, sport sponsorship, sport marketing, sport law, event management, sport ethics, and social issues in sport. The course will also provide a discussion of the many segments of the sport
industry, including youth sport, interscholastic athletics, intercollegiate athletics, professional sport, and international sport. Prerequisites - none.

## HFS 170. Introduction to Exercise Science. 4 credits

This course will investigate the nature, scope, and impact of Exercise Science. The course will provide the student a broad knowledge base of Kinesiology studies through a study of the concepts, theories, history, current status, and future directions of the disciplines. Additionally, this course will offer an overview of Exercise Science and related fields to develop an understanding of the range of career paths in the field. No prerequisites.

## HFS 204. Applied Anatomy. 4 credits

This course presents a detailed study of the structure and function of the bones, joints, and muscles of the human body. Emphasis is on the analysis and description of human movement. Kinesiology principles are used to understand anatomic structure and function and common athletic injuries are used to illustrate the practical application of anatomic knowledge. No prerequisites.

## HFS- 210N. Your Body: Your Health and Fitness. 4 credits.

Course content includes an introduction to health and fitness, body structure and movement, muscular strength/endurance and flexibility, posture, anthropometry and somatotyping, body composition, nutrition, fat (weight) control, cardiorespiratory function, cardiovascular risk analysis, health-related fitness regimes, and sport and recreational activities for health and fitness. Students participate in laboratory sessions where they are measured and tested to determine body type, percent body fat (instructor will take skinfold measurements at selected body sites), strength/endurance, flexibility, aerobic ability and cardiorespiratory function. In addition to laboratories on these topics, there are assignments related to posture (students will be photographed in bathing suits standing behind a posture grid), nutrition, stress, cardiovascular risk and lifestyle assessments. Scientific methodologies utilized in the study of the human body will be reviewed and employed in required laboratories and assignments. Every third year.

## HFS- 220. Event Planning and Facility Management, 4 credits

Event Planning and Facility Management are two critical components of the sport industry. This course provides the student with an in-depth look at the practices, procedures and operations of major event and facility management, including planning, funding, and managing these events. The main focus of these principles will be on sporting events and facilities, but can be applied to many different areas, including various corporate and social events.

## HFS- 221C. International Sport Management, 4 credits

This course is an examination of several transformational forces in the world today: the global economy, the electronic village, international politics, and their impact on management within the
sport industry. The course explores the positive and negative effects that globalization has had on sport and, in turn, the positive and negative effects that the sport industry has had on the global community and how sport management professionals address these issues.

## HFS- 222. Sport Marketing, 4 credits

Sport Marketing is an essential element of the sport industry. It includes aspects of promotions, marketing research, sponsorships, and fundraising. This course provides the student with an indepth look at the marketing practices, procedures and operations of professional, college and recreational sport organizations and enterprises, and the theories behind these activities.

## HFS- 224 Sport Law. 4 credits

A basic understanding of the law is essential to anyone involved in the sport industry. This course provides an introduction to common legal concepts as they apply to sport managers and organizations. Students are expected to identify and analyze legal issues, as well as the ramifications of those issues. Students will also be expected to identify and analyze strategies to apply the law and limit liability of sport organizations. This class discusses and analyzes the applicable law governing the sport industry. Contracts, personal injury, risk management, labor law, intellectual property, employment, discrimination, and antitrust are major areas covered in this class.

## HFS- 225. Coaching Young Athletes. 4 credits.

Prepares the student to become a competent youth sport coach. Identifies differences between a corporate model and educational model of athletics, "process vs. product" coaching philosophies and humanistic vs. autocratic coaching styles. Alternative athletic program models are examined. The student surveys recent coaching effectiveness research and develops a sound basic philosophy of coaching, including a professional code of ethics. Various coaching principles and techniques are studied: communication and motivation, talent identification, injury prevention and care, legal responsibilities of coaches and moral imperatives in the coaching of children. Class practicum, introspective written assignments and small group discussions are interspersed with brief lectures, videos and guest coach speakers. Addresses coaching certification requirements. Every year.

## HFS- 230S. Contemporary Issues in Sport Sociology and Sport Psychology. 4 credits.

Sport Sociology covers the following areas: the nature of sport, sport and social values, cultural variations in sport, socialization into sport, sport within educational institutions, social stratification and sport, the female athlete, race in sport, violence in sport, sport and the mass media, and the political economy of sport. Sport Psychology covers the following areas: motivation and achievement in sport, aggression in sport, social facilitation, anxiety in sport, children in sport, sport personology, arousal and activation levels and attention in sport. Writing intensive. Alternate years. This course may also be counted as an "L" course.

## HFS- 240. Sport in Culture. 4 credits.

At a time of major political and economic change in the world, this course will examine the nature and role of international sport in the emerging global village. Students will seek to uncover the unique elements of sport in the United States and to explain its appearance in terms of the nation's dominant system of cultural values. Sport will be placed against the broader, sometimes contradictory, backdrop of American culture. As well as the United States, sport will be analyzed in the following cultures: Japan, China, the "New Europe" (e.g., former Eastern Bloc), South Africa, New Zealand and the United Kingdom. A background in sociology and cultural studies would be beneficial, although not a requirement. Alternate years.

## HFS- 245H. History of Women in Sport. 4 credits.

This course studies the development of sport from early religious ritual to a modern corporate model in western society. The genesis and development of recreation, sport, and exercise for women has been influenced by religion, medicine, economics, polities, and ideology. The intersection of gender, race, and socioeconomic class for women of color is examined, as is the struggle by women for admission in the Olympics. Sport has served as a historical site for feminist transformation and the development of alternative western sport forms. Women have "dared to compete." The struggle of women to gain entry into sport is both sad and inspirational. Students write a sport autobiography, conduct cross-generation sport interviews, and research Wittenberg women's sport history. Every year.

## HFS- 250N. Nutrition. 4 credits.

This course will examine Nutrition as a key to health. It will cover basic human body function and nutritional needs in relation to macronutrients (i.e. carbohydrates, proteins, and fats), micronutrients (e.g. vitamins and minerals) and water. In addition, it will provide guidelines for designing a healthy diet. Emphasis will be placed on analysis of food intake as it relates to healthy body function and the relationship between sound nutrition and the prevention of disease. In addition to its scientific content, the course will examine relationships between science, health, and contemporary culture. Every year.

## HFS- 265. AIDS and Other Sexually Transmitted Diseases. 2 credits.

This course examines issues surrounding AIDS and other sexually transmitted diseases. It studies these diseases and their affects on the individual and society. Course content includes causes, symptoms, modes of transmission, social concerns, testing, counseling, legal issues, and support groups. Emphasis is placed on prevention strategies and healthy behaviors. Assessment for the course is by written tests, oral reports, specific article assignments, and class participation. Every third year.

## HFS 270. Care and Prevention of Sport Injuries. 2 credits.

This course will cover the basic principles in the prevention, recognition, evaluation, and treatment of athletic injuries and illness. Students will also learn the techniques used in taping,
bandaging, and strapping. Professional Rescuer CPR and Bloodborne and Airborne Pathogens certification will be included. No prerequisites.

## HFS 273. Motor Learning. 2 credits

Students will learn the major principles underlying the acquisition of motor skill and how control of skilled movements is gained, maintained, and adapted. This course covers the various ways that individuals learn to move, learn skilled actions, and how the principles of motor performance and learning can be useful in teaching, coaching, and rehabilitation. Prerequisite: HFS 170

## HFS 275. Biomechanics. 2 credits

The purpose of this course is to introduce students to concepts of mechanics as they apply to human movement, particularly those pertaining to exercise, sport, and physical activity. The student should gain an understanding of the mechanical and anatomical principles that govern human motion and develop the ability to link the structure of the human body with its function from a mechanical perspective. Prerequisite: HFS 170

## HFS- 280. Topics. 1-4 credits.

Topics of particular interest, such as alcohol and drugs, exercise physiology, sport in society, women's health issues, etc. Offered subject to sufficient student interest and availability of faculty. This course number (different topic) may be repeated for credit.

## HFS 301 Ethics in Sport Management - 4 credits

Our complex and rapidly changing environment imposes new demands on managers of sport organizations. Increased pressure to address ethical issues is one of the new demands. While there is no simple prescription describing how ethical issues should be dealt with, the purpose of this course is to explore how managers can more effectively address them. The course provides some essential components of the student's management tool kit - theories, concepts, models and techniques to use in managing ethical dilemmas. Writing Intensive

## HFS 370. Exercise Physiology. 4 credits

This course includes the study of how the body (sub-cell, cell, tissue, organ, system) responds in function and structure to 1) acute exercise stress, and 2) chronic physical activity. Aspects of chemistry, biology, and physics are integrated to explain biological events and their sites of occurrence in the human body as they affect exercise and training. The course includes the energy systems, neuromuscular concepts as applied to sports, and functions of the cardiovascular and respiratory systems during rest, steady state and exhaustive physical activity. Prerequisites: HFS 170 and 204; BIOL 125B

## HFS 373. Exercise Testing and Prescription. 4 credits

Application of exercise physiological concepts to exercise prescription and programming for individuals without disease or with controlled disease. Includes analysis of techniques used for health appraisal, risk stratification and fitness assessment, and evaluation of strategies used to promote physical activity. Prerequisite: HFS 370

## HFS 375. Exercise for Special Populations. 4 credits

This course examines basic epidemiology, ecology and pathophysiology of common disease states, and provides recommendations for exercise and concerns for diseased and other special populations requiring alterations to exercise prescription for normal populations. This course provides practical information on exercise for persons with a wide range of specific diseases and disabilities. This course is writing intensive. Prerequisite: HFS 373

## HFS 377. Principles of Strength and Conditioning. 4 credits.

This course includes critical evaluation of strength and conditioning concepts and the biomechanical and physiological analyses of various sport movements as they apply to strength and power exercises for sport training. Students are prepared to attempt the National Strength and Conditioning Association's certification exam. Prerequisite: HFS 370

## HFS 380 Applied Projects in Sport Management - 1-6 credits

Applied sport management credits are earned when a student participates in a faculty-guided, skills-based project. Although specific projects differ based on the needs of the client, each program has an experiential as well as an academic component. Courses may be taken for 1-6 credits; 4 credits are required for completion of the sport management major. The student is expected to budget a minimum of three hours per week for each credit earned. Each project has its own specific academic output. Some projects are group efforts; others require participation by individuals. The student may enroll for a maximum of six credits of Applied Projects in Sport Management during the Wittenberg career. Prerequisites for Applied Projects in Sport Management projects vary according to the project. Instructor is not responsible for securing the projects for students. If students do not present a project proposal, they will choose from a selection of instructor provided case studies/sport management projects to complete. This course may be repeated.

## HFS 401 Sport Management Policy - 4 credits

This is the capstone course in the sport management major. Students will examine the strategic direction of sport organizations, and how such strategic policies can be most effectively implemented. To make these decisions, managers must accurately assess threats and opportunities in the organization's environment and the organization's strengths and weaknesses. Students will examine business principles and practices within the context of professional leagues and collegiate sport, and address issues such as management, labor relations, marketing, communications, diversity and ethics. The course builds on knowledge that has been acquired throughout the major and challenges students to think about how critical issues affect sport
organizations. The models and perspectives to be reviewed are particularly relevant to the rapidly changing environment in which sport organizations currently find themselves. Prerequisites: HFS 150 Intro to Sport Management, HFS 222 Sport Marketing, HFS 223 Ethics in Sport Management, BUS 365 Leading and Managing Effective Organizations, ACCT 225 Financial Accounting.

## HFS 470. Senior Capstone. 2 credits

Exercise Science students will perform a capstone experience in their senior year. The experience can take the form of independent research or a project, and will provide significant learning experiences in problem solving and written and oral communication. This course is writing intensive.

## HFS- 490. Independent Study. 1-4 credits.

Individual research on a specialized topic or problem on some aspect of Health, Fitness or Sport. Permission required from the Chair. The study must be an outgrowth of a course taken in the department. A HFS faculty member must work closely with each student. This course may be repeated for credit. This course does not fulfill the General Education "P" requirement.

## HFS 491 - Senior Internship. 1-4 credits.

## History

Go to faculty and staff page.

## Requirements for Major

Thirty-six credits in History: twenty credits to include eight credits in 100-level, eight credits in 200-level and HIST 204; twelve credits at the 300-level; and HIST 411 (4 credits). Also required is a Foreign Language cognate consisting of four credits beyond the general education competency level. The Foreign Language cognate should not be taken pass/fail.

## Foreign Language Cognate

Course options as follows:

- CHIN 211 or higher (4 credits)
- FREN 260, 261, 262, 263, 264, 265 (2 credits each. Students must take 4 total credits)
- GERM 260, 261, 262, 263, 264, 265 (2 credits each. Students must take 4 total credits)
- JAPN 211or higher (4 credits)
- RUSS 260, 261, 262, 263, 266 (2 credits each. Students must take 4 total credits)
- SPAN 150 or higher (4 credits)

Note that students studying Latin, Greek, or languages not offered at Wittenberg may take an English-language culture or literature course in the Languages department to fulfill the requirement.

## Major Requirements for Students Seeking Integrated Social Studies Licensure

Thirty-six credits, distributed as follows: 106,121,122, 204,and one additional 200-level; twelve credits at the 300 -level, and 411 . One of these nine courses must examine the pre-modern era. These nine courses must also examine at least three continents (waived for students who complete 105 and 106). Along with these thirty-six credits in History, four credits at an intermediate level of foreign language is required. Note that this major is available only to students completing integrated social studies teaching licensure.

In addition to this major, a student seeking integrated social studies licensure must complete nine courses in Education (103 or 104, 112, 120, 304, 306, 312, 342, 349 and 495); three courses in Political Science (101, 102, one at the 200-level or above); and three courses from related social sciences (Economics 190S, Psychology 100, or Sociology 101, or 110). These requirements are subject to change, so consultation with the history and education departments is essential.

## Requirements for Minor

Twenty credits, chosen with the approval of a departmental adviser, at least eight of which are taken at the 100/200- level, and at least eight of which are taken at the 300/400-level.

## Course Listings

HIST- 101. Topics in History. 2 to 4 credits.
Topics in history. May be repeated for credit.
HIST- 105C/H. Pre-Modern World History. 4 credits.
Investigation of significant ideas, people, events and problems in the pre-modern world. Every year.

HIST- 106C/H. Modern World History. 4 credits.
Investigation of significant ideas, people, events and problems in the modern world. Every year.
HIST-110 C/H. Ancient Mediterranean Worlds. 2-4 credits
Course examines religious and philosophical thought, the evolution of language, the archaeology of urban and nomadic communities, and the political events that defined the empires of the ancient Mediterranean world. Alternate years.

## HIST- 111H. Medieval Europe. 4 credits.

Survey of important historical events, developments and people of medieval Europe from the end of the ancient world to 1500 . Every year.

## HIST- 112H. Modern Europe. 4 credits.

Survey of significant ideas, people, events and problems in European history from the 1500s to the present. Every year.

## HIST- 121H. United States History I. 4 credits.

Study of the United States from colonial times through Reconstruction. Every year.

## HIST- 122H. United States History II. 4 credits.

Study of the United States from Reconstruction to the present. Every year.
HIST- 126H. U.S. History from 1877 to 1945.4 credits.
Study of the United States from the end of Reconstruction through World War II. Alternate years.

## HIST- 127H. U.S. History since 1945.4 credits.

Study of the United States from World War II to the present. Every year.

## HIST- 130H. African American History. 4 credits.

Historical study of the African-American struggle for racial equality. Every year.

## HIST- 161C. Pre-Modern East Asia. 4 credits.

Survey of the history of East Asia's three major countries - China, Japan and Korea - from earliest times until the beginning of the 17th century. The focus is on culture and thought, as well as major political developments. Alternate years

## HIST- 162C. Modern East Asia. 4 credits.

Survey of the history of East Asia's three major countries - China, Japan, and Korea - from the 17th century to the present. The focus is on the response of these countries to the challenges of an increasingly global world. Alternate years.

## HIST- 170C. Topics in African History. 4 credits.

Exploration of various dimensions of African history. May be repeated for credit. Every year
HIST- 172C. African Societies Since 1500. 4 credits.
Course explores African political, cultural, religious, and economic institutions since 1500. Alternate years.

## HIST- 173C. History of South Africa. 4 credits.

Course considers the struggle for equality in South Africa from a historical perspective. Alternate years.

## HIST- 201. Topics in History 2-4 credits.

Topical approach to history. Some sections are writing intensive. May be repeated for credit.

## HIST 204 Topics in Historical Methods. 4 credits.

This topics course examines the historical discipline through the introduction to historical writing, historiography, and writing historical research papers. The course is required of all majors. Prerequisite: ENGL 101, Sophomore standing and History major. May be retaken for credit. Writing intensive. Offered every semester.

## HIST- 205C/H Topics in World History. 2-4 credits.

Topical studies in global history dedicated to specific interregional themes. Some sections are writing intensive. May be retaken for credit. Alternate years.

## HIST- 210H. Topics in the Ancient World. 2-4 credits.

Exploration of themes and regions in ancient and pre- modern history. Some sections are writing intensive. Recent topics include: Archaeology of the Near East; Monuments, Myths and Mummies of Ancient Egypt; Alexander the Great; The Persian and Greeks. Alternate years.

## HIST- 211H/R. History of Early Christianity. 2-4 credits.

This course explores major events and themes in the early history of Christianity in the Mediterranean world. Writing intensive. Alternate years.

## HIST- 212C/R. History of Early Islam. 2-4 credits.

This course explores major events and themes in the development of Islam within the Arabian Peninsula and it establishment of an empire throughout Afro-Eurasia from 550-1000 CE. Writing Intensive. Alternate years.

## HIST- 225H/R. Topics in Religious History. 2-4 credits.

Historical study of the interaction between religion and some other aspect of American Western culture, such as law, film or science. Some sections are writing intensive. May be repeated for credit. Alternate years.

## HIST- 229A. American Film. 4 credits.

Survey of American film and the film industry since the 1890s. Topics include the silent film era; the rise of the studio system and the Motion Picture Production Code; the end of the Code and the studio era; and contemporary American film. Some sections are writing intensive. Alternate years.

## HIST- 231S. American Constitutional Foundations. 4 credits.

Exploration of the ideas, issues and figures that formed and American constitutional law, with particular attention to the constitutional convention of 1787, the struggle over ratification of the constitution, the key precedents set by the Marshall Court, and the law of slavery.
Prerequisite: Sophomore standing or permission of instructor. Alternate years.

## HIST- 232S. Modern American Constitutional Law. 4 credits.

Study of the key cases and critical issues that have shaped modern constitutional law, with particular attention to the creation and role of the Fourteenth Amendment, civil liberties and
civil rights, federal regulatory power, and the law of war. Writing intensive.
Prerequisite: Sophomore standing or permission of instructor. Alternate years.

## HIST- 240H. Topics in Pre-Modern Europe. 2-4 credits

Exploration of themes and regions in European History up to 1500. Possible topics include: The Crusades, Medieval Eastern Europe, England from Arthur to Henry VII. Some sections are writing intensive. May be repeated for credit. Alternate years.

## HIST- 241H. Topics in Modern Europe. 2-4 credits.

Exploration of themes and regions in modern European History to the present. Possible topics include: Modern Britain, Modern Ireland, Modern France, Modern Germany, The Holocaust. Some sections are writing intensive. May be repeated for credit. Alternate years.

## HIST- 251H/C. Medieval Russia. 4 credits.

This course examines the birth of the eastern European state of Rus’ and its transformation into Russia, as well as its interactions with the medieval world around it including western Europe, the Mediterranean, and Central Asia. Alternate years.

## HIST- 252H/C. Imperial Russia. 4 credits.

This course examines the Russian Empire of the Romanovs from the seventeenth to the twentieth century, as well as situating Russia in larger world affairs. Alternate years.

## HIST- 253H/C. Soviet Russia 4 credits

This course examines the birth, rise, and fall of Soviet Russia over the course of the twentieth century, including the causes for its creation and its dramatic impact on the entire world. Alternate years.

## HIST- 270C. Topics in African History. 4 credits.

Exploration of various dimensions of African history. Some sections are writing intensive. May be retaken for credit. Alternate years.

## HIST- 281 C/R. Modern Middle East. 4 credits.

This course is a survey of the history of the Modern Middle East from the Ottoman and Safavid empires to the present. Writing intensive. Alternate years.

## HIST- 301. Topics in History. 2-4 credits.

Topical approach, focusing on a specific theme. Prerequisites vary by section. Writing intensive. Prerequisites: Junior Standing and one course in history; or permission of instructor. May be
repeated for credit. Alternate years.

## HIST- 302 Topics in Ancient History and Archaeology. 2-4 credits

Examination of physical and textual evidence for the history of ancient communities in AfroEurasia from prehistory to Late Antiquity. Topics include: Nomadic Archaeology, New Kingdom Egypt, Homer and the Greeks, The Persian Wars, Alexander the Great. Writing intensive. Prerequisites: Junior Standing and one course in history; or permission of instructor. May be repeated for credit. Alternate years.

## HIST- 303 Ancient and Pre-Modern Historians 2-4 credits

Textual analysis of ancient and pre-modern history through the examination of select ancient historians. Writing intensive. Prerequisites: Junior Standing and one course in history; or permission of instructor. May be repeated for credit. Alternate years.

## HIST- 304 Topics in Late Antiquity. 2-4 credits

Exploration of selected topics in Late Antiquity in Afro-Eurasia. Writing intensive. Prerequisites: Junior Standing and one course in history; or permission of instructor. May be repeated for credit. Alternate years.

## HIST- 305 Archaeological Field Methods. 2-4 credits

Introduction to theoretical and practical application of archaeological field methods with daily fieldwork at an excavation site. Some sections may be writing intensive. Prerequisites: One course in history or ARCH 103; or permission of instructor. Every year.

## HIST- 306. Byzantium: The Mediterranean Empire. 2-4 credits.

This course explores major events and themes in the history of the Byzantine Empire in the Mediterranean world. Themes will include examination of Christian thought, the role of women and minorities in the church, the evolution of the canon, the art and archaeology of Christian communities, and the major ecclesiastical events that defined the early church such as the age of martyrs, the adoption of Christianity by Constantine and the divergent Christian beliefs which challenged the authority of the church. Prerequisites: Junior Standing and one course in history; or permission of instructor. Writing Intensive. Alternate years.

## HIST- 309. Eurasian Nomads in the Ancient and Medieval World. 4 credits

Eurasian nomads are part of a variety of histories and historiographies in China, Russia, India, the Middle East, and Europe. But in every one of those cases they primarily exist as an "other," the "outsider" who raids the settled empire, the "barbarian" who ravages civilization. This class will attempt to change that perspective and focus on the nomads themselves as the actors. Over the course of the semester the class will acquire an understanding of nomadic society and traditions, as well as the various cultures involved in the regions and periods under consideration. In class, we will cover four separate nomadic groups (Xiongnu, Huns, Turks, and Mongols), and in groups
students will do in-depth research on one particular steppe culture or people and present that material to the class, with the goal of helping to understand who these Eurasian nomad are, why they acted the way they did, and why history and historians traditionally portray them negatively. Prerequisites: Junior Standing; and one class in History; or permission of instructor. Writing Intensive. Alternate years.

## HIST- 310: Topics in Pre Modern European History. 2-4 credits

In depth analysis of themes and regions in European History up to 1500. Possible topics include: The Crusades, The Carolingians, Medieval Women, and The Medieval Family. May be repeated for credit. Prerequisites: Prerequisites: Junior Standing; and one class in History; or permission of instructor. May be repeated for credit. Writing Intensive. Alternate years.

## HIST- 311: The Viking World. 4 credits.

The Vikings occupy an important place in European, and indeed, Eurasian history. From their first recorded attack on Lindisfarne in 793, the Vikings roamed the Baltic and North Seas, continental Europe, the Mediterranean, the eastern European river systems, and even the Caspian and Black Seas. In their travels they met peoples of various faiths and origins, and traded with and raided them all equally. This course will explore the initial outburst of Viking expansion beginning in the late eighth century, look at the way Vikings lived at home and abroad, and will also examine the effect Vikings had on the various places they visited. We will also address the place of women in Viking society and study the Icelandic sagas that have survived to this day as a view to what they can tell us about Viking life and practices. The course will conclude with the creation of Scandinavian kingdoms and empires, such as those of King Cnut and Harald Hardrada. Prerequisites: Junior Standing; One Class in History; Writing Intensive. Alternate years.

## HIST- 312: The Age of Cathedrals. 4 credits.

Walk inside any medieval cathedral and you are automatically transported to a different place and time. The soaring vaults and jewel-like stained class create a space unlike any other. But cathedrals are more than pretty spaces. They are complex cultural artifacts and can tell us much about the society that produced them. The goal of this class is to examine the social, political, economic and cultural developments of the society that built such wonderful monuments. Students will learn to "read" cathedrals for insight into the mental, religious and cultural realities of the eleventh and twelfth centuries. Prerequisites: Junior Standing; One Class in History; Writing Intensive. Alternate years.

## HIST- 313: Living in Medieval England. 4 credits.

History consists of the threads of individual lives, woven together to make up the fabric of the past. Historical biography remains one of the most popular forms of history writing. This course concentrates on the biography - individual and collective - of the people who lived in medieval England. Students will examine the lives of medieval people ranging from the humblest of peasants to the mightiest of kings. Not only will the course consider how modern scholars have
crafted the lives of medieval people, but it will also examine how medieval people themselves recorded the lives of their contemporaries. Prerequisites: Junior Standing; One Class in History; Writing Intensive. Alternate years.

## HIST- 314. Topics in Renaissance and Reformation. 4 credits.

Examination of various themes and debates in Renaissance and/or Reformation history. Writing intensive. Prerequisites: Junior Standing; One Class in History; Writing Intensive. Alternate years.

## HIST- 322. Revolutionary America. 4 credits.

Advanced study of the origins of the rebellion, the course of the war, the evolution of national and local governments, and the Revolution's impact on American society. Prerequisite: Junior standing and one course in history; or permission of instructor. Writing intensive. Alternate years.

## HIST- 325. Topics in the History of U.S. Foreign Relations. 2-4 credits

Exploration of selected topics in the U.S. diplomatic history and/or the history of U.S. diplomatic relationships with various regions of the world from the middle of the nineteenth century to the present. Topics include: Wars in Iraq and Afghanistan; The Cold War; U.S. Imperialism. Writing intensive. Prerequisites: Junior. standing; and one course in History; or permission of instructor. May be repeated for credit. Alternate years.

## HIST- 370. Topics in African History. 4 credits.

Exploration of various themes and debates in African history. Topics may include: Migrant Labor \& HIV/AIDS; History of Western Development in Africa; and Labor, Liquor \& Lust. Writing intensive. Prerequisites: one course in history or permission of instructor. May be repeated for credit. Alternate years.

## HIST- 372. Race in the United States and South Africa. 4 credits.

This class will focus on the political, economic, and cultural reasons behind the construction of racially discriminatory systems in the United States and in South Africa. White settlers in both the United States and South Africa turned to the use of slaves; why did they do this and how did they justify it? After the abolition of slavery, each society developed new economic structures along with new forms of institutionalized segregation. By comparing the institutionalization of racism in both countries, students will gain a better understanding of why these systems emerge and how they function. Writing intensive. Prerequisite: one course in history or permission of instructor. Alternate years.

## HIST- 380. Topics in Public History. 4 credits.

Topics in various aspects of public or applied history, such as archival management, historic preservation and museum studies. Prerequisite: Junior standing and one course in
history; or permission of instructor. May be retaken for credit. Writing intensive. Alternate years.

## HIST- 411. Senior Seminar: the Study of History. 4 credits.

As the capstone to the major, HIST 411 requires students to undertake a major research project based upon work undertaken likely in a 300 level history course, along with presentation of the research to the history faculty. Prerequisites: HIST 204 at least 8 credits of 300 level history courses and history major. Writing Intensive. Every year.

HIST- 490. Independent Study. 1-4 credits.
Prerequisite: Instructor’s permission. Every year. This course may be repeated for credit.

## HIST- 491. Internship. 1-4 credits.

Prerequisite: Instructor’s permission. Every year. This course may be repeated for credit.

## HIST- 492. Directed Research. 1-4 credits.

Primary and/or secondary research done under the supervision of a member of the department. Prerequisites: History 202 and 203 and permission of the instructor. May be repeated for credit.

HIST- 499. Honors Thesis/Project. 0-4 credits.
Prerequisite: 3.50 GPA and permission of the Department Chair.

## International Studies

The major in International Studies (INTL) offers five tracks for students to choose from

- Track I: Diplomacy
- Track II: International Economics
- Track III: Global Issues and Cultures
- Track IV: Africana and Diaspora Studies
- Track V: Peace Corps Preparations

Wittenberg’s International Studies major also requires significant foreign language study (16 credits beyond 112, university requirement). Please see information on Culture and Language across the Curriculum:

## http://www5.wittenberg.edu/academics/international_studies/clac.html

International Studies majors are expected to acquire international experience before graduation. For most students this will be a study-abroad program, but could also include significant work with an immigrant community (Somali, Brazilian, Mexican and Central American communities in the local area), or an internship with an international organization. Any one of the three major tracks will prepare students for $21^{\text {st }}$ century, global workplace.

## Major Requirements

All International Studies students must take following classes (16 credits), which also fulfil current General Education requirements.

Economics 110 (only when offered as Global Economics)
or
Economics 190 (S) Principles of Economics
History 106 (H) The Modern World
Political Science 251 (S) International Relations

All International Studies students must take the capstone seminar in either their junior or senior year:

## International Studies 495

## Track I: Diplomacy Track

Students in the Diplomacy Track (I) must also complete 16 credits from among the following:
History 325-Topics in U.S. Diplomacy
Political Science 350-American Foreign Policy
Political Science 352—Russian Foreign Policy

Political Science 354-Chinese Foreign Policy
Political Science 355-East Asian Foreign Relations
One related class from either Track II or Track III or INTL 490 or INTL 491 (determined through consultation with the student's advisor)

## Track II: International Economics Track

Students in the International Economics Track (II) must also complete the following:
Economics 330-International Trade and Finance
Business 250-International Business
8 credits of work from among the following courses:
Political Science 259—International Political Economy
Sociology 290-Global Change
Philosophy 306-Ethics of Economic Development
One related class from either Track I or Track III or INTL 490 or INTL 491 (determined through consultation with the student's advisor)

## Track III: Global Issues and Cultures Track

Students in the Global Issues and Cultures Track (III) must complete the following:
Sociology 290-Global Change
International Studies 300-Topics in Global Issues (or other class approved by advisor or program director)

Additionally, students in Track III must choose:

## 2 Focus courses for 8 credits

Each student prepares a proposal identifying a focus for the Global Issues and Cultures Track, containing the two courses that provide such a focus. These courses may be completed while the student studies abroad. All focus courses must be approved by the academic advisor for Track III. Focus courses will vary according to student interest. Please see the director or faculty advisors for more information and examples.

## Track IV: African and Diaspora Studies

Students in the African Diaspora Studies track will focus on the continent of Africa and its Diasporas in Europe, Asia and the Americas. The African Diaspora will be studied through intense analysis of issues of race, class, gender, culture, migration, emigration, economics, politics, history, the arts, literature, and global citizenship. The African Diaspora study will extend beyond America, but maintain a rooted history in the American struggle with racism post-
slavery, noting that scholars of the African Diaspora in the Americas move across global boundaries and make connections with the continent of Africa especially and the world in general.

Students in African and Diaspora Studies Track IV will complete 16 credits in approved courses related to African and Diaspora Studies. (Students who major in International Studies Track IV cannot also minor in African and Diaspora Studies.) All students will take:

Introduction to African and Diaspora Studies (old Africana Studies AFST 201; 4 credits)
At least 4 credits of history (not including HIST 106) 12 credits from the approved course list for Track IV 201. Introduction to Africana Studies. 4 credits.

## English

180A. Slave Narrative. 4 credits.
190A/C. Afro-Caribbean Studies. 4 credits.
190 A/C/ Black Britain 4 credits.
313. African American Literature (20th century). 4 credits.

History
170C. Topics in African History. 4 credits.
171C/H. African Societies to 1500.4 credits.
172C. African Societies Since 1500. 4 credits.
230H. African American History. 4 credits.
270. Topics in African History. 4 credits.
370. Topics in African History 4 credits.

Music
113A. Jazz Styles. 4 credits.
Political Science
234S. Black Politics. 4 credits.
Philosophy
204. Philosophy of Women’s Lives. 4 credits
304. Knowing Bodies. 4 credits

## Religion

176H. Racism and Social Ethics. 4 credits.
375R. Advanced Social Ethics: Racism. 4 credits.
Sociology
277C/R. Islam and Islamic Societies. 4 credits.
301S. African American Social Thought
Spanish

130A. Caribbean Literature. 4 credits.
Theatre \& Dance
112A. Dance in Popular Culture. 4 credits.
210C. Dance Ethnology. 4 credits.
At least six credits of the total required course work must be at the 200 level or higher

## Track V: Peace Corps Preparations

Students in the Peace Corps Preparations (V) must also complete the following:
Students interested in any form of international service will benefit from this track in the International Studies major. Successful completion does not guarantee acceptance into the Peace Corps, but does seek to ensure that students will have completed important requirements and service experiences, which should be to their advantage in the application process. Completion of Track V is not required for application to the Peace Corps; students completing any major may apply. Such students may count on, and are encouraged to seek assistance with their applications from the Track V adviser.
A. All students interested in the Peace Corps Preparation Studies Track (V) will complete the following core requirements (16 credits) in:

Econ 110 (when offered as International Economics) (4 credits)
Or
Econ 190 (4 credits)
History 106 (4 credits)
Political Science 251 (4 credits)
They will also complete INTL 495, the capstone seminar, either junior or senior year. (4 credits)
All Track V students will also complete 16 credits of a foreign language beyond the 112-level, and may take advantage of CLAC offerings.
B. Track V: Peace Corps Preparation Studies (16 credits). Students will also complete:

4 credits in: Political Science 259 International Political Economy 4 credits. 4 credits in: Business 250 International Business 4 credits.
Or
Economics 220 Economics of Developing Areas 4 credits.
8 credits in Global Issues and Cultures: Sociology Global Change 4 credits
Elective 4 credits Elective class will require advisor approval.

## Other program requirements:

Students in Track V are encouraged to partake in a study abroad experience, emphasizing immersion in a different culture.
Students in Track V must engage in significant community service ( 90 hrs .) beyond the university requirement; these 90 hrs. may include service learning.

Track V director will maintain records and monitor such endeavors
Minor Requirements
12 credits from among the core requirements:
Political Science 251
History 106
Economics 110—The Global Economy; or
Economics 190
8 credits from only one of the three tracks
Minors are encouraged to complete a significant academic experience abroad and must complete: 8 credits in a foreign language above the 112 level.

## Course Listings

ECON 110. Topics: International Economics 4 credits
ECON 190S. Principles of Economics 4 credits.
ECON 330. International Trade and Finance 4 credits.
HIST 106C/H. Modern World 4 credits.
HIST 325. Topics in Diplomacy: The Wars in Iraq and Afghanistan 4 v.
POLI 350. American Foreign Policy 4 credits.

## Languages

Go to faculty and staff page.
All incoming first-year students are required to take the language placement examinations, which may be taken either over the summer or during New Student Days.

Chinese Minor: The minor in Chinese is for students who want to attain a solid foundation in the Chinese language and culture and to be able to thrive in a Chinese language environment. This goal is achieved through study at Wittenberg supported when possible by study abroad in China.

Requirements: Completion of Chinese 112 (Elementary Chinese II), or placement, is a prerequisite for entering the minor. A total of at least 20 additional credits is required for completion of the minor, 16 of them from Chinese language study and 4 of them from other areas of Chinese studies.

Language Study (16 credits): Two full years of Chinese language study beyond Chinese 112 (Elementary Chinese II). Students are encouraged to study abroad in China, and up to two language classes taken in China may be accepted for the minor. Sixteen credits of Chinese language courses can be obtained by taking Chinese 211 (Intermediate Chinese I; 4 credits), Chinese 212 (Intermediate Chinese II; 4 credits), Chinese 311 Directed Readings: Newspapers; 4 credits), Chinese 312 (Directed Readings: Literature; 4 credits).

Chinese Area Studies (4 credits): In addition to language study, students are required to take one 4 credits course from the disciplinary areas of Literature, Theatre and Dance, History, Political Science, Religion or Sociology that is solely focused on the study of China. East Asian Studies courses in another discipline may be substituted upon consultation with the Chinese minor faculty.

## FRENCH — Requirements for Major

Required in French
Requirements: All six 2-credit, half-semester courses (FREN 260-265), three 300-level courses, either one additional four-credit course at the 300- or 400-level or four 1-credit modules of FREN 270/370 in the Cultures and Languages Across the Curriculum (CLAC) program and two 400level courses: 36 credits

The Cultures and Languages Across the Curriculum (CLAC) option: Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of
knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a nonlanguage course offering the Cultures and Languages Across the Curriculum option.

## French Minor

Requirements: Four 200-level courses, two 300-level courses and one 400-level course (not the senior seminar); 20 credits

## GERMAN — Requirements for Major

Thirty-four credits beyond 112 including: at least eight at the 200-level taught in German, eight at the 300 -level, and German 410 in the junior or senior year.

Recommended in the Department of Foreign Languages and Literatures:
At least eight credits in another language. Whenever possible, these should be above the 112 level.

Recommended in Other Departments:
Related courses in Art, English, History, International Studies Music, Philosophy, Political Science, and Religion and Theatre.

## GERMAN - Requirements for Minor

At least 20 credits beyond 112. Each student minoring in German is required to design the minor in consultation with the department.

Licensure for Teaching in German
Students interested in pursuing a course of study leading to a license to teach German should contact their adviser or the Education Department for specific requirements.

## RUSSIAN - Requirements for Minor

The minor will consist of 20 credits chosen from the following courses. Russian 112-Beginning Russian II is the prerequisite for courses on the 200-level, or by placement exam.
I. Ten credits from the following two credits courses :

Russian 260: Contemporary Issues (offered yearly)
Russian 263: Culture and Film (offered yearly)
Russian 264: Voices from the Past (offered alternate spring semester)
Russian 266: Russian Speech Etiquette (offered alternate years)
Russian 262: Art of Translation (offered yearly)
Russian 230: Topics in Russian language 1-4 sem. credits
II. Four credits of courses on the 300-level or above :( Four of which may be taken by Study Abroad):
Russian 316: Cultural Traditions 2 credits
Russian 317: National Identity 2 credits
Russian 300: Topics in Russian Language
Russian 490: Independent Study
III. One credit of Russian 270: CLAC (Culture and Language across the Curriculum)

One credit of Russian 370: CLAC (Culture and Language across the Curriculum)
IV. Four credits chosen from:

Russian 130: Topics in Translation
History 251: History of Russia to 1796
History 252: History of Russia from 1796
History 212: Topics in Russian History as appropriate (Medieval History of Eastern Europe, etc.)
Political Science 204: Russian Politics and Society
Political Science 352: Russian Foreign Policy
Sociology 390: Russian and Central Eurasian Societies
Economics 231: European Economic History Prerequisite: Economics 190
Economics 275: Economies in Transition Prerequisite: Economics 190

## SPANISH - Requirements for Major

Required in Spanish
12 credits at the 200 level, including Spanish 264 and 265
12 credits at the 300 level, including Spanish 301 or 302
12 credits at the 400 level,
Spanish 301 or 302, and at least one 400-level course must be completed at Wittenberg. All coursework for the major must be taught in Spanish. To successfully complete the Spanish major, students turn in a final portfolio by the end of their spring semester, senior year.

## SPANISH - Requirements for the Minor

12 credits at the 200 level, including Spanish 264 and 265, 8 credits at the 300 level or higher. All coursework for the minor must be taught in Spanish. Students may only take classes for the minor using the pass-fail option with the instructor's permission.

## Licensure for Teaching in Spanish

Students interested in pursuing a course of study leading to a license to teach Spanish should contact their adviser or the Education Department for specific requirements.

## Chinese

## Course Listings

## CHIN- 100A/C Introduction to Chinese Culture. 4 credits.

Introduction to Chinese culture from ancient to modern times, aiming at providing students with fundamental knowledge of this Asian civilization. Students will learn aspects of Chinese history, literature, art, philosophy, religion and government by reading primary sources in English translations. Taught in English. No prerequisites. Every year.

## CHIN- 111. Beginning Chinese I. 4 credits.

Introduction to spoken Putonghua and the Chinese writing system. Mastery of 250 characters and compounds expected. Every year.

CHIN- 112F. Beginning Chinese II. 4 credits.
Continuation of 111. Mastery of another 300 characters and compounds expected. Prerequisite: Chinese 111 or its equivalent. Every year.

## CHIN- 130. Chinese Topics. 4 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English, reading in English. Some sections are writing intensive. This course may be repeated for credit.

## CHIN- 151. Modern Chinese Film and Fiction. 4 credits.

Survey of film and fiction in 20th century China. Intended for students with no previous knowledge of the subject matter. Taught in English. Every year.

## CHIN- 211F. Intermediate Chinese I. 4 credits.

Emphasis on vocabulary acquisition and grammatical competency. Classes are conducted in spoken Putonghua. 90 minutes of independent work in the Foreign Language Learning Center are required. Prerequisite: Chinese 112F. Every year.

CHIN- 212. Intermediate Chinese II. 4 credits.
Continuation of 211F. 90 minutes of independent work in the Foreign Language Learning Center are required. Prerequisite: Chinese 211F. Every year.

## CHIN- 230. Chinese Topics. 1-6 credits.

## Students may be awarded 5 or 6 credits for study abroad only.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English or Chinese as designed by the instructor. Some sections may be writing intensive. Offered as need arises. This course may be repeated for credit.

## CHIN- 241: Foreign Language Learning Center Tutor Training. 2 credits.

This two-credit, half semester course is designed to train incoming and potential foreign language tutors for employment in Wittenberg’s Foreign Language Learning Center (FLLC). Students who complete the course will receive a certificate from the College Reading and Learning Association stating that they are certified level 2 tutors. This course is mandatory for employment in the FLLC. Every year. There are no course prerequisites for this course, but students must be recommended by a language faculty member.

## CHIN- 270: Cultures and Languages Across the Curriculum Module. 1 credit

Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## CHIN- 311. Directed Reading of Chinese Newspapers. 4 credits.

Emphasis on tactics and skills of reading Chinese newspapers. Class work is conducted in Chinese. Prerequisite: Chinese 212 or permission of instructor. Every year.

## CHIN- 312. Directed Readings of Chinese Literature. 4 credits.

Intensive study of pieces representative of Republican and Communist style literature. Focus primarily on modern fiction. Prerequisite: Chinese 311 or permission of instructor. Every year.

## CHIN- 330. Chinese Topics. 4 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English, readings in English. May be writing intensive. Offered as need arises. This course may be repeated for credit.

## CHIN- 370: Cultures and Languages Across the Curriculum Module. 1 credit

Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## CHIN- 380. Methods for Teaching World Language (K-12). 2 credits.

Course to acquire an understanding of the history and rationale for world language instruction and of the relationship between theories of language and learning and classroom practice. The students learn to plan, implement, and evaluate language instruction for students at the middle and secondary school levels, and to enrich curriculum content to promote appreciation of the customs, values and history of other cultures. Prerequisites: 8 credits at the 200-level taught in the target language. Alternate years.

## CHIN- 430. Chinese Topics. 1-6 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in Chinese, readings in Chinese; English may be used for translation. May be writing intensive. Prerequisite: Chinese 311/312 or permission of instructor. Offered as need arises. This course may be repeated for credit. Students may be awarded 5 or 6 credits for study abroad only.

## CHIN- 490. Independent Study. 4 credits.

Tutorials for the student who has excelled in previous study of putonghua. Thematic content chosen according to student's intellectual interests. Conducted entirely in putonghua. Every year. This course may be repeated for credit.

## CHIN- 491. Internship. 1-4 credits.

## French

## Course Listings

FREN- 111. Beginning French I. 4 credits.
Emphasis on elementary grammar, vocabulary building, reading, writing, speaking, listening comprehension, and francophone cultures. Open only to beginners except by permission. Offered at least every other year. 90 minutes attendance required weekly in the Foreign Language Learning Center.

## FREN- 112F. Beginning French II. 4 credits.

A continuation of FREN 111. Emphasis on elementary grammar, vocabulary building, reading, writing, speaking, listening comprehension, and francophone cultures. Prerequisite: French 111 or placement. Offered every semester. 90 minutes attendance required weekly in the Foreign Language Learning Center. This course satisfies the university's general education requirement for Foreign Language.

## FREN- 140A. Themes of Francophone Literature. 2-4 credits.

The course introduces students to francophone literary traditions. Representative works are studied and discussed. Lectures, readings and discussions are in English. Some sections are writing intensive. Every year.

## FREN- 230. French Topics. 1-6 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English or in French, as designated by the instructor. Some sections may be writing intensive. Offered as need arises. This course may be repeated for credit. Students may be awarded 5 or 6 credits for study abroad only.

FREN- 241. Foreign Language Learning Center Tutor Training. 2 credits.
This two-credit, half semester course is designed to train incoming and potential foreign language tutors for employment in Wittenberg's Foreign Language Learning Center (FLLC). Students who complete the course will receive a certificate from the College Reading and Learning Association stating that they are certified level 2 tutors. This course is mandatory for employment in the FLLC. Every year. There are no course prerequisites for this course, but students must be recommended by a language faculty member.

FREN- 260A. La Vie contemporaine des francophones (Contemporary Francophone Culture). 2 credits

Consideration of topics in contemporary life in francophone cultures with a focus on conversation, including study of practical vocabulary of daily life, and grammar review. Taught in French. Prerequisite: French 112 or placement. Offered alternate years.

FREN- 261F. L'Environnement naturel du monde francophone (The Natural Environment of the Francophone World): 2 credits.

This is a content-based reading and conversation course that focuses on the role of the natural environment in the lives of Francophones; it explores some of the distinctive ways in which French-speaking people around the world express their regard and concern for the natural world. Prerequisite: successful completion of FREN 112 or placement. Offered alternate years.

FREN- 262A. La Traduction : théorie et pratique ; (Translation : Theory and Practice). 2 credits

This course will examine the theory behind the approaches to translation as well as offering students practical experience in translating from English to French and from French to English. Prerequisite: French 112 or placement. Offered alternate years.

FREN- 263F. La Culture et le film francophones (Francophone culture and film): $\mathbf{2}$ credits
This is a content-based conversation course that uses the medium of film to explore various aspects of French culture and history. Prerequisite: successful completion of French 112 or placement. Offered alternate years.

FREN- 264H. Moments de l'histoire francophone (Highlights of francophone history): 2 credits

This is a content-based course that offers a general overview of French history from the Roman conquest to the Fifth Republic and the end of the colonial empire. Prerequisite: successful completion of French 112 or placement. Offered alternate years.

FREN- 265H. Qui sont les Français ? L’Identité nationale (Who are the French ? National Identity): 2 credits

Consideration of topics in contemporary French culture, including study of comparative cultures, national identity and educational institutions today. Taught in French. Prerequisite: French 112 or placement. Offered alternate years.

## FREN- 270. Cultures and Languages Across the Curriculum Module. 1 credit

Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## FREN- 303A. Panorama de la littérature française, 4 credits

Survey of major writers in French literature from the medieval period through the 20th century. Taught in French. Prerequisite: 4 credits at the 200-level. Taught every third semester.

## FREN- 304H. Histoire française/philosophie européenne, 4 credits.

This is a content-based course that explores the relationship between European philosophy and continental French history. Prerequisite: 4 credits at the 200-level. Offered every third semester.

## FREN- 305A. Traduction et stylistique, 4 credits.

This course focuses mainly on literary translation as a mechanism for examining principles of grammar and style in French and English. Prerequisite: 4 credits at the 200-level. Offered every third semester.

## FREN- 330. French Topics. 4 credits.

Study of special subjects, chosen by the instructor and described in the course schedule each term. Some sections writing intensive. Offered as need arises. This course may be repeated for credit.

## FREN- 370. Cultures and Languages Across the Curriculum Module. 1 credits

Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of
language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## FREN- 380. Methods for Teaching World Language (K-12). 2 credits.

Course to acquire an understanding of the history and rationale for world language instruction and of the relationship between theories of language and learning and classroom practice. The students learn to plan, implement, and evaluate language instruction for students at the middle and secondary school levels, and to enrich curriculum content to promote appreciation of the customs, values and history of other cultures. Prerequisites: 8 credits at the 200 -level taught in the target language. Alternate years.

## FREN- 401. Thèmes dans la littérature française, 4 credits

Study of special subjects, chosen by the instructor and described in the course schedule each semester. Taught in French. Offered every other year. Prerequisite: 4 credits at the 300 -level or permission of instructor.

## FREN- 402. Thèmes de la culture francophone : $\mathbf{4}$ credits

Themes in French culture. This course addresses various aspects of francophone culture using materials deriving from political science, geography, sociology and anthropology. Actual themes will vary from year to year, and will range from globalization to political wrangling, French style. Taught in French. Prerequisite: 4 credits at the 300- level. Offered alternate years.

## FREN- 403R. Thèmes dans l'histoire intellectuelle française, 4 credits.

This is a content-based course that addresses various aspects of French intellectual history using materials drawn from a number of academic disciplines. Actual topics will vary from year to year, and can range from "Literature and the Plastic Arts in Nineteenth- Century France" to "Existentialism and Twentieth Century French Film." Prerequisite: 4 credits at the 300 -level. Offered alternate years.

## FREN- 490. Independent Study. 1-4 credits.

This course may be repeated for credit.
FREN- 491. Internship. 1-4 credits.
This course may be repeated for credit.

## FREN- 495. Field experience in World Language Education. 2 credits.

A half-semester field experience of observation and supervised teaching of Spanish at the high school level. Open to French, German, and Spanish majors accepted in a teaching licensure program. Prerequisites: 8 credits in coursework taught in the target language at the 200-level. Must be taken concurrently with FREN 380. Alternate years.

FREN- 499. Honors Thesis/Project. 1-4 credits.
Prerequisite: 3.50 GPA and permission of the Department Chair.

## German

## Course Listings

## GERM- 105. German for Professionals I. 4 credits.

The foundation course of the two-course series designed to meet the needs of professional learners by allowing them to demonstrate competency in German while incorporating their professional interests into their language learning. The course and classroom experience are designed to accommodate the lifestyle of students in the Community Education program. Enrollment is limited to students in the School of Community Education.

GERM- 107. Elementary German I in Lutherstadt Wittenberg. 4 credits.
Guided in large measure by the same set of learning outcomes that define German 111, German 107 is offered "on site" and employs specially targeted communicative strategies to provide students with the skills necessary for basic day-to-day linguistic survival in Germany. There are no prerequisites for this course.

GERM- 108F. Elementary German II in Lutherstadt Wittenberg. 2 credits.
Offered as a tutorial, German 108 employs similar communicative strategies to those defining German 107, but makes use of materials designed exclusively to prepare students for the Council of Europe A2 (or novice-high) competency exam. Prerequisite: Successful completion of German 107 or permission of the instructor.

## GERM- 111. Beginning German I. 4 credits.

Fundamentals of grammar, pronunciation, oral practice and laboratory work. Also a basic introduction to German culture. Open to only the beginner, except by permission of instructor. Every year.

## GERM- 112F. Beginning German II. 4 credits.

Explication of grammar, continued oral practice, reading of literary and/or cultural texts and related explication of grammar and laboratory work. Prerequisite: German 111 or equivalent. Every year.

## GERM- 140A. Traditions in German Literature. 4 credits.

The course introduces students to the literary traditions of German speaking Europe. Representative works are studied and discussed. Lectures, readings and discussions are in English. The course serves to acquaint students with the aesthetic and cultural dimensions of the literary work of art

## GERM- 230. German Topics. 1-6 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English or in German, as designated by the instructor. Some sections may be writing intensive. Offered as need arises. This course may be repeated for credit. Students may be awarded 5 or 6 credits for study abroad only

## GERM- 241. Foreign Language Learning Center Tutor Training. 2 credits.

This two-credit, half semester course is designed to train incoming and potential foreign language tutors for employment in Wittenberg's Foreign Language Learning Center (FLLC). Students who complete the course will receive a certificate from the College Reading and Learning Association stating that they are certified level 2 tutors. This course is mandatory for employment in the FLLC. Every year. There are no course prerequisites for this course, but students must be recommended by a language faculty member.

## GERM- 260F. Aktuelle Fragen der Kultur und Politik (Contemporary Cultural and Political Issues): 2 credits

This is a content-based reading and composition course that explores a number of social issues central to the lives of contemporary Germans; it aims to focus on those issues that are distinctively German as well as those more universal concerns that are approached in a distinctively German manner. Prerequisite: successful completion of German 112 or placement. Alternate years.

## GERM- 261F. Umwelt: Natur und Kultur (Environment: Nature and Culture): 2 credits

This is a content-based reading and conversation course that focuses on the role of the natural environment in the lives of contemporary Germans; it explores some of the distinctive ways in which those Germans express their regard and concern for the natural world. Prerequisite: successful completion of German 112 or placement. Alternate years.

## GERM- 262F. Einführung in die Kunst des Übersetzens (Introduction to the Art of Translation) 2 credits

An introduction to the theory and practice of good translation, including a consideration of the demands of translating different types of texts and a consideration of the broader cultural issues inherent in the practice of translation. Review of advanced grammar topics as well. Alternate years. Prerequisite : German 112 or placement at the 200 -level.

## GERM- 263F. Film und Kultur (Film and Culture): 2 credits

This is a content-based composition and conversation course that uses the medium of film to explore German culture at various points in its evolution over the past one hundred years. In so far as the setting for each of the movies highlighted below is Berlin, the current manifestation of
the course provides historical and contemporary portraits of the German capital in particular. Prerequisite: successful completion of German 112 or placement. Alternate years.

## GERM- 264F. Deutsche Geschichte und historische Quellen (German History and Historical Sources) 2 credits

Through the study of German, students will read and discuss texts and films that narrate German history and become conversant with major historical events in German-speaking Europe. The course will also help students work on language skills necessary for narrating past events. Alternate years. Prerequisite: German 112 or Placement at the 200-Level

## GERM- 265F. Nationale Identität und kulturelle Vielfalt (National Identity and Cultural Diversity) 2 credits

Through readings, film, and discussion, students study the histories that have shaped German identity in the twentieth and twenty-first century and which shape contemporary discussions of pluralism in German-speaking Europe. The course also focuses on developing the language skills necessary to engage in basic research and discussion of these issues. Alternate years. Prerequisite : German 112 or placement at the 200-level.

## GERM- 270. Cultures and Languages Across the Curriculum Module. 1 credit

Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## GERM- 275A. Germans and Jews: Culture, Identity and Difference. 4 credits.

Study of the issues that have characterized the history of German Jewry in its relationship to German Christendom, focusing on the period from the Enlightenment to the aftermath of the Holocaust. Consideration of the problems of cultural difference, assimilation, European identity and discrimination as reflected in the cultural imagination. Writing intensive. Alternate years.

## GERM- 380. Methods for Teaching World Language (K-12). 2 credits.

Course to acquire an understanding of the history and rationale for world language instruction and of the relationship between theories of language and learning and classroom practice. The
students learn to plan, implement, and evaluate language instruction for students at the middle and secondary school levels, and to enrich curriculum content to promote appreciation of the customs, values and history of other cultures. Prerequisites: 8 credits at the 200-level taught in the target language. Alternate years.

## GERM- 360. "Vom Stasiland zur Ostalgie" [From Stasiland to Ostalgia]. 4 credits.

With a focus on the new German states (i.e., those of the former German Democratic Republic), this course examines some of the major cultural responses to the social and political realities of life in Germany since the fall of the Berlin Wall. It explores issues of "cultural memory" as well as some of the consequences of so-called "reunification" for contemporary Germany. Writing intensive. Prerequisite: At least eight credits in German at the 200-level or permission of instructor.

GERM- 362R. Naturwissenschaften und Mythos: die Nachtseite der Naturwissenschaften (Natural Sciences and Mythos - Science and Imagination). 4 credits.

The course explores the connections between natural sciences and culture, emphasizing ways in which scientific advances both influence and reflect cultural developments. Students will explore connections between the arts and the sciences and between inspiration, creativity and theories of nature as they examine ways in which the scientific and cultural imagination intersect to frame our understanding of our place in the world. Writing intensive. Prerequisite: At least eight credits in German at the 200-level or permission of instructor.

## GERM- 364H. Nationalbewusstsein und kulturelles Gedächtnis (National Identity and

 Cultural Memory). 4 credits.The course highlights major historical developments that shape the contemporary sense of German identity and examines how these events contribute to the cultural narrative of what it means to be German. Students will also examine how these narratives change over time to reflect the ways in which different eras look to the past to construct a contemporary sense of community and cultural authenticity. Writing intensive. Prerequisite: At least eight credits in German at the 200-level or permission of instructor.

## GERM- 365. "Bunte Republik Deutschland" [Motley Republic of Germany]. 4 credits.

This course examines a number of literary, socio-historical and film texts to trace the evolution of Germany as a land of immigration, from the mid-1950s into the new century. It also provides a measure of the contributions by ethnic and linguistic minorities to the contemporary German cultural scene. Writing intensive. Prerequisite: At least eight credits in German at the 200-level or permission of instructor.
GERM- 370. Cultures and Languages Across the Curriculum Module. 1 credit
Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course
offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## GERM- 380. Methods for Teaching Foreign Language (K-12). 4 credits.

Course to acquire an understanding of the history and rationale for foreign language instruction and of the relationship between theories of language learning and classroom practice. The student learns to plan, implement, and evaluate language instruction for students at the elementary and secondary school levels, and to enrich curriculum content to promote appreciation of the customs, values and history of other cultures. Field experience is included. Prerequisite: Completion of two 200-level courses in the target language or by permission of the instructor. Alternate years.

## GERM- 410. Period Seminar. 4 credits.

In-depth study of a literary movement or period; topic chosen by the instructor. Writing intensive. Prerequisite: One course at 300 level or permission of instructor. Every third year. This course may be repeated for credit.

GERM- 490. Independent Study. 1-4 credits.
This course may be repeated for credit.
GERM- 491. Internship. 1-4 credits.
This course may be repeated for credit.

## GERM- 495. Field experience in World Language Education. 2 credits.

A half-semester field experience of observation and supervised teaching of Spanish at the high school level. Open to French, German, and Spanish majors accepted in a teaching licensure program. Prerequisites: 8 credits in coursework taught in the target language at the 200-level. Must be taken concurrently with GERM 380. Alternate years.

## GERM- 499. Honors Thesis/Project. 0-4 credits.

Prerequisite: 3.50 GPA and permission of the Department Chair

## Greek

## Course Listings

GREE- 111. Elementary Classical Greek. 4 credits.
Emphasis on grammar, exercises and selected readings. Intended for the beginner. Every third year, depending on interest.

GREE- 112F. Intermediate Classical Greek. 4 credits.
Continuation of grammar, exercises and selected readings in Attic Greek. Prerequisite: Greek 111. Every third year, depending on interest.

## Japanese

## Course Listings

## JAPN- 111. Beginning Japanese I. 4 credits.

Introduces the fundamental communication skills of listening, speaking, reading and writing, as well as sociolinguistic information necessary for effective communication with Japanese natives. Every year.

## JAPN- 112F. Beginning Japanese II. 4 credits.

Continued introduction of fundamental listening, speaking, reading and writing skills, together with the relevant sociolinguistic information. Prerequisite: Japanese 111 or placement. Every year.

## JAPN- 130. Japanese Topics. 4 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English, readings in English. Some sections writing intensive. Offered as need arises. This course may be repeated for credit.

## JAPN- 111. Beginning Japanese I. 5 credits.

Introduces the fundamental communication skills of listening, speaking, reading and writing, as well as sociolinguistic information necessary for effective communication with Japanese natives. Every year.

## JAPN- 150A/C. Survey of Japanese Literature. 4 credits.

Introduction to major literary works written in Japan between the year 900 and the present. Designed to be of interest to the entire campus community. Taught in English, readings in English. Every year.

## JAPN- 211F. Intermediate Japanese I. 4 credits.

Further development of the fundamental communication skills of listening, speaking, reading and writing, as well as the sociolinguistic information necessary for effective communication with Japanese natives. 90 minutes of independent work in the Foreign Language Learning Center required. Prerequisite: Japanese 112F or placement. Every year.

JAPN- 212. Intermediate Japanese II. 4 credits.
Continued development of the fundamental communication skills of listening, speaking, reading and writing, as well as the sociolinguistic information necessary for effective communication with

Japanese natives. 90 minutes of independent work in the Foreign Language Learning Center required. Prerequisite: Japanese 211F or placement. Every year.

## JAPN- 230. Japanese Topics. 1-6 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English or in Japanese, as designated by the instructor. Some sections may be writing intensive. Offered as need arises. This course may be repeated for credit. Students may be awarded 5 or 6 credits for study abroad only

## JAPN- 241: Foreign Language Learning Center Tutor Training. 2 credits.

This two-credit, half semester course is designed to train incoming and potential foreign language tutors for employment in Wittenberg's Foreign Language Learning Center (FLLC). Students who complete the course will receive a certificate from the College Reading and Learning Association stating that they are certified level 2 tutors. This course is mandatory for employment in the FLLC. Every year. There are no course prerequisites for this course, but students must be recommended by a language faculty member.

## JAPN- 250 A/C. Japanese Literature and Aesthetics. 4 credits.

Interdisciplinary study of contemporary and pre-modern literature, visual and performing arts in Japan. Discussions of the intellectual, emotional and aesthetic conflicts arising from the encounter of the traditional Japanese world view with modern industrial civilization. Taught in English, texts in English. Alternate years.

## JAPN- 270. Cultures and Languages Across the Curriculum Module. 1 credits

Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## JAPN- 311. Advanced Japanese I. 4 credits.

The goal of the course is to develop culturally and socially appropriate proficiency in the four language skills: reading, writing, listening and speaking. Prerequisite: 212 or placement. Every year.

## JAPN- 312. Advanced Japanese II. 4 credits.

A continuation of 311, the goal of the course is to develop culturally and socially appropriate proficiency in the four language skills: reading, writing, listening and speaking. Prerequisite: 311 or placement. Every year.

## JAPN- 330. Japanese Topics. 4 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English, readings in English. May be writing intensive. Offered as need arises. This course may be repeated for credit.

## JAPN- 370. Cultures and Languages Across the Curriculum Module. 1 credit

Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## JAPN- 380. Methods for Teaching World Language (K-12). 2 credits.

Course to acquire an understanding of the history and rationale for world language instruction and of the relationship between theories of language and learning and classroom practice. The students learn to plan, implement, and evaluate language instruction for students at the middle and secondary school levels, and to enrich curriculum content to promote appreciation of the customs, values and history of other cultures. Prerequisites: 8 credits at the 200 -level taught in the target language. Alternate years.

## JAPN- 430. Topics in Japanese Language and Literature. 4 credits.

This course is designed to meet the needs of Japanese language students who have surpassed the highest levels of Japanese language study available in existing courses at the university. Course design will vary in accordance with student need, and may include select readings and conversation activities. Prerequisite: Japanese 312 or permission of the instructor.

## JAPN- 490. Independent Study. 1-4 credits.

This course may be repeated for credit.

## JAPN- 491. Internship. 1-4 credits.

## Latin

## Course Listings

## LATN- 111. Elementary Latin. 4 credits.

Concentration on grammar, exercises and selected readings. Intended for the beginner and for the student with some high school background in Latin. Every year.

LATN- 112. Intermediate Latin. 4 credits.
Continuation of grammar, exercises and selected readings in classical Latin and discussion of Roman culture. Prerequisite: Latin 111 or equivalent. Every year.

## Russian

## Course Listings

## RUSS- 105F. Russian for Professionals I. 4 credits.

Introduction to the study of Russian through speaking, reading and translation. Computer assisted instruction in speaking and in reading Russian Culture. Enrollment limited to students in the School of Community Education.

RUSS- 106F. Russian for Professionals II. 4 credits.
Continuation of Russian 105; speaking, reading and translation. Russian culture through reading Russian texts. Computer-assisted instruction. Enrollment limited to students in the School of Community Education.

## RUSS- 111. Beginning Russian I. 4 credits.

Introduction to the structure of Russian through oral and written practice. Every year.

## RUSS- 112F. Beginning Russian II. 4 credits.

Continuation of the structure of Russian through oral and written practice. Every year.

## RUSS- 130. Russian Topics. 4 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community.
Taught in English, readings in English. May be writing intensive. Offered as need arises. This course may be repeated for credit.

## RUSS- 151 A/C Real to Reel: Russian War on Film. 4 credits

An examination of Russia's wars of the Twentieth century through the use of film. Films will be shown in chronologic order with readings to accompany each film. Films are in Russian with English subtitles. No prerequisite

## RUSS- 152 A/C Journey into the Fantastic. 4 credits

An introduction to Russian literature through the genre of the fantastic. Readings will begin with Russian fairy tales and include major authors of the 19th and 20th centuries who used the fantastic in their works. Short stories and novels of authors include Pushkin, Dostoevsky, Zamjatin, Bulgakov, the Strugatsky Brothers and Pelevin. Taught in English. No prerequisites.

## RUSS- 153 A/C St. Petersburg: Myth and Soul of a Russian City. 4 credits

An introduction to the history and cultural arts of St. Petersburg from its creation to the present day. Major authors of the nineteenth and twentieth century who lived in and wrote about St. Petersburg include Pushkin, Gogol, Dostoevsky, Akhmatova and others. Major artists include Chaikovsky, Stravinsky and Shostakovich. Topics about present-day St. Petersburg will also be discussed. Taught in English. No prerequisites.

## RUSS- 154 A/C The Modern Hero. 4 credits

This course will study the impact of Russia's Modern Age on its literary hero/ines’ evolution from the mid nineteenth century to the present. A study of how the hero portrays the events occurring in Russian society. This course is taught in English, has no prerequisites

## RUSS- 230. Russian Topics. 1-6 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English or in Russian, as designated by the instructor. Some sections may be writing intensive. Offered as need arises. This course may be repeated for credit. Students may be awarded 5 or 6 credits for study abroad only

## RUSS- 241. Foreign Language Learning Center Tutor Training. 2 credits.

This two-credit, half semester course is designed to train incoming and potential foreign language tutors for employment in Wittenberg’s Foreign Language Learning Center (FLLC). Students who complete the course will receive a certificate from the College Reading and Learning Association stating that they are certified level 2 tutors. This course is mandatory for employment in the FLLC. Every year. There are no course prerequisites for this course, but students must be recommended by a language faculty member.

## RUSS- 260F. Understanding Contemporary Russian Social Issues. 2 credits

 Introduction to reading skills in Russian by using authentic materials from the contemporary Russian press found on the World Wide Web. Discussion of social and cultural issues in Russian society such as the role of women, education, political movements and youth groups, immigration and relocation issues of the former Soviet Republics. Prerequisite: Russian 112 or placement
## RUSS- 262F. Introduction to Translation. 2 credits

Introduction to the practice of good translation including more advanced topics in Russian grammar such as verbs of motion, verbal aspect and verb governance. Special attention to idiomatic expressions and formulaic speech patterns. Prerequisite: Russian 112 or placement.

## RUSS- 263F. Russian Film and Culture 2 credits

Through the study of Russian, students will watch and discuss films that acquaint students with contemporary Russian life. Students will learn the vocabulary necessary to discuss the portrayals of family, relationships, changing value systems and social questions as reflected in Russian film. This course will also help students gain additional language skills in speaking and aural comprehension. Prerequisite: Russian 112 or placement at the 200-level (or permission of instructor) This course may be repeated for credit if the topic changes.

## RUSS- 266F. Speech Etiquette 2 credits

This course equips students with formulaic speech patterns that will help them conduct conversations on situational transactions such as telephone conversations, purchasing, transportation and expressing opinions. This course is particularly designed for those who will
study abroad. Prerequisite-Russian 263: Film and Culture or by permission or placement. Offered alternate years

## RUSS- 316. Cultural Traditions 2 credits

An examination of the cultural heritage of Russia. Short prose works, poetry, cultural readings and films help students develop reading and conversational skills. Taught in Russian. Prerequisite: Russian 260 and 262 or by permission Offered alternate years.

## RUSS- 317. National Identity 2 credits

With a focus on the New Russia as a result of the fall of the Soviet Union, this course examines some of the major cultural responses to the social and political changes in Post-Soviet life. It explores issues of how Russians define themselves as an individual as a result of the loss of the collective in Post-Soviet society, Taught in Russian. Prerequisite: Russian 316 or by permission Offered alternate years.

## RUSS- 330. Russian Topics. 4 credits.

Study of special subjects, chosen by the instructor and described in the course schedule each semester. May be writing intensive. Offered as need arises. This course may be repeated for credit.

## RUSS- 380. Methods for Teaching World Language (K-12). 2 credits.

Course to acquire an understanding of the history and rationale for world language instruction and of the relationship between theories of language and learning and classroom practice. The students learn to plan, implement, and evaluate language instruction for students at the middle and secondary school levels, and to enrich curriculum content to promote appreciation of the customs, values and history of other cultures. Prerequisites: 8 credits at the 200-level taught in the target language. Alternate years.

## RUSS- 490. Independent Study. 1-4 credits.

This course may be repeated for credit.

## RUSS- 491. Internship. 1-4 credits.

This course may be repeated for credit.

## Spanish

## Course Listings

## SPAN- 101. Spanish for High Beginners 2 credits

Designed for students who have had 2 years or less of previous instruction in Spanish but who are not yet ready to enter a 112 class. Course will review essential structures needed to prepare students for 112 classes, focusing upon the communicative structures of reading, writing, listening and speaking. Every year. (Prerequisite: workshop placement or placement in 101 or permission of Spanish faculty)

## SPAN- 106. Spanish for Professionals II. 4 credits.

The second course of the two-course series offered for students in the School of Community Education. Spanish 106 follows a modified individualized instruction format, with students meeting to review grammar, discuss and present assignments and projects. Students will receive assignments based on professional and/or personal interests and needs. Areas of interests include Spanish for business professionals, health care professionals and law enforcement. Students who successfully complete all work and activities in 106 will complete the language requirement. Enrollment is limited to students in the School of Community Education.

## SPAN-107. Introductory Spanish I in Costa Rica. 6 credits

This course is an introduction to Spanish for beginners with little or no previous knowledge of the language. Students will develop the basic linguistic skills necessary to communicate in everyday situations. The course covers basic grammatical structures, vocabulary, communicative expressions and frequent situations in settings such as restaurants, stores, buses, etc. Emphasis is on understanding, speaking, reading and cross-cultural perspectives. Prerequisite: none.

## SPAN-108. Introductory Spanish II in Costa Rica. 6 credits.

This course is for introductory-level students with prior experience studying Spanish. Students will build on their previous knowledge and further develop their oral, reading, writing and listening skills. They will expand their vocabulary and language usage in order to better interact with the Costa Rican environment, and will be able to express themselves in the past tense. Prerequisite: Spanish 111 or placement at the Spanish 101 or 112 level

## SPAN- 111. Beginning Spanish I. 4 credits.

Emphasis on elementary grammar, oral practice and required laboratory. Every year.

## SPAN- 112F. Beginning Spanish II. 4 credits.

Grammar review, composition, oral practice, reading and required laboratory. Prerequisite: Spanish 111 or equivalent. Every year.

## SPAN- 130A. Hispanic Literature. 4 credits.

Topics, chosen by the instructor, designed to be of interest to the entire campus community. Taught in English, readings in English. Topics will focus on issues of race, gender, national and ethnic identity formation. Alternate years.

## SPAN- 150F. Intermediate Spanish. 4 credits.

This course is designed to offer students at the intermediate level an opportunity to acquire communicative skills, improve their formal knowledge of the language, and develop an awareness and appreciation of Hispanic cultures. Prerequisite: Spanish 112F or equivalent. Every year.

## SPAN- 230. Spanish, Latin American, and Latino Topics. 1-6 credits.

Topics, chosen by instructor, designed to be of interest to the entire campus community. Taught in English, readings in English. May be writing intensive. Offered as need arises. This course may be repeated for credit. Students may be awarded 5 or 6 credits for study abroad only,

## SPAN- 241. Foreign Language Learning Center Tutor Training. 2 credits.

This two-credit, half semester course is designed to train incoming and potential foreign language tutors for employment in Wittenberg's Foreign Language Learning Center (FLLC). Students who complete the course will receive a certificate from the College Reading and Learning Association stating that they are certified level 2 tutors. This course is mandatory for employment in the FLLC. Every year.
There are no course prerequisites for this course, but students must be recommended by a language faculty member.

## SPAN- 260F. El mundo contemporáneo (Contemporary Issues of the Hispanic World) 2 credits

This course focuses on contemporary issues of the Hispanic world including topics such as immigration, politics, pop culture, economics, demography, religion, social class, and globalization. The course will help students develop conversational skills and strategies. Prerequisite: Spanish 112 or Spanish 150 or placement at the 200-level. Every year.

## SPAN- 261F. El mundo físico (The Physical World) 2 credits

This course serves as an introduction to the Hispanic world by highlighting the diverse nature and cultures of Spanish-speaking people focusing on speech patterns, climate, geography and environmental issues. The course will also develop language skills that will enhance student's
ability to express themselves in Spanish. Prerequisite: Spanish 112 or Spanish 150 or placement at the 200 level. Every year.

## SPAN- 262F. Entre dos mundos: el arte de la traducción. 2 credits

This intermediate course will introduce students to the theory (theories) and practices of translation. Through translation practice from Spanish to English, and English to Spanish, students will focus on nuance, style and context of language/text. Students will read selected essays on translation, read selected texts in dual language versions, and create their own translations of short texts. Prerequisites: Spanish 112 or Spanish 150 or placement at the 200level. Every year.

## SPAN- 263F. El cine y el cambio social (Film and Social Change). 2 credits

This course introduces students to films from Spain and Latin America that intersect with social and historical transitions. Students will explore the cultural context of each film, analyze major themes, and discuss the role of film as a reflection of and catalyst for social change. The course will focus on aiding
students in developing language skills for description and reporting. Prerequisites: Spanish 112 or Spanish 150 or placement at the 200 -level. Every year.

## SPAN- 264F. Voces del pasado (Voices of the Past). 2 credits

This course gives students the opportunity to gain an understanding of the Spanish-speaking world by examining its rich cultural heritage. Through reading and writing activities, student learners will explore the complexity of the Hispanic world and how historical events have influenced human contact. The course will help students develop language skills for description and narration in the past. Every year. Prerequisites: 4
sem. hrs. of 200-level courses in Spanish.

## SPAN- 265F. La diversidad en el mundo hispano (Diversity in the Spanish-speaking World). 2 credits

This intermediate course will provide students the opportunity to explore human diversity in the Spanish-speaking world, in both historical and contemporary contexts. Through reading, viewing and writing activities students will gain an understanding of the complexities of identity, ethnicity and multiculturalism across the Hispanic world, including the United States. The course will aid students in developing language skills to express and support opinion. Every year. Prerequisite: 4 sem. hr. of 200-level coursework in Spanish.

## SPAN- 270. Cultures and Languages Across the Curriculum Module. 1 credit

Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must
register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## SPAN- 301A. Introduction to Hispanic Literature. 4 credits.

Provides an introduction to the major periods and movements through which Hispanic literature has evolved, from its beginnings to the 19th century. Designed to provide the student with the opportunity to acquire the technical vocabulary of the Hispanic literary critic. Includes discussions of the artistic implications of literature and presentation of the four basic genres: narrative, poetry, drama and essay. Writing intensive. Prerequisite: 8 credits at the 200-level including Spanish 264 and 265. Alternate years.

## SPAN- 302A. Introduction to Hispanic Literature II. 4 credits.

Continuation of Spanish 301, provides the student with a survey of 19th and 20th centuries. Significant figures and literary currents of the Hispanic world are presented. Writing intensive. Prerequisite: 8 credits at the 200-level including Spanish 264 and 265. Alternate years.

## SPAN- 330. Topics in Advanced Hispanic Literature and Culture. 1-6 credits.

This topics course is designed for the student in the 300 level or 400 -level in Spanish. With topics chosen by the instructor, Spanish 330 complements the topics courses at the 100 and 200 level, providing additional learning opportunities for students in the Spanish Language. Prerequisite: 8 credits at the 200-level including Spanish 264 and 265 or permission of instructor. Offered as need arises. This course may be repeated for credit. Students may be awarded 5 or 6 credits for study abroad only.

## SPAN- 350H. Spanish Peninsular Civilization. 4 credits.

Cultural survey of Spain from its earliest history to the present with an emphasis on contemporary Peninsular culture. Lectures and discussions are supplemented by readings as well as presentations that reflect the history and development of Spanish civilization. Prerequisite: 8 credits at the 200-level including Spanish 264 and 265. Alternate years.

## SPAN- 351H. Latin American Culture. 4 credits.

Study of the development of Latin America focusing on the cause, meaning and effects of events, which have shaped its culture. The course objective is to show the unity of Latin American culture. Prerequisite: 8 credits at the 200-level including Spanish 264 and 265. Alternate years.

## SPAN- 370. Cultures and Languages Across the Curriculum Module. 1 credit

Selected courses in several disciplines present students the opportunity to do additional research in a foreign language and earn a credit for that work. Students will work with a faculty member in the Language Department to design and complete a project that supports learning in the course offering the Cultures and Languages Across the Curriculum (CLAC) option. Students must register both for a course offering the CLAC option and for the CLAC module. CLAC modules allow students the opportunity to enrich their learning by acquiring cross-cultural perspectives on the acquisition of knowledge in various disciplines. Students also acquire practice in using their language skills to explore different disciplines. Students assessed at the intermediate level of language competency may register for a 270 module; students with advanced skills may register for a 370 module. Prerequisite: A language course numbered 150 or above and concurrent enrollment in a non-language course offering the Cultures and Languages Across the Curriculum option.

## SPAN- 380. Methods for Teaching World Language (K-12). 2 credits.

Course to acquire an understanding of the history and rationale for world language instruction and of the relationship between theories of language and learning and classroom practice. The students learn to plan, implement, and evaluate language instruction for students at the middle and secondary school levels, and to enrich curriculum content to promote appreciation of the customs, values and history of other cultures. Prerequisites: 8 credits at the 200-level taught in the target language. Alternate years.

## SPAN- 415. Advanced Studies in Spanish Language. 4 credits.

It is especially recommended for students who seek advanced work in grammar, with the goal of producing idiomatic Spanish. Students will acquire an understanding of more sophisticated grammar structures and their interrelations. Prerequisites: 8 credits at the 200-level and a 300level course taught in Spanish. Alternate years.

## SPAN- 425. Advanced Studies in Hispanic Literature and Culture I. 4 credits.

In-depth study of topics and themes in Peninsular literature and culture. Course will include reading, analysis and discussion of selected literary and/or cultural works. Prerequisite: any 300level course taught in Spanish. Writing intensive. Alternate years.

## SPAN- 426. Advanced Studies in Hispanic Literature and Culture II. 4 credits.

In-depth study of topics and themes in Latin American literature and culture. Course will include reading, analysis and discussion of selected literary works and /or cultural. Prerequisite: any 300level course taught in Spanish. Writing intensive. Alternate years.

## SPAN- 427. The Silver Screen. 4 credits.

This course will familiarize students with the history of film in the Hispanic world. Students will view works by prominent directors from Spain and the Americas, as well as explore issues and trends in Hispanic films. Prerequisite: any 300-level course taught in Spanish. Every third year.

## SPAN- 430. Intensive Spanish Conversation. 1-6 credits.

Expansion of oral communication skills in different areas of concentration such as business, medicine, literature and politics. Emphasis on modes of expression and lexicon enhancement. Prerequisite: any 300-level course taught in Spanish. Every third year. Students may be awarded 5 or 6 credits for study abroad only.

## SPAN- 434. Spanish Pronunciation. 2 credits.

Introduction to Spanish phonology with particular attention to speech characteristics and to dialectal differences in Peninsular and Spanish American phonology. Oral drill to improve pronunciation and diction. Prerequisite: Any 300-level course taught in Spanish. Every third year.

SPAN- 450. Temas del mundo hispano. 4 credits.
In-depth study of a literary or cultural_movement, problem, approach, or author. Topic to be chosen by instructor. Prerequisites: any 300-level course taught in Spanish. Writing intensive. Alternate years.

## SPAN- 490. Independent Study. 1-4 credits.

This course may be repeated for credit.

## SPAN- 491. Internship. 1-4 credits.

This course may be repeated for credit.

## SPAN 494. Early Childhood Field Experience in Spanish Language Education. 2 credits.

A half-semester field experience of observation and supervised teaching of Spanish at the elementary school level. Open to Spanish majors and minors accepted in a teaching licensure program. Must be taken concurrently with Spanish 380. Prerequisites: 8 credits at the 200 -level taught in the target language. Alternate years.

## SPAN 495. Field experience in World Language Education. 2 credits.

A half-semester field experience of observation and supervised teaching of Spanish at the high school level. Open to French, German, and Spanish majors accepted in a teaching licensure program. Prerequisites: 8 credits in coursework taught in the target language at the 200-level. Must be taken concurrently with SPAN 380. Alternate years.

## SPAN- 499. Honors Thesis/Project. 1-4 credits.

Prerequisite: 3.50 GPA and permission of the Department Chair

## Liberal Studies (SCE students only)

Intended strictly for the evening program for adult/non-traditional students, this interdisciplinary degree program is supervised by the Dean and the Director of the School of Community Education and the Community Education Committee.

The major requires 36 credits of coursework, organized around a plan developed by the student and approved by the Dean and Director. The coursework must include SCED 200L: Liberal Studies Colloquium; and at least three courses at the 300 level or above, including SCED 400: Senior Leadership Seminar or SCED 499: Liberal Studies Honors Thesis Project and SCED 400. Courses may be drawn from SCED courses or from other departments’ courses.

## For a complete listing of SCED courses, see School of Community Education. SCED 200L. Liberal Studies Colloquium. 4 credits.

Introduction to the processes and values of interdisciplinary liberal arts inquiry, to modes of expression appropriate to such inquiry and to research techniques in general. Processes and values include identification of underlying premises and sequences of thought, analysis of competing positions, recognition of points requiring research, an appreciation for at least two different disciplinary approaches to a given topic and formation of critical judgment. The subject of the course varies but reflects issues and themes appropriate to the General Education Program's Integrated Learning goal. Products of the course include a research paper and discussion of student projects. The Liberal Studies major should take this course as early as possible while working through the requirements of the major. SCED 200L satisfies the Integrated Learning (Wittenberg Seminar) requirement for SCE students. Prerequisite: English 101. Writing intensive.

## SCED 400. Senior Leadership Seminar. 4 credits.

A synthesis of learning from previous study and experience developed into a major report in which the student identifies a problem or process in an organizational setting, provides analysis, and proposes appropriate action. The inquiry process, developed in conjunction with the instructor and through activities with the group, addresses the dimensions of both management and leadership. Students present their report in writing to the instructor and orally to the seminar group. The report also serves as the basis for the oral senior assessment presentation for the major. Prerequisite: senior standing and completion of at least four major courses, including the Liberal Studies Colloquium. Writing intensive. 347

## SCED 499. Liberal Studies Honors Thesis. 0-8 credits.

Prerequisite: 3.50 GPA and permission of the Dean.

## Marine Science

Go to the faculty and staff page.
The program in Marine Science is designed for students who desire a solid foundation in the field, including Marine Biology and Oceanography. A fundamental goal of the minor is to allow students to explore the interdisciplinary nature of marine science and the connections among its sub disciplines. In addition to required coursework, students must participate in a marine field experience and conduct a research project or other significant work on a marine topic. This minor is available to students in any major, and would especially benefit those students interested in pursuing graduate work in a marine field.

## Requirements for the Minor

The minor in Marine Science requires:

- At least 22 credits, consisting of two core courses, Marine Science 200 Oceanography and Biology 247 Marine Ecology; either Geology 150 Physical Geology or Geology 160 Environmental Geology; and at least 8 credits in elective courses (listed below).
- A marine field experience
- A marine research project or other significant professional marine experience such as an internship

At least 8 credits taken beyond the core courses must come from outside the student's major department. Up to 4 credits of directed research or independent study may be included in the 8 credits of elective courses. Note that most courses offered during the Duke University Marine Laboratory's semester program will count toward minor requirements. Many Duke courses without direct equivalents could count as MRSC 250 Topics in Marine Science. See the program director for a full list of course equivalents.

Wittenberg programs that fulfill the requirement for a marine field experience include Extended Field Studies (Biology 258) taken in conjunction with either Biology 239 Biology of Marine Invertebrates or Biology 247 Marine Ecology, the Duke University Marine Laboratory semester program, and the Bahamas summer program. Other possibilities include summer internship programs at marine laboratories. This requirement may be fulfilled simultaneously with the research experience if the research is conducted in a field setting. The program director's approval is required for the field experience if it is not through a Wittenberg program.

Students must complete a research project on a marine topic or otherwise participate in a professionally-related marine experience such as an internship (Marine Science 492 Directed Research or Marine Science 490 Internship). Up to 4 credits of either (but not both) may be included in the minimum 22 credits required for the minor. The project need not be taken for credit, but must be of a scope worthy of receiving academic credit. At the conclusion of the project or internship, the student will present the results of the research in written, oral, or professional poster format (format to be chosen in consultation with the student's research or internship adviser). Students have the opportunity to conduct this research on campus during the
academic year, during Wittenberg's Bahamas summer program, during the semester program at the Duke University Marine Laboratory or other similar, accredited programs approved by the Marine Science Committee. Similarly, an internship with a government agency such as the National Atmospheric and Oceanographic Administration or the U.S. Geological Survey would fulfill this requirement. In addition, NSF-funded Research Experiences for Undergraduates, other research-based internships at marine laboratories, and summer-long research projects conducted at a marine laboratory with Wittenberg faculty members, which are eligible for Faculty Research Fund Board awards, would be appropriate. The Marine Science Committee will evaluate research programs and internship opportunities not affiliated with Wittenberg's curriculum on an individual basis.

## Course offerings

## MRSC- 104. Topics in Marine Science Seminar. 1-4 credits.

Study of selected topics relating the student to the marine environment and society and of the conflicts between people and their environment. Topics vary by instructor. Offered subject to demand and availability of faculty. Counts as an elective toward a minor in marine science if taken before the core courses, and can serve as an alternate prerequisite to Marine Science 200 if taken for 4 credits.

## MRSC- 141N. Introduction to Marine Science. 4 credits.

This course is an introduction to the physical characteristics of the world's oceans, the biology of the animals and plants that live there, and the ways in which humans interact with them. It includes elements of oceanography, fisheries biology and management, marine biology, and ways in which managers use the scientific method to learn about and protect marine resources.

## MRSC- 200. Oceanography. 4 credits.

Oceanography is one of the most integrative of all the sciences, and this fact will be reflected in this course. The course is an introduction to the major systems of the marine environment: physical, chemical, biological, and geological, with an emphasis on the interactions and interconnections of these four traditional disciplines of oceanography. Topics include origin of the oceans, plate tectonics, major ocean currents, the role of the ocean in atmospheric dynamics, life in the oceans, and cycling of energy, heat, and inorganic nutrients. The course will also focus on human impacts on ocean systems and the impacts that the oceans now have and can have in the future on human societies. Prerequisite: Math placement score of 22 and any of one of 1) Biology 170 or 180 ; 2) Biology 248; 3) Chemistry 121; 4) Geology 150 or 160; 5) Physics 200; 6) Marine Science 104; or 7)Biology 141 and permission of the instructor.

Biology 258 Extended Field Studies (counts toward the minor if linked to Biology 141 Introduction to Marine Biology, Biology 239 Biology of Marine Invertebrates, or Biology 247 Marine Ecology). 0-2 credits.

## MRSC- 250. Topics in Marine Science. 1-5 credits.

Study of selected topics in marine science. Topics vary with instructor. The course counts as an elective toward a minor in marine science. This course may be repeated for credit.

## MRSC- 490. Internship. 1-5 credits.

## MRSC- 492. Directed Research. 1-5 credits.

## MRSC- 494. Seminar in Marine Science. 1-5 credits.

Topics of particular interest to students minoring in marine science. Counts as an elective toward a minor in marine science. Offered subject to sufficient demand by students and availability of faculty. This course may be repeated for credit.

## Biology

Biology 248 Comparative Communities - Bahamas. 5 credits
Biology 234 Morphology of Nonvascular Plants. 5 credits.
Biology 239 Biology of Marine Invertebrates. 5 credits.
Biology 247 Marine Ecology. 5 credits.
Biology 341 Limnology. 5 credits.

## Geology

Geology 150 Physical Geology. 5 credits.
Geology 160 Environmental Geology. 5 credits.
Geology 260 Sedimentology. 5 credits.
Geology 340 Earth History. 5 credits.

## Economics

Economics 350 Environmental and Natural Resource Economics. 4 credits.

## Mathematics

Go to faculty and staff page.

## Requirements for Major (B.A.)

Required in Mathematics: Thirty-eight credits.
Required: Mathematics 201, 202, 210, 227, and 261
Electives: Twenty credits selected from one of the two tracks below:
Mathematics: One of Mathematics 212 or 215, one of 365 or 370, plus eight additional credits, which must include at least one 300+ level course and may include Computer Science 250.

Mathematical Science with a Concentration in Statistics: Mathematics 228, any two of 327, 328, or 337, plus four additional credits which may include Computer Science 250.

Senior Capstone Experience: Two or more credits from one of the following: Mathematics 460, 490, or 499.

Required in Computer Science: Five credits.
Computer Science 150.

## Requirements for Major (B.S.)

Required in Mathematics: Forty-six credits:
Required: Mathematics 201, 202, 210, 212, 215, 227, 261, 365, and 370
Electives: Eight additional credits in mathematics which must include at least one 300 level course.

Senior Capstone Experience: Two or more credits from one of the following: Mathematics 460, 490, or 499. Note: majors considering graduate school in math are strongly encouraged to complete a senior independent study (Mathematics 490) or a research project / honors thesis (Mathematics 499).

Required in Computer Science: Nine credits.
Computer Science 150 plus one additional course numbered 250 or above.
Required in Other Departments: Eight credits.
A sequence of courses in one department (Biology, Chemistry, Geology, Physics, Psychology, or another approved by the department) that is approved by the Department of Mathematics and Computer Science.

## Requirements for Minor in Mathematics

Required in Mathematics: Twenty credits.
Mathematics 201, 202, 210, one course from Mathematics 215, 227, 228, 260 or 261, plus one course (of at least four credits) numbered 200 or above.

Required in Computer Science: Five credits.
Computer Science 150.

## Requirements for Minor in Statistics

Required in Mathematics: Twenty or Twenty-four credits.

Mathematics 131 or 201/202; 227, 228, and any two selected from 327, 328, or 337.

## Licensure for Teaching in Mathematics

Students interested in pursuing a course of study leading to a license to teach mathematics should contact their adviser or the Education Department for specific requirements.

## Special Programs in Mathematics

Computational Science - See Computational Science.
Computer Science - See Computer Science.
Engineering - See Engineering.
Statistics - See Minor above.

## Course Listings:

## MATH-090. Introductory Algebra and Probability using ALEKS. 0 credits

A credit/no credit course moving from elementary algebra through more complex concepts, with the objective of producing readiness for college-level work in mathematics and math-related courses. Topics include real numbers, simple operations on polynomials, solving and graphing linear equations, algebraic fractions, fractional equations, and exponential and logarithmic functions, as well as other more advanced topics which will prepare students for statistics or pre-calculus if desired. This course is taught using a web-based, artificially intelligent assessment and learning system called ALEKS which individualizes the curriculum to the students needs. A grade of $80 \%$ or higher in the respective ALEKS course (Math Placement Level 22, 23 or 24) constitutes a passing grade in MATH 090. This course only serves to help students raise the second digit of their math placement score. Enrollment requires approval of the Math Workshop Director.

MATH- 112Q. The Language of Mathematics. 4 credits.
College-level experience with the logic, language and methods of mathematics through the study of topics from a variety of areas of mathematics. Not intended as or suitable for preparation for
other mathematics courses. Prerequisite: Appropriate level on the Math Placement Exam. Every year.

## MATH- 118Q. Mathematics for Elementary and Middle School Teachers. 4 credits.

Study of number systems, number theory, operations and algebraic thinking with a special emphasis on the processes of mathematics; problem-solving, reasoning, communicating mathematically, and making connections with mathematical ideas, real world situations, and children's mathematical thinking. Open only to students intending to major in education. Math Placement score of 2 strongly suggested. Every semester.

## MATH- 119. Geometry with Computer Applications for Elementary and Middle School Teachers. 2 credits.

Study of basic concepts of plane and solid geometry, including topics from Euclidean, transformational, and projective geometry and from topology. Includes computer programming experiences using Logo with a special emphasis on geometry and problem-solving. Prerequisite: Mathematics 118. Every year.

## MATH- 120Q. Elementary Functions. 4 credits.

Exploration of functions and their graphs and applications of functions in formulating and solving real-world problems. Examination of polynomial, rational, exponential, logarithmic, trigonometric and inverse trig functions. Discussion of limits and continuity. Intended for the student planning to take Mathematics 131 or 201 but whose high school preparation is insufficient for entering calculus directly. Prerequisite: appropriate level on the Math Placement Exam. Every year.

## MATH- 127Q. Introductory Statistics. 4 credits.

Study of statistics as the science of using data to glean insight into real-world problems. Includes graphical and numerical methods for describing and summarizing data, sampling procedures and experimental design, inferences about the real-world processes that underlie the data, and student projects for collecting and analyzing data. Open to non-majors only. (Note: A student may not receive credit for more than one of the following: Mathematics 127, Mathematics 227, Psychology 107, or Business 210.) Prerequisite: Appropriate level on the Math Placement Exam. Every year.

## MATH- 131Q. Essentials of Calculus. 4 credits.

A one-semester study of the fundamental concepts and techniques of single-variable differential and integral calculus. The majority of applications are drawn from management and the biological and social sciences; in particular, no trigonometric applications are covered. This course is intended to be a terminal course and does not satisfy the prerequisite for Mathematics 202. A student who plans to take more than one calculus course should enroll in Mathematics 201 instead
of this course. (Note: A student cannot receive credit for both Mathematics 131 and 201.) Prerequisite: Mathematics 120 or appropriate level on the Math Placement Exam. Every year.

## MATH- 171Q. Discrete Mathematical Structures. 4 credits.

The mathematics of discrete sets, sets which are finite or at most countably infinite. Starting on the foundation of logic, set theory, the course will cover various topics dealing with relations and functions, counting arguments, discrete probability, number theory, and graph theory. Prerequisite: Math Placement Level 25 or Math 120Q.

## MATH- 201Q. Calculus I. 4 credits.

First course in a detailed two-semester introduction to a graphical, numerical, and symbolic approach to differential and integral calculus of one variable. (Note: A student cannot receive credit for both Mathematics 201 and 131.) Prerequisite: Mathematics 120 or appropriate level on the Math Placement Exam. Every year.

## MATH- 202Q. Calculus II. 4 credits.

Continuation of Mathematics 201. Prerequisite: Mathematics 201. Every year.

## MATH- 205. Applied Matrix Algebra. 4 credits.

Course in matrix algebra and discrete mathematical modeling. Study of the formulation of mathematical models, together with analysis of the models and interpretation of the results. Primary emphasis is on modeling techniques that use matrix methods. Prerequisite: Mathematics 201. Every year.

## MATH 210. Introduction to Proofs. 4 credits.

This course is an introduction to mathematical proof with a focus on discrete mathematics. Intended to "bridge" understanding between computational and theoretical mathematics courses, students will progress in developing critical-reasoning, problem-solving and communication skills. Topics of study include techniques of mathematical proof, logic, set theory, mathematical induction, functions, relations, and countability. Prerequisite: Mathematics 202 or Mathematics 205. Writing Intensive. Every year.

MATH- 212. Multivariable Calculus. 4 credits.
Calculus of functions of several variables and associated analytic geometry. Prerequisite: Mathematics 202. Every year.

## MATH-215. Differential Equations. 4 credits.

Study of elementary ordinary differential equations, with particular emphasis on techniques and applications using algebraic, numerical and graphical approaches. Prerequisites: Mathematics 202. Every year.

## MATH- 221. Foundations of Geometry. 4 credits.

Rigorous study of Euclidean and non-Euclidean geometry from an axiomatic point of view. The mathematics is studied in an historical context. Prerequisite: Mathematics 210. Writing intensive. Usually offered in alternate years.

## MATH- 227. Data Analysis. 4 credits.

This introductory statistics course is designed not only for students majoring or minoring in math, but for any student who would benefit from a more substantial introduction to the field especially prospective teachers of mathematics or statistics, as well as students considering careers as statisticians or actuaries. Students will learn general principles and techniques for summarizing and organizing data effectively, and will explore the connections between how the data were collected and the scope of conclusions that can be drawn from the data. Also emphasized are the logic and techniques of formal statistical inference, with greater focus on the mathematical underpinnings of these basic statistical procedures than is found in other introductory statistics courses. Software for probability and data analysis is used daily. Prerequisites: Mathematics 131 or 201. (Note: a student may not receive credit for more than one of the following: Mathematics 127, Mathematics 227, Psychology 107, or Business 210.)

## MATH- 228. Univariate Probability. 4 credits.

Axiomatic and applied introduction to probability as the mathematical study of random processes and building and assessing stochastic models. Prerequisite: Mathematics 131 or 202. Usually offered in alternate years.

## MATH- 261. Linear Algebra. 4 credits.

This course is an elementary introduction to matrix theory and linear algebra. Topics of study include systems of linear equations, matrices, determinants, eigenvalues and eigenvectors, vector spaces, linear transformations, and orthogonality. Emphasis is placed on methods, calculations, and applications that are useful in other disciplines. Prerequisite: MATH 201.

## MATH- 327. Statistical Modeling. 4 credits.

In this second course in statistics, regression analysis is the main vehicle for illustrating the principles of statistical modeling in real-world contexts. Students will learn strategies for selecting and constructing models, criteria for assessing and comparing models, and tools for making formal inferences using these models. Class sessions include discussion of conceptual issues with
practice in data analysis, and they put strong emphasis on interpreting the results of analyses. Students are required to complete projects in which they design studies, collect and analyze data, and present their findings orally and in writing. Prerequisite: Mathematics 127, Mathematics 227, Business 110, or Psychology 107. Writing Intensive. Offered alternate years.

## MATH- 328. Mathematical Statistics. 4 credits.

Theoretical introduction to the concepts and methods of statistical inference and a development of the distribution theory underlying such methods. Prerequisites: Mathematics 228. Usually offered in alternate years.

## MATH- 337. Statistical Design. 4 credits.

Whereas the introductory statistics course focuses primarily on exploratory and formal analysis of data that have already been observed, this course focuses primarily on how to design the comparative observational and experimental studies in which data are collected for formal analysis. Students will learn: (1) to choose sound and suitable design structures; (2) to recognize the structure of any balanced design built from crossing and nesting; (3) to assess how well standard analysis assumptions fit the given data and to choose a suitable remedy or alternative when appropriate; (4) to decompose any balanced dataset into components corresponding to the factors of a design; (5) to construct appropriate interval estimates and significance tests from such data; and (6) to interpret patterns and formal inferences in relation to relevant applied context. Students are required to complete projects in which they design studies, collect and analyze data, and present their findings orally and in writing.
Prerequisite: Mathematics 127, Mathematics 227, Business 110, or Psychology 107. Offered alternate years.

## MATH- 365. Abstract Algebra. 4 credits.

Introduction to various algebraic structures with particular attention to groups. The axiomatic method is emphasized throughout the course. Prerequisites: Mathematics 205 and 210. Writing intensive. Every year.

## MATH- 370. Real Analysis. 4 credits.

Course in the basic theoretical concepts of single variable calculus: continuity, differentiation, integration and infinite series. Prerequisite: Mathematics 210. Writing intensive. Every year.

## MATH- 380. Topics in Mathematics. 1-4 credits.

Study of special topics not included in other departmental offerings. Offered occasionally according to the needs and interests of students and/ or faculty. This course may be repeated for credit.

## MATH- 460. Senior Seminar. 2 credits.

In this capstone experience for the math major, the student works individually and in groups to synthesize knowledge from and seek interrelationships among areas of mathematics previously encountered. Includes written and oral presentations, bibliographic research, and modeling and problem-solving projects. Prerequisite: Senior math major status or permission of instructor. Every year.

## MATH- 480. Topics in Mathematics. 2-4 credits.

Study of special topics not included in other departmental offerings. Offered occasionally according to the need and interests of students and/or faculty. This course may be repeated for credit.

## MATH- 490. Independent Study. 1-4 credits.

Individual study by the advanced student of a topic that is beyond the scope of regular courses. Prerequisite: Approval of the instructor directing the study. This course may be repeated for credit.

## MATH- 491. Internship. 4-10 credits

Open to the junior or senior mathematics major by departmental permission only.

## MATH- 499. Honors Thesis/Project. 0-8 credits.

Prerequisite: 3.50 GPA and permission of the department chair.

## Music

Go to faculty and staff page.
To the student: To declare one of the majors in music, it is necessary to assess proficiency in music fundamentals and musical literacy either by taking the Music Placement Examination and achieving placement in Music 155 Intermediate Music Theory I or by successfully completing Music 102A Basic Music Theory \& Skills. For acceptance into the BME or BA, a satisfactory audition is required

Preliminary to Curricula: Both Degree Programs

- MUSI 102A Basic Music Theory \& Skills 4 credits
- MUSI 120 Functional Keyboard Skills 2 credits


## Music Major, Bachelor of Arts Degree

For Credit

- MUSI 155 Intermediate Music Theory I 2 credits
- MUSI 156 Intermediate Music Skills I 2 credits
- MUSI 257 Intermediate Music Theory II 2 credits
- MUSI 258 Intermediate Music Skills II 2 credits
- MUSI 259 Analysis of Music after 19002 credits
- MUSI 221 Advanced Keyboard Skills \& Improvisation 2 credits
- MUSI 304H History of Western Music to 17504 credits
- MUSI 305H History of Western Music, 1750-Present 4 credits
- Applied Music Lessons 4 credits
- Music Ensemble 4 credits

Participation in music ensemble/ensembles is required of all music majors every semester on campus in accord with the expectations published in the Music Student Handbook.

- Electives in Music, selected from two of the following groups: 10 credits
o Music theory courses (3-7): MUSI 355, 357, 450, or appropriate topics courses, MUSI 212 or 380;
o Music history courses (4-8): MUSI 203, 205, 208, 216, 220, or appropriate topics courses, MUSI 212, 380 or 214A
o Additional applied music lessons or MUSI 350 \& 351, Introduction to Conducting \& Choral \& Instrumental Conducting.
- MUSI 495, Senior Recital and Paper, or MUSI 498, Senior Project 2 credits

TOTAL credits 42 credits

For Non-Credit

- MUSI 199, Music Practicum
- Proficiency examinations


## Bachelor of Music Education Degree

For Credit (in music)

- MUSI 155 Intermediate Music Theory I 2 credits
- MUSI 156 Intermediate Music Skills I 2 credits
- MUSI 257 Intermediate Music Theory II 2 credits
- MUSI 258 Intermediate Music Skills II 2 credits
- MUSI 259 Analysis of Music after 19002 credits
- MUSI 221 Advanced Keyboard Skills \& Improvisation 2 credits
- MUSI 250 Technology for Music Educators 2 credits
- MUSI 304H History of Western Music to 17504 credits
- MUSI 305H History of Western Music, 1750-Present 4 credits
- MUSI 216A/C Music of the World 4 credits
- Applied Music Lessons, primary area 7 credits
- Applied Music Lessons, keyboard area 2 credits
- Music Ensemble 4 credits

Participation in music ensemble/ensembles is required of all music majors every semester on campus in accord with the expectations published in the Music Student Handbook.

- MUSI 350 Introduction to Conducting 2 credits
- MUSI 351 Choral \& Instrumental Conducting 2 credits
- MUSI 231-234 Instrumental methods \& techniques 4 credits
o MUSI 231, Woodwind Instruments
o MUSI 232, Brass Instruments
o MUSI 233, Percussion Instruments
o MUSI 234, String Instruments
- MUSI 235 Introduction to Vocal Pedagogy \& Diction 2 credits
- MUSI 165 Introduction to Music Education 3 credits
- MUSI 463 General Music Methods 4 credits
- MUSI 464 Choral Music in the Schools 3 credits
- MUSI 465 Instrumental Music in the Schools 3 credits
- MUSI 491 Internship 2 credits

The internship will constitute early placement in the student teaching setting several hours per day prior to the start of the student teaching experience.

TOTAL CREDITS (in music) 64 credits
For Non-Credit (in music)

- MUSI 199, Music Practicum
- MUSI 497, Senior Portfolio Review

Proficiency examinations and applied music examination for advanced standing

Recital or studio class performance annually
For Credit (in education)

- EDUC 103 or 104 Sociological Perspectives in Education or Philosophical Perspectives in Education 4 credits
- EDUC 111 Human Development \& Learning Theory: Birth through Middle Childhood 2 credits
- EDUC 113 Human Development \& Learning Theory Adolescence through Young Adult 1 credit
- EDUC 120 Introduction to Students with Special Needs 2 credits
- EDUC 312 Reading and Writing in Content Areas 4 credits
- EDUC 495 Student Teaching 12 credits

TOTAL CREDITS in Education 25 credits

For Non-Credit (in education)
Successful completion of the State Board of Education Examinations

## Minor in Music

- Music 102A Basic Music Theory and Skills 4 credits
- Music 110A Understanding Music 4 credits
- Eight credits selected from Music 201 to 220 and 301 to 320
- Applied Music lessons or/or Music Ensemble (4 credits total)

TOTAL CREDITS 20

## Course Listings

## I. Music Ensembles

All Wittenberg students may participate in a variety of choral and instrumental music ensembles, initial placement in which is determined by an interview or audition with the ensemble conductor.

A total of four credits may be earned for successful participation in music ensemble and other production experience courses.

Music majors and minors must fulfill their ensemble requirement in their designated programs. Chamber ensembles are formed when sufficient interest warrants.

Participation in music ensemble/ensembles is required of all music majors every semester on campus in accord with the expectations published in the Music Student Handbook.

## Instrumental Ensembles (0 to 1 credit)

- 173A. Handbell Choir.
- 175. Jazz Ensemble.
- 177A. Chamber Orchestra
- 179A. Symphonic Band.


## Choral and Vocal Ensembles (0 to 1 credit)

- 183. Opera Studio.
- 185. Wittenberg Choir.
- 187. Wittenberg Singers..


## Chamber Ensembles (0 to 1 credit)

- 191. Flute Ensemble.


## II. General Classes in Music

Most of the following courses meet general education learning goals. The courses are arranged in accord with the guidelines given below, which serve as prerequisites self-assessed by the student.

Courses at the 100 level: Such courses, generally open to all students, assume no particular familiarity with music and tend to emphasize a substantial number of listening experiences.

Courses at the 200 level: The ability to read music is recommended. Some experience in listening to music is recommended. Further, successful completion of English 101 is recommended.

Courses at the 300 level: Because standard college-level music texts may be used, the ability to read music is required. The student should have the ability to read critically from musical scores and literary sources of the period. Junior standing is recommended.

## MUSI- 100A. Fundamentals of Music, Studio. 4 credits.

Practical approach to the fundamentals of music, meaning the student gains understanding of how music works through playing it on electronic pianos in a laboratory situation. Virtually no reading - all information is presented in class, demonstrated and then rehearsed by the student. The successful student is able to read music and improvise/harmonize melodies on the keyboard, adding suitable, if simple, accompaniments in several styles. This course is not for the student unwilling to maintain a regular practice schedule. Because the material is cumulative, the learning cannot be delayed. No prerequisite skills. Every year.

## MUSI- 101A. Elementary Music Theory. 4 credits.

Introductory course designed to give the student a fundamental understanding of how to compose music and how to analyze music using Western conventions developed over the past 1,000 years.

The ability to read music is helpful, but not required; music reading will be learned early in the course. Grading is based on several short exams and a term project. By the end of the semester, the student will be able to compose a short musical composition and create an elementary analysis of a major work of music. Both classical and popular music styles will be studied. Every year.

## MUSI- 102A. Basic Music Theory and Skills. 4 credits.

This is an introductory course designed to give students a fundamental understanding of the basics of music theory. It is intended for the music major/minor who needs to review the basics and intends to continue the study of music at the advanced level. The course is open to non-music majors, the prerequisite being the ability to read music. The course begins with a study of the materials of music - intervals, triads, scales, key signatures, meter, and melodic structure. By the end of the semester, the student has been introduced to the basics of four-part writing with chords in root position. Grading is based upon daily assignments consisting of exercises in each of the areas studied and supplemented with analytical work provided by the instructor.

## MUSI- 110A. Understanding Music. 4 credits.

Basic introductory course designed to enable the student to appreciate some of the great works of musical art. A practical knowledge of music is achieved through a variety of guided listening experiences illustrating the various forms and styles of music. May be writing intensive. Every year.

## MUSI- 112. Topics. 2-4 credits.

Study of subjects, chosen by the instructor, designed to develop perceptive listening and musical literacy. May be writing intensive. This course may be repeated for credit.

## MUSI- 203A. The Beatles and Their Predecessors: Musical Style and Social Context. 4 credits.

A study of the evolution of American and British popular music from the mid-1950s to about 1970 with a focus on classic rock. Includes a study of the musical styles and social context of Elvis, the Beach Boys, the Beatles, and their immediate predecessors: Little Richard, Fats Domino, Chuck Berry, Jerry Lee Lewis and Buddy Holly. Course includes an analysis of numerous songs in terms of melody, rhythm, harmony and formal structure. In-class lecture, listening and discussion. Out of class listening, reading and writing (journals, short papers and major project). Ability to read music is highly recommended. Alternate years.

## MUSI- 205A. Women in Music. 4 credits.

Study of women composers and performers who have contributed significantly to the music of Western civilization. Selected readings show the shifting attitudes throughout history toward women in music and the struggles of these women for recognition and survival. Emphasis is placed on perceptive listening skills as well as on an understanding of historical periods and musical styles through recordings and readings. Writing intensive. Every third year.

## MUSI- 212. Topics. 2-4 credits.

Courses, chosen by the instructor, designed to develop an understanding of significant musical elements through an examination of the interrelations between musical creativity and cultural environment. May be writing intensive. This course may be repeated for credit.

## MUSI 214A: Electronic Music Production, 4 credits

Students will learn to compose and perform electronic music in the manner of many professional pop musicians using Ableton Live and companion software applications. Styles of music explored include Ambient, House, Chiptune, Breakbeat, and Hip-Hop. Basic recording and mixing techniques will also be covered. No prior composition experience or ability to read music is necessary. Examples of artists will be presented and made available for outside of class reference and listening.

## MUSI- 216A/C. Music of the World. 4 credits.

The world's music are as diverse as its lands, peoples, cultures, and languages. In this course, the student studies the music and culture of several disparate societies, seeking answers to the following questions: What technical aspects create a music's unique sound? What role does music play in the lives of its composers, performers and listeners, and what other elements of culture (language, art, literature, society, etc.) are relevant to the study of a society's music? Primarily the study of the musics and cultures of Africa, India, Indonesia and Latin America. Serves as an introduction to research methods in "ethnomusicology" (the study of music in culture). Grading is based on exams, a major paper and class participation. Writing intensive. Every year.

## MUSI- 220. Introduction to Church Music. 4 credits.

Study of areas of concern common to all Christian denominations regarding the practice of sacred music in the context of worship. Deals with historical background of worship of the JudeoChristian tradition, liturgies, theology of worship and the place of music in worship. Also included is a synopsis of hymnic materials as they have developed from the early Christian Church through the 20th century. Required for church music majors; however, it is open to any student interested in the study of worship and its music. Of particular interest to religion majors. Every third year.

## MUSI- 301H. History of Western Music to $\mathbf{1 7 5 0} .4$ credits.

Study of the important musical developments from ancient Greek and early Christian music through the Medieval, Renaissance and Baroque eras and of the composers whose creativity brought new musical ideas to fruition. Styles and forms and the dynamics of change are researched through listening, reading and analysis. Required for music majors. Writing intensive. Every year.

## MUSI- 302H. History of Western Music, 1750-1900. 4 credits.

Survey of music history and literature from the beginnings of the Classic style to the end of the Romantic era. Required for music majors. Writing intensive. Every year.

## MUSI- 303A. History of Western Music from 1900. 2 credits.

Begins with the origins of contemporary musical thought in the Post- Romantic style. Concentrates on Debussy to the present. Styles discussed include Impressionism, Neo-Classicism, Expressionism, Neo- Romanticism, Minimalismi and electronic music. Provides an awareness of the main musical style trends in the 20th century. Required for music majors. Prerequisite: Music 110 or equivalent. Writing intensive. Every year.

## MUSI- 304H History of Western Music to 17504 credits.

Study of the important musical developments from ancient Greek and early Christian music through the Medieval, Renaissance and Baroque eras and of the composers whose creativity brought new musical ideas to fruition. Styles and forms and the dynamics of change are researched through listening, reading and analysis. Required for music majors. Writing intensive. Every year.

## MUSI- 305H. History of Western Music 1750-Present. 4 credits.

Survey of music history and literature from the beginnings of the Classic style to the present. Writing intensive. Prerequisite: Must be able to read music.

## III. Applied Music Lessons

All students at Wittenberg may take private lessons in Applied Music, the initial enrollment for which requires the permission of the Chair of the Department of Music. There is an applied lessons fee for non-music majors. A meeting with the applied lessons professor is also required prior to enrollment. Students may register for one half-hour lesson per week in Applied Music and earn one credit. Should program or desire permit, a student may register for a one-hour lesson per week and earn two credits. If Applied Music registration satisfies a requirement of a declared music major or minor program, the additional fee is normally waived.

Two levels of applied instruction are available, with initial enrollment at the 100 level. Students may enroll in Advanced Applied Music at the 300 level after successfully completing an applied examination, usually given at the end of the second year of study, to determine competency. Applied Music Lessons are graded with letter grades unless a student chooses a Pass/Fail option.

- 121/321: Applied Organ.
- 122/322: Applied Piano.
- 123/323: Applied Harpsichord.
- 124/324: Applied Voice.
- 125/325: Applied Violin.
- 126/326: Applied Viola.
- 127/327: Applied Violoncello.
- 128/328: Applied Bass.
- 129/329: Applied Classic Guitar.
- 130/330: Applied Harp.
- 131/331: Applied Flute.
- 132/332: Applied Oboe.
- 133/333: Applied Clarinet.
- 134/334: Applied Saxophone.
- 135/335: Applied Bassoon.
- 136/336: Applied Horn.
- 137/337: Applied Trumpet.
- 138/338: Applied Trombone.
- 139/339: Applied Euphonium.
- 140/340: Applied Tuba.
- 141/341: Applied Percussion.
- 145/345: Applied Composition.


## IV. Intensive Music Classes

The course Music 102A serves as prerequisite for courses in music theory and music skills taught as two pairs of offerings, Music 155/156 and 257/258. The courses in each pair should be taken concurrently and each pair should be taken consecutively.

## MUSI- 120. Functional Keyboard Skills. 2 credits.

A course designed to develop basic keyboard skills needed by non-keyboard music majors. Rudiments of theory, keyboard technique and harmonization will be covered. Taught in the electronic keyboard lab. Every year.

## MUSI- 155. Intermediate Music Theory I. 2 credits.

Begins with a review of the materials of music-scales, intervals and triads during the first two weeks of the semester. The course proceeds into harmonic progressions, first with the major mode and then the minor mode, along with the principles of voice leading, open and close positions, and rules of motion as set forth in the Common Practice Period (1600-1825). Chords of inversion, nonharmonic tones, cadence, dominant seventh chords and secondary dominants (borrowed chords) complete the course. Exercises in each of these areas are provided in the text and supplemented with analytical work provided by the instructor. Grading is based on daily assignments. It is recommended that Music 155 be taken concurrently with Music 156: Intermediate Music Skills I. Prerequisite Music 102 or equivalent skill level. Every year.

## MUSI- 156. Intermediate Music Skills I. 2 credits.

(1) Sight Singing: Primary goal is to learn to perform at sight any pattern of pitches or rhythms in order to facilitate the student's playing, singing, conducting, composing and studying music.

Grading is based on performance exams given daily. Significant and regular outside practice is required. In this, the first semester of Sight Singing, the following material is covered: Pitch, diatonic melodies using conjunct motion and disjunct motion within the tonic and dominant chords; C clefs; diatonic melodies using disjunct motion within the subdominant, supertonic and dominant seventh chords; and Rhythm: fundamental rhythm patterns in common simple and compound meters: irregular division of the beat. (2) Ear Training: The student learns to understand and notate pitch patterns and rhythm patterns presented aurally. Grading is based on dictation exams given approximately every other week. In this first semester of Ear Training, material covered will match that included in Sight Singing. In addition, harmonic dictation in major keys will be included. It is recommended that Music 156 be taken concurrently with Music 155: Intermediate Music Theory I. Prerequisite: Music 101 or equivalent or placement by examination. Every year.

## MUSI- 199. Music Practicum. 0 credits

Non-credit course required of all music majors every term on campus. Monitors attendance and participation by the music major at concert and recital events, special workshops and clinics. Every year.

## MUSI 214A. Electronic Music Production, 4 credits

Students will learn to compose and perform electronic music in the manner of many professional pop musicians using Ableton Live and companion software applications. Styles of music explored include Ambient, House, Chiptune, Breakbeat, and Hip-Hop. Basic recording and mixing techniques will also be covered. No prior composition experience or ability to read music is necessary. Examples of artists will be presented and made available for outside of class reference and listening.

## MUSI- 221. Advanced Keyboard Skills and Improvisation. 2 credits.

A course designed to develop more advanced skills needed by non-keyboard music majors and assist them to pass their respective keyboard proficiencies. Prerequisite: Music 120 or equivalent skills. Taught in the electronic keyboard lab. Every year.

## MUSI- 235. Introduction to Vocal Pedagogy \& Diction. 2 credits

Applied class instruction in vocal techniques, emphasizing voice pedagogy, teaching procedures and materials, and lyric diction. The course includes a basic study in the pronunciation and application of the English language as it relates to singing through the use of the international Phonetic Alphabet. Applicable to all students of voice and required of all voice performance and music education majors.

## MUSI- 236. Foreign Language Lyric Dictions. 2 credits

Presents a basic study in the pronunciation and the application of the Italian, German, and French languages as these relate to singing through the use of the International Phonetic

Alphabet. Materials for the class include David Adams' A Handbook of Diction for Singers; Joan Wall's International Phonetic Alphabet for Singers; and examples of repertoire, primarily art songs, from a variety of periods and styles. Recommended for all voice students.

## MUSI- 257. Intermediate Music Theory II. 2 credits.

Since this course resumes study after a three-month recess, the first week is spent reviewing all four-part writing principles of the Common Practice Period, beginning with secondary dominants, the last area studied in Music 155. The course proceeds with studies in musical texture, diminished seventh chords, non-dominant sevenths, dominant ninths, 11ths, 13ths, chromatically altered chords, the Neapolitan sixth, augmented sixths, and other chromatic chords. A final project consists of an original composition based upon a text selected by the student, an original melody and four-part harmonization incorporating as much of the harmonic vocabulary available to the student following completion of this course. Daily exercises in each of the areas studied are provided in the text supplemented with analytical work provided by the instructor. Grading is based on results of daily assignments. It is recommended that Music 257 be taken concurrently with Music 258: Intermediate Music Skills II. Prerequisite: Music 155. Every year.

## MUSI- 258. Intermediate Music Skills II. 2 credits.

The following material is covered: Pitch: chromatic melodies in major and minor, medieval modes, highly chromatic melodies, modulation and extended melodies; rhythm: syncopation, complex syncopation and musical excerpts (Medieval through Modern). Ear Training: The student learns to understand and notate pitch patterns and rhythm patterns presented aurally. Grading is based on dictation exams, given approximately every other week. Material covered will match the work being done in Sight Singing. In addition, harmonic dictation in major and minor keys will be included. It is recommended that Music 258 be taken concurrently with Music 257: Intermediate Music Theory II. Prerequisite: Music 156. Every year.

## MUSI- 259. Analysis of Music After 1900. 2 credits.

An introduction to the basic theoretical concepts for post-tonal music of the 20th century. Students will also review the latest theoretical tools in analyzing and creating post-tonal music. The student's grade will be based on homework assignments and tests. Prerequisite: Music 257 or permission of the instructor.

## MUSI- 350. Introduction to Conducting. 2 credits.

Introduces and develops the skills necessary for a musician to conduct an ensemble. The style and mechanics of the physical art of conducting are discussed each class period. The student applies this knowledge by conducting an ensemble consisting of members of the class. A daily grade will be given for individual preparation and class participation. There will be discussions and written exams covering musical terminology and instrumental transposition as found in scores. Each week exercises that develop coordination and rhythm will be performed and graded. The course will conclude with a discussion of various methods of score study and score preparation. Prerequisites: Music 257, 258, or permission of instructor. Alternate years.

## MUSI- 351. Choral and Instrumental Conducting. 2 credits.

Continuation of Music 350. Prerequisite: Music 350.

## MUSI- 355. Studies in Counterpoint. 3 credits.

Designed to develop an awareness and understanding of contrapuntal writing and techniques through reading, analysis of musical examples, workbook exercises and original composition. Prerequisites: Music 257 and 258. Alternate years.

## MUSI- 357. Orchestration. 3 credits.

The student learns to write for each instrument found in a concert band and an orchestra and to write for these instruments in various combinations. The course also deals with the principles of scoring for a concert band and an orchestra as well as solutions to problems one encounters in making a score. The course uses a lecture/discussion format. The student's grade will be based on a combination of assignments, quizzes, a written midterm exam and a final orchestration project. Prerequisites: Music 257 and 258. Alternate years.

## MUSI- 380. Topics in Music. 2-4 credits.

Designed for the major in music, this course may explore intensively such topics as score reading, advanced conducting, composition and the art of accompaniment, when student interest and faculty availability warrant. Prerequisite: Permission of instructor. May be writing intensive. Course may be repeated for credit.

## MUSI- 450. Form and Analysis. 4 credits.

Comprehensive study of analytical techniques designed to give the student the tools for understanding the compositional processes of a wide spectrum in music. Prerequisite: Music 257 or permission of instructor. Alternate years.

## MUSI- 470. Problems in Pedagogy and Literature. 4 credits.

Course in group and private teaching of a specific applied instrument or of the voice and its literature. Includes aims, objectives, and procedures of applied teaching and principles of learning. Prerequisite: Permission of instructor. Offered as needed.

## MUSI- 490. Independent Study. 2-4 credits.

Individual project as arranged by the student with the supervising professor and the department chair. May be writing intensive. Every year. This course may be repeated for credit.

## MUSI- 491. Internship. 2 to 4 credits.

Supervised learning-work experience at an on-or off-campus site. Generally pursued during the senior year. Usually involves a written report, a journal, or other assignments. Every year. This course may be repeated for credit.

## MUSI- 495. Senior Recital and Paper. 2 credits.

Presentation of a full-length recital in the primary area of applied music study. A challenging program to be determined in consultation with the applied music teacher. Designed as a culmination of preceding studies. A written paper of moderate length and relating to some aspect of the program is also required. Required of Bachelor of Music degree students. An oral examination, reviewing and assessing the student's previous work in all areas of the music major, concludes the course. Prerequisite: At least three terms of advanced study in the primary area of applied music, senior standing and concurrent registration in the area of advanced applied study. Every year

## MUSI- 496. Senior Recital and Paper with Honors. 2 credits.

Prerequisite: 3.50 GPA, applied lessons at the 300-level, and permission of the Department Chair.

## MUSI- 497. Senior Portfolio Review. No credit.

Presentation of selected class work and related materials and resources, and the demonstration of musical skills and competencies in an oral examination format before a committee of three faculty members. Required of the major in music education. The review and examination should occur at the beginning of the senior year and at least one full semester prior to the student taking Education 495: Student Teaching. Every year

## MUSI- 498. Senior Project. 2 credits.

Full-scale investigation of a selected topic or a production of a creative project. Usually presented in a written form. The project is juried by a committee of three faculty members. Both the project and the committee are determined by the end of the student's junior year and in consultation with the academic adviser and the Department Chair. An oral examination, reviewing and assessing the student's previous work in all areas of the music major, concludes the course. Writing intensive. Every year.

## MUSI- 499. Honors Thesis/Project. 2 credits.

Prerequisite: 3.50 GPA and permission of the Department Chair.

## V. Music Education Classes

## MUSI- 165. Introduction to Music Education. 3 credits.

Comprehensive survey of the problems and the scope of music education in the school. Includes the development of fundamental, instrumental, and vocal skills and teaching techniques. Also developed is the ability to use effectively a fretted instrument as a pedagogical tool. Includes field-based experience. Alternate years.

## MUSI- 231, MUSI- 232, MUSI- 233, MUSI- 234, MUSI- 235: Vocal and Instrumental Teaching Methods/Classes.

Applied class instruction in various groups of instruments and in vocal techniques with emphasis on teaching techniques and procedures. Teaching materials are surveyed. At least two courses each year.

- 231: Woodwind Instruments. 1 credit
- 232: Brass Instruments. 1 credit
- 233: Percussion Instruments. 1 credit
- 234: String Instruments. 1 credit
- 235: Introduction to Vocal Pedagogy and Diction. 2 credits

MUSI- 250. Technology for Music Educators. 2 credits.
A course that will introduce the student to the basics of technology as it relates to teaching music in the schools. The student will gain general skills and knowledge of current technology in the following areas: the Internet, computer-assisted instruction, desktop publishing, music notation, music sequencing, digital audio and multimedia. The student's grade will be based on quizzes and the completion of six projects. Prerequisite: Music 102 and 155, or permission of the instructor.

## MUSI- 463. General Music Methods. 4 credits.

Intensive study of materials and methods used in teaching music pre-K through Grade 12 by a music-teaching specialist, including classroom courses such as general music and music appreciation. Also includes exploratory teaching in the schools. Prerequisites: Music 165 and Education 103 or 104 or permission of instructor. Alternate years.

## MUSI- 464. Choral Music in the School. 3 credits.

Study of materials and methods for teaching music in junior, middle and senior high schools with emphasis upon classroom courses such as music history, music theory, etc., as well as the study of vocal problems and techniques of the changing voice and its application to junior and senior high school choral groups. Includes exploratory teaching in the public school. This course satisfies requirements for a teaching licensure in the area of music. Prerequisite: Music 165 and Education 103 or 104. Alternate years.

## MUSI- 465. Instrumental Music in the School. 3 credits.

Integrated course including the problems involved in the organization and administration of an instrumental music program also dealing with the organization, planning and design requisite for performances given by the marching band. Laboratory experience in the care and repair of instruments and the purchase of supplies and equipment. Include exploratory teaching. Prerequisites: Music 165, 231, 232, 233, and 234 and Education 103 and 104. Alternate years.

## Neuroscience

## Requirements for the Minor

Because of the number of prerequisites for the required courses, this minor is primarily intended for biology and psychology majors and minors. The Neuroscience minor will require a total of 20 credits from:

## 1. Coursework

Students will be required to take at least three of the four core courses (Biol 220, Biol 210, Psyc 311, Psyc321) for the Neuroscience minor and an additional one to two courses from the Neuroscience minor electives. The core courses may not be double counted as electives. In addition, elective
courses taken for the Neuroscience minor may not count toward the student's major.

## 2. Capstone Experiences

A significant Neuroscience internship or research experience is required for this minor during a student's junior year. Students may take Neuroscience 492: Neuroscience research OR Neuroscience 493: Internship (0-5 credits) to fulfill this requirement. In addition, students other significant professional experience deemed sufficient by the Neuroscience Committee may also fulfill this requirement. During the senior year, students are required to take Neuroscience 495:
Capstone seminar.

## Core courses:

Biol 220B: Neurobiology
Biol 210: Molecular Neurobiology
Psyc 311B: Behavioral Neuroscience
Psyc 321B: Learning, Memory and Cognition

## Elective courses:

Biol 210: Molecular Neurobiology
Biol 220B: Neurobiology
Biol 221: Pharmacology
Biol 325: Human A\&P I
Biol 324: Animal Physiology
Chem 271: Principles of Biochemistry
Comp Sci 350Q: Artificial Intelligence
Comp Sci 260: Comp. Models \& Methods
Math 327: Statistical Modeling OR Math 337: Statistical Design OR Math 205: Applied Matrix Algebra
Phil 203: Mysteries of Self and Soul
Psyc 207: Experimental Design
Psyc 211: Sensation and Perception

Psyc 311B: Behavioral Neuroscience
Psyc 321B: Learning, Memory and Cognition

- Capstone Experiences:


## Neuroscience 492- Neuroscience research. 0-5 credits

Investigation of various neuroscience topics by laboratory or field observations, experimentation and data collection. Directed by a neuroscience faculty member although research experiences may occur off-campus. Course may be taken more than once for credit; however, only five credits count toward the minor requirements. Prerequisites: Junior or senior standing. Every semester.

## Neuroscience 493 - Internship. 0-5 credits

The student develops, under the direction of a faculty member and job-site supervisor, a work/study program that provides practical neuroscience experience. Prerequisites: Junior or senior standing. Every semester. This course may be repeated for credit; however, only five credits count toward the minor requirements.

## Neuroscience 495 - Capstone seminar. 0 credits

The purpose of this seminar is to encourage students to integrate their internship or research experiences with the courses taken from the minor curriculum. Students will be expected to present information/data from their internship or research experience for the neuroscience faculty. Prerequisite or co-requisite: Neur 492 or Neur 493. Offered each spring semester

Core courses taken from the required courses list may NOT double count as electives
Elective courses taken for the neuroscience minor may NOT count towards the student's major

## Nursing - RN to BSN Degree Completion- SCE only

The RN to BSN degree completion program enables licensed RNs to complete a four-year Bachelor of Science in Nursing. Students admitted to the program will have earned a two-year degree in Nursing, must have achieved Nursing licensure by the second term of the Wittenberg program, and must meet all other Wittenberg graduation requirements to earn the BSN. Students in the program must maintain a minimum of a 2.0 GPA in their major courses, and must receive at least a C in a NUR course to count it toward the major and degree.
The following courses serve as prerequisites for the program. These typically are completed during the student's course leading to the RN.

Basic Human Anatomy (3-4 credits)
Intro to Biology (3-4 credits)
Chemistry (3-4 credits)
First Year English (3-4 credits)
Human Nutrition (credit or exam; 3-4 credits)
Basic Microbiology (3-4 credits)
Intro to Sociology (3-4 credits)
General Psychology (3-4 credits)
Statistics (3-4 credits)
Completing the Nursing major at Wittenberg requires an additional twenty-four credits in Nursing courses:

NURS 300: Foundations and Contemporary Issues for RNs (2)
NURS 301: Cultural Competency in Health Care (2)
NURS 400: Health Assessment (4)
NURS 401: Evolving Concepts in Leadership and Management (4)
NURS 402: Practicum in Nursing Leadership and Management (2)
NURS 403: Research and Evidence-Based Nursing (4)
NURS 404: Concepts in Community Health Nursing (Clinical course) (4)
NURS 405: Nursing Informatics (2)
All of the Nursing courses are taught in Wittenberg’s hybrid, @witt@home format.

## Courses

Courses are open only to students enrolled in the RN/BSN program.

## NUR 300 Foundations and Contemporary Issues for RNs. 2 credits.

Introduction to socialization of the professional nurse with synthesis of concepts, theories, processes, issues of informatics, and models to facilitate transition into professional nursing.

## NUR 301 Cultural Competence in Health Care. 2 credits.

An introduction to concepts and techniques for the provision of culturally competent care within the U.S. and across global contexts.

## NUR 400 Health Assessment. 4 credits.

Students expand their knowledge and skills in health assessment, synthesize health assessment data in planning and providing care, and explore variations in health among clients of different age groups and cultures.

## NUR 401: Evolving Concepts in Leadership and Management 4 credits.

Examines theories and strategies of leadership and management for the practice of professional nursing in relation to safety and quality improvement initiatives, and quality patient outcomes. Includes application of leadership concepts, skills, and decision-making in the provision of nursing care, team coordination, and participation in evidence-based improvement/change projects.

## NUR 402: Practicum in Nursing Leadership and Management 2 credits.

Examines managerial and leadership concepts, issues, and roles as applied to the role of the professional nurse in various healthcare settings. Facilitates students in the transition from student role to professional nurse role through concentrated clinical experience in selected clinical areas.

## NUR 403: Research and Evidence-Based Practice 4 credits.

Introduces the basic elements of the research process and evidence-based practice. Emphasizes the critical appraisal of current evidence that guides professional nursing practice.

## NUR 404: Concepts in Community Health Nursing 2 credits.

Study of community health nursing theory and principle applied to the nursing care of individuals, families, groups, communities and populations.
PRACTICE REQUIREMENTS: Clinical experiences will be structured to meet the learning needs of the student and the course objectives.

NUR 405: Health Care Informatics (2 credits).
This course examines informatics in health care emphasizing information systems and the use of the information technology (IT) applications to support health.
Prerequisites: none

## Nursing Pathway - (Cooperative Program with Clark State)

The Pathway Program is a joint program leading to the BSN degree offered by Wittenberg and Clark State Community College, in conjunction with Springfield Regional Medical Group. The student is enrolled at Wittenberg for all four years of the program. During Year 1, the student takes general education courses and courses related to the nursing program; during Years 2 and 3 the student takes Nursing courses at Clark State Community, completing an AA at Clark State and qualifying to take the RN licensure after the junior year; and in Year 4 the student completes the remaining requirements in Nursing and general education to complete the BSN. Through this program, the student meets the same requirements as those completing the RN program at Clark State and the RN to BSN completion program at Wittenberg.

Students must apply for entrance into the CSCC phase of the program during the spring semester of the first year. The CSCC Nursing program requires as background: high school Algebra (or college level math/stats at Wittenberg), biology, chemistry (or Chemistry for nurses at Wittenberg), STNA (taken at Clark State), Medical Terminology (taken at Clark State).
Admission to Year 4, the Wittenberg phase of the Nursing courses, is conditional upon the student passing the state’s Nursing licensure exam.

## SAMPLE SCHEDULE

Year 1: Fall \& Spring (courses on the Wittenberg campus)
Introductory courses in Psychology and Sociology (8 credits)
ENGL 101 (4 credits)
LANG 111 (if needed) and 112 (may be taken later) (5-10 credits)
A general education course (4 credits)
Statistics (4 credits)
One course in CHEM (4 credits)
Year 1 May (courses on the Clark State campus)
STNA (4 credits)
Medical Terminology (online) (2 credits)
CSCC Orientation (0 credits)
Year 2: Fall \& Spring (on the Clark State campus)
Anatomy and Physiology I and II (8 credits)
Pharmacology and Drug Calculations (3 credits)
Lifespan Human Growth \& Development (3 credits)
Basic Nursing Concepts (7 credits)
Adult Nursing I (7 credits)
Behavioral Health Nursing (4 credits)

## Year 2: Summer

The student may choose to take summer courses at Wittenberg or at Clark State toward remaining general education requirements.

Year 3: Fall \& Spring (on the Clark State campus)
Microbiology (3 credits)
Adult Nursing II and III (5 credits and 7 credits)
Children-Family Nursing (3 credits)
Nursing Directed Practice/Seminar (2 credits)
Maternal-Newborn Nursing (3 credits)
Nursing Review (1 credits)
NURS 400 Assessment (4 credits)
Year 4 Fall \& Spring (on the Wittenberg campus)
NURS 300 Foundations/301 Culture (4 credits)
NURS 403 Research (4 credits)
NURS 405 Leadership (4 credits)
NURS 404 Community (4 credits)
NURS 402 (4 credits)
Any remaining general education courses may be taken in the summers following the 2nd and $3^{\text {rd }}$ years or during the $4^{\text {th }}$ year.

## Organizational Leadership (SCE students only)

Intended strictly for the evening program for adult/non-traditional students, this interdisciplinary degree program is supervised by the Dean and the Director of the School of Community Education and the Community Education Committee. The major requires thirty-six 36 credits of SCED courses and four credits in Economics.

## Requirements:

Thirty-two credits in SCED courses:
SCED 200: Liberal Studies Colloquium (4)
SCED 260: Organizational Behavior (4)
SCED 290: Topics: Financial Accounting or Understanding Financial Statements (4)
SCED 360: Human Resource Management (4)
SCED 340: Readings in Leadership (4)
SCED 400: Senior Leadership Seminar* (4)
SCED 300: Issues in Liberal Studies Leadership Issues electives (4) Related electives in the fields of leadership or management. (4)
*Qualified students may substitute SCED 499: Liberal Studies Honors Thesis Project for SCED 400.

Four credits in Communication courses: COMM 200. Introduction to Communication Studies; 224. Group Dynamics; 270S. Interpersonal Communication; or 290S. Media Literacy

Four credits in Economics: ECON 190S. Principles of Economics (4)

## Course Offerings

## SCED 190/290/390. Topic. 2-4 credits.

Within the Organizational Leadership program or such related programs as may develop, topics of special interest or need that are not readily encompassed by other designations in the curriculum. The 190 courses are at the beginning level, dealing with basic skills, techniques, or concepts. The 290 courses assume some level of college experience - to be designated for each particular course. The 390 courses are at an advanced level, require some experience in one or more disciplines, and are appropriate for students beyond the sophomore level.

## SCED 200L Liberal Studies Colloquium. 4 credits.

Introduction to the processes and values of interdisciplinary liberal arts inquiry, to modes of expression appropriate to such inquiry and to research techniques in general. Processes and values include identification of underlying premises and sequences of thought, analysis of competing positions, recognition of points requiring research, an appreciation for at least two different disciplinary approaches to a given topic and formation of critical judgment. The subject of the course varies but reflects issues and themes appropriate to the General Education Program's Integrated Learning goal. Products of the course include a research paper and discussion of
student projects. The Liberal Studies major should take this course as early as possible while working through the requirements of the major. SCED 200L satisfies the Integrated Learning (Wittenberg Seminar) requirement for SCE students. Prerequisite: English 101. Writing intensive.

## SCED 260S. Organizational Behavior. 4 credits.

Introduction to organizational behavior. Topics such as leadership, motivation, group dynamics, and organizational and work design covered. Writing intensive. Every year.

## SCED 300. Issues in Liberal Studies. 2 credits.

Intensive focus upon topics relating to liberal studies concentrations. Generally these topics are applications of interdisciplinary academic principles to issues that the adult student encounters in work and civic activities. They may also be extensions of topics introduced in other courses. Sophomore standing recommended.

## SCED 340. Readings in Leadership. 4 credits.

Students will read full texts and excerpts from a selected "Top Ten" classic authors in leadership, including Plato, Machiavelli, Drucker, Deming, and Peters. Principal theories of leadership, particularly those relating to business organizations and the effects of historical and economic contexts in shaping them, will be examined. The course objective is to develop a historically grounded understanding of the ways organizations develop and the manner in which leaders operate within them. Projects in the course will be designed to develop a mature set of insights into one's work organization.

## SCED 360S. Human Resource Management. 4 credits.

Introduction to the fundamentals of human resource management. Coverage of the classic topics including the philosophy and assumptions underlying the field, the legal background (EEO, OSHA, ADA, etc.), job analysis, personnel planning and recruitment, employee selection, issues in employment testing, training, employment development and compensation systems. Prerequisites: Any course meeting the General Education requirement in Social Institutions, Processes and Behavior and Economics 190S. Writing intensive.

## SCED 400. Senior Leadership Seminar. 4 credits.

A synthesis of learning from previous study and experience developed into a major report in which the student identifies a problem or process in an organizational setting, provides analysis, and proposes appropriate action. The inquiry process, developed in conjunction with the instructor and through activities with the group, addresses the dimensions of both management and leadership. Students present their report in writing to the instructor and orally to the seminar group. The report also serves as the basis for the oral senior assessment presentation for the major. Prerequisite: senior standing and completion of at least four major courses, including the Liberal Studies Colloquium. Writing intensive.

## SCED 490. Independent Study. 1-4 credits.

Individual study that requires approval of the faculty member directing the study and the Dean of the School of Community Education.

SCED 491. Internship. 1-4 credits.
Individual study centering on a supervised work site or community project. Requires approval from the faculty member directing the study, the work site supervisor, and the Dean of the School of Community Education.

SCED 499. Liberal Studies Honors Thesis. 0-8 credits.
Prerequisite: 3.50 GPA and permission of the Dean.

## Pre-Modern and Ancient World Studies

## Go to faculty and staff page.

The minor in Pre-Modern and Ancient World studies provides students with an opportunity to delve deeply into the history, literature, and culture of past civilizations. To make students global citizens, the PAST minor takes a global perspective, and encourages students to study the past from a variety of perspectives to allow them to make connections across time and space, and also between the present and the past.

## Requirements for the Minor:

A minor in Pre-Modern and Ancient World Studies consists of 22 credits distributed in the following way: PAST 400 Capstone Seminar (2 credits), an additional 20 credits, of which 8 credits must be at the advanced level and from at least two different areas of study with no more than three courses from any one department. Areas of study include: Art, Economics, English, History, Literature and Language, Music, Philosophy, Political Science, Religion, and Theatre.

To provide coherence to the minor, students should decide in consultation with their PAST faculty adviser on a distribution: chronological, thematic or comparative.

## Course Listings:

## PAST 400 Capstone Seminar. 4 credits.

Capstone course in which the junior or senior Pre-Modern and Ancient World Studies minor integrates the major strands of Pre-Modern and Ancient World history, culture, religion and philosophy, and literature around a specified theme and writes an extensive research paper. Writing intensive. Prerequisite: Must be a junior or senior Pre-Modern and Ancient Studies minor and have completed twelve credits of the PAST minor. Every year.

See Academic Catalog by Department for Full Description of Courses Listed Below:

## Art History:

ART 110H History of Art I
ART 220H Renaissance Art
ART 230H Baroque and Rococo Art
ART 240H Early Christian and Byzantine Art
ART 243H Western Medieval Art
ART 275H Greek and Roman Art
ART 280 when topic appropriate

## Economics:

Economics 231 European Economic History
Economics 320 History of Economic Thought

## English:

English 180A when topic appropriate

English 280 British Survey I
English 305 Studies in Medieval Literature and Culture
English 306 Studies in Renaissance Literature and Culture
English 307 Studies in Restoration and Eighteenth-Century Literature and Culture
English 330 when topic appropriate
English 331 Shakespeare

## History:

History 101 Topics in History when topic appropriate
History 105H/C Pre-Modern World
History 111H Medieval Civilization
History 161C Pre-Modern East Asia
History 171C African Societies to 1500
History 201 Topics in History when topic appropriate
History 202H Writing and Interpreting History when topic appropriate
History 203H/C Historian’s Craft when topic appropriate
History 241H England from King Arthur to Queen Elizabeth I
History 251C Russia to 1917
History 263C Age of the Samurai
History 301 Topics in History when topic appropriate
History 312 From Constantine to the Vikings
History 313 From the Vikings to the Black Death
History 314 Renaissance and Reformation
History 390 Reading Colloquium when topic appropriate

## Languages:

Chinese 130A/C Chinese Topics when topic appropriate
French 140A Themes of Francophone Literature when topic appropriate
French 301A Survey of French Literature I
French 412 La Prose I
Spanish 301 Introduction to Hispanic Literature

## Music:

Music 209A: Bach and Handel
Music 220 Introduction to Church Music
Music 301H History of Western Music to 1750

## Philosophy:

Philosophy 310 Ancient and Medieval Philosophy

## Political Science:

Political Science 211 Ancient and Medieval Political Philosophy

## Religion:

Religion 121R Art of Biblical Literature
Religion 134C/R Chinese and Japanese Religious Traditions

Religion 137R Jewish Tradition
Religion 221R Understanding the Old Testament
Religion 222R Understanding the New Testament
Religion 241R Christian Tradition
Religion 321 Biblical and Modern Prophets
Religion 324 Apocalyptic Vision in Ancient and Modern Literature
Religion 333C/R Buddhist Thought and Scriptures
Religion 339 C/R Monkeys, Samurai, and Gods
Religion 381R Women and Religion

## Theatre:

Theatre and Dance 260H History of European Theatre
In addition, topics courses in these departments and others are approved to meet Pre-Modern and Ancient World Studies minor requirements as the selected topics warrant. Other types of courses may also be offered with a Pre-Modern and Ancient World Studies emphasis and be approved for PAST credit. Current PAST courses will be listed in the master schedule each semester. Students may also receive PAST credit for study abroad experience upon petition to the PAST faculty up to 10 credits. The remaining 12 credits, which include the 2 -credit PAST seminar, must be completed with PAST Wittenberg faculty.

## Philosophy

Go to faculty and staff page.

## Requirements for Major (33 credits)

24 credits from Critical Thinking / Critical Theory

- 4 credits in Logic and Critical Reasoning (110R)
- No more than 8 credits at the 100 -level
- At least 12 credits at the 300 level, in addition to the Historical / Professional sequence (310, 311, and 400).
- 9 credits in the Historical / Professional sequence
- 8 credits: a 2-course sequence in the history of Western philosophy : Ancient and Medieval Philosophy (310); Modern Philosophy (311);
- 1 credit: Senior Seminar (400)


## Requirements for Minor (20 credits)

- 8 credits: the first two courses in the history of Western philosophy $(310,311)$
- 12 credits of elective courses, outside the history of Western philosophy sequence, with no more than 4 credits at the 100 -level


## Course Listings

## PHIL- 102R. Introduction to Philosophy. 4 credits.

This course is an introductory examination of the basic areas of philosophy, addressing questions like the following: How do we know if an action is right or wrong, and are any actions universally wrong? Is "beauty" really only in the eye of the beholder, or are there objective standards in the visual, musical, and literary arts? What sorts of things exist, for instance, do any non-physical things (such as minds, souls, or spirits) exist? Do we have free will, or are our behaviors and thoughts determined by chemical and physical events in our brains? Is knowledge possible and, if so, how do we know what we know? And is there a genuine difference between reasoning and coercion, between persuasion and manipulation, and how can we tell? Every year.

## PHIL- 103R. Ethics and Identity. 4 credits.

An introductory course in ethics and social identity, exploring the ways our moral principles and ethical ideals are related to our places and identities within concrete social systems. The goals of the course are to teach a method of moral decision-making, to enable students to understand how moral norms are in some sense relative and yet also in some sense objective, to explore ways that we are all to some extent selfish and yet to some extent always already in relations of interdependence and cooperation with others. Primary texts by theorists such as J.S. Mill, Kant, Hume, and Aristotle are studied.

## Phil 107R The Art of Living Ethically 4 credit.

In The Art of Living Ethically we will read, analyze and critique a number of different views regarding what it means to live a good life on a personal and social level. We will be challenged to examine our assumptions about our self and others in order to think more fully about how we can craft lives that are meaningful, thoughtful and socially engaged. During this course you will develop your philosophical skills through speaking, reading and writing, as well as through developing, hopefully, a deep appreciation for the importance of asking yourself questions that trouble you and the value of seeking to answer these questions.

## PHIL- 110R. Logic and Critical Reasoning. 4 credits.

An introduction to traditional and symbolic logic that typically includes: (1) informal fallacies, (2) syllogistic logic, and (3) elementary sentential and predicate logic. Students are required to construct proofs using a variety of formal methods. Every semester.

## PHIL- 200R. Introductory Topics. 0-4 credits.

Introductory examination of the work of a philosopher or philosophical school or of an area of philosophical study such as feminism, race theory, or existentialism. This course may be repeated for credit. Every year.

## PHIL- 203R. Mysteries of Self and Soul. 4 credits.

This is a course focusing on issues at the intersection of the philosophy of mind and psychology and the philosophy of religion. Problems discussed include the mind-brain/body problem, the problem of free will, the immortality of the soul, and the possibility of spirit-possession. The goal of the course is to bring students into an examination of their understandings of their own metaphysical, physical, and spiritual constitutions. Primary texts by theorists such as James, Freud, and Beauvoir are studied.

## PHIL- 204R. Philosophy of Women's Lives. 4 credits.

A course in global feminism that begins with studying feminist epistemologies and feminist postmodernism, and moves between theoretical readings about women's lives and actual first person narratives by women about their lives. The course is based on the belief that studying actual women's lives and words leads to a better understanding of theories about women's experiences.

## PHIL-207R Science in Social Context 4 credits

In Science in Social Context students will critically analyze: 1. The role of race and gender in science and medicine; i.e. how these impact the doing of science and medicine. 2. How science and medicine have studied race and gender. 3 . The interaction between science, medicine, and marginalized people. We will look at variety of views on these issues, assess the evidence and
arguments that are presented to us through our texts and hopefully have energetic class discussions about the material. You will be assessed through quizzes, written assignments, exams and a final project.

## PHIL-208A Philosophy and the Modern Drama 4 credits

The primary aim of the course is to provide students with the ability to recognize and evaluate theater and dramatic arts through a philosophical lens. As a pragmatic endeavor, we will examine perspectives as they relate to economic, social, cultural, political, and technological globalization. More specifically, students will be working through plays and short stories that examine what it means to be human and wrestle with "social evils" of the day. By "evil" what we mean are enactments and experiences of unmerited suffering, undeserved harm, or unjustified pain that humans create amongst themselves and others. No prerequisites.

## PHIL-209A Philosophy of Hip Hop Culture 4 credits

Philosophy and Art of Hip-Hop Culture will look at the content and forms of Hip Hop Expression as well as the assessment of performance, lyrics and images placed upon, and embodied by, its audience. This course will be taught thematically, focusing particularly to the fundamental human questions such as: The search for God, love and knowledge; the historical concerns of cultural authenticity, race and sexuality; the beauty and pain inherent in language, artistic expression and meaning; Chiefly we are looking at Hip Hop as a Cultural Socratic Art-Form, namely the historic look at Hip-Hop's ability to question, inform and engage in politics and the search for purpose within a democracy through its drama, music, and cultural forms. No prerequisites.

## PHIL- 303. Ethics and Psychology. 4 credits.

This is a course focusing on issues at the intersection between moral theory and psychology. the goal of the course is to explore theories of moral development, moral functioning, and moral education, especially as articulated by psychologists, sociologists, and anthropologists who base their empirical work on self-consciously philosophical concepts of morality and by philosophers in dialogue with them. Primary texts by such theorists as Dewey, Piaget, Durkheim, Kohlberg, and Gilligan are studied.

## PHIL- 304. Knowing Bodies. 4 credits.

An advanced philosophy of the body course. This course seeks to center the body within philosophy, arguing that philosophy can be meaningful only by recognizing the necessary relation between bodies and knowledge, bodies and ethics, and bodies and social change. Questions we will seek to answer are: What can I know? How can I know? How do I go about knowing? As we pursue these questions, we will find to answer them we must address the metaphysical questions of where knowledge takes place and what is the relation between the mind and knowing, the body and knowing, the body-mind and knowing, and the role of somatic experience in knowing.

## PHIL- 305. Applied Ethics. 4 credits.

Intensive study of one or more areas of applied ethics, e.g., medical, business, or environmental ethics. A background in the relevant field is helpful. Prerequisite: Philosophy 103 or permission. This course may be repeated for credit. Offered in rotation with 303.

## PHIL-308 Love, Death and Desire: Philosophy of Literature 4 credits

The aim of the course is to provide opportunities for students to engage in the deepest of all philosophical questions about love, lust and death. This course will examine a number of issues that arise once we begin to reflect on our mortality. Well we will also look at love through a twofold classification--three objects of love (things, persons, and ideals) \& three types of love (sexual, social, and religious); and ultimately raise the fundamental question, does love provide any exposure to how creative, powerful and mysteriously meaningful (or meaningless) and valuable (or valueless) your life is? Or is love an illusion sought to avoid the isolated, emptiness that life often provides, and death ultimately awaits. Prerequisites: One prior course in Philosophy.

## PHIL- 310. Ancient and Medieval Philosophy. 4 credits.

This course spans the period from the ancient Greek presocratics to 17th century European philosophy. The primary goal of the course is to introduce students to the historical method of philosophy, emphasizing the ways in which the philosophers of this period responded to perceived inadequacies in the solutions their predecessors offered to philosopher problems. Primary texts by Plato, Aristotle, Augustine, Thomas Aquinas, and Thomas Hobbes are studied.

## PHIL- 311. Modern Philosophy. 4 credits.

Modern philosophy (17th-19th centuries) is one of the most fascinating areas of philosophy. It is during the modern period that philosophy began to be concerned with the kinds of methods and ideas that we think of as philosophical today. Perhaps the most interesting thing about modern philosophy is that it is a period of intellectual change and social upheaval. The beliefs we have in democracy and the faith we have in scientific method, for example, developed during the modern period, as did navigation methods and optics. The modern period was one of the most hopeful times for social reform, but it also was a period of imperialism and colonialism, which did not have social reform for Others in mind. We will study Descartes, Princess Elizabeth, Locke, Hume, Mary Wollstonecraft, Hegel, Marx, and other thinkers. We also will study contemporary critiques of the modern period, seeking to understand why and how many of the modern ideas are still relevant today.

## PHIL- 312. Contemporary Philosophy. 4 credits.

While the focus of this class will not be all movements in the 20th century, the student will become acquainted with two traditions, namely "continental tradition" and the "pragmatist tradition." We will be asking questions related to but not limited to the following: How does Marx influence philosophy, most specifically the Frankfurt School, in the 20th century? What is the relation between philosophical positions and social change? Can we identify the ills of society? If so, how do we go about critiquing social movements and social institutions? Do human beings have the power to change the world or does the world exert so much power over human beings that we are the whim of social (and natural) forces? What constitutes a philosophical solution both to a philosophical problem and a social-political problem?

## PHIL- 380. Advanced Topics. 4 credits.

Examination of the works of a major philosophical thinker or school of philosophy, e.g., Whitehead, empiricism, pragmatism, etc. Prerequisites defined by instructor. Offered occasionally.

## PHIL 400. Senior Capstone. 1 credit

An advanced topics, research methods course, with the topics varying according to the associated 300-level elective. Co-requisite: Any 300-level Philosophy course excluding PHIL 310 and PHIL 311.

## PHIL- 490. Independent Study. 1-4 credits.

Philosophy Capstone serves as companion 1-credit course to one of our upper division courses Phil 380, Phil 303, 304, 306. Students will take Phil 400 during the their junior or senior year. Students fulfill Phil 400, Senior Capstone, by completing a major research project through mentorship and supervision with the faculty member teaching the companion course, i.e., Phil 380, Phil 303, 304, 308. Prerequisites: Completion of Phil 312 and at least junior standing. The course may be repeated for credit.

## PHIL- 491. Internship. 4-10 credits.

Work-study opportunities designed to enable students to apply ideas and skills developed in the study of philosophy, particularly analytical and writing skills, and knowledge of the principles of moral and political philosophy. Possibilities include work in an art museum, with a social services agency, or on a congressional staff. This course may be repeated for credit.

## PHIL- 499. Honors Thesis/Project. 1-4 credits.

Prerequisite: 3.50 GPA and permission of the Department Chair.

## Physics

Go to faculty and staff page.

## Requirements for Major (B.A.)

Required in Physics (37 credits)
Physics 200, 213, 214, 215, 218, 220, 311, 313, 350, 360, 460, a senior thesis, and eight additional credits taken at the 300-level or above, which must include at least four credits from one of the following: PHYS 330, 332, or 411.

## Required in Related Departments

Mathematics 201, 202, and either Mathematics 212 or 215; either Computer Science 150 or a chemistry course taken at the 121 level or above, with Chemistry 162 suggested.

## Requirements for Major (B.S.)

Required in Physics (47 credits)
Physics 200, 213, 214, 215, 218, 220, 311, 313, 350, 360, 460, a senior thesis, and 18 additional credits taken at the 300 level or above, which must include two credits of research and at least four credits from one of the following: PHYS 330, 332, or 411.

Required in Related Departments
Mathematics 201, 202, 212 and 215; Computer Science 150; Chemistry 121 and 162.
Recommended for the Major
Physics 312, 320, 321, 325, 330, 332, and 411; Computer Science 250; Mathematics 360.

## Requirements for Minor

Required in Physics
Physics 200, 215 and 12 additional credits taken at the 200 level or above.
Required in Related Departments
Mathematics 201 (Mathematics 202 is suggested).

## Special Programs in Physics

Engineering - See Engineering.

## Course Listings

## PHYS- 100N. Concepts in Physics. 4 credits.

Introduction to the principles of physics. Topics are selected from areas of classical and contemporary physics and technology such as Newtonian mechanics, digital and analog technology, astronomy, cosmology, modern physics and relativity. Prerequisite: Appropriate level on the Math Placement Exam. Every year.

## PHYS- 101. Concepts in Physics with Laboratory. 5 credits.

Same as Physics 100 but with a laboratory. Prerequisite: Appropriate level on the Math Placement Exam. Every year.

## PHYS- 102B. Physics through Experimentation. 4 credits.

Introduction to topics selected from classical and contemporary physics. Topics explored with both laboratory and lecture techniques, which are interwoven. Prerequisite: Appropriate level on the Math Placement Exam. Every year.

## PHYS- 107N. Astronomy. 4 credits.

Concentration on the nature of sky observations, the methods for making them, and the physical bases for understanding them. Topics discussed are the solar system, stars and their evolution, galaxies, cosmology and instrumentation. Observatory sessions are anticipated. Every year.

## PHYS- 200B. Mechanics and Waves. 5 credits.

Study of classical mechanics and acoustic waves. Topics include kinematics, statics, dynamics, work and energy, impulse and momentum, rotational motion and acoustical wave phenomena. One three-hour lab per week. Prerequisite: Placement into Mathematics 201, which is suggested as a co-requisite. High school physics is desirable. Every year.

## PHYS- 205. Topics in Classical and Modern Physics. 5 credits.

Continuation of Physics 200. Topics include thermodynamics, electricity, magnetism, light and modern physics. One three-hour lab per week. Prerequisite: Physics 200. Every year.

## PHYS- 213. Thermodynamics and Optics. 2 credits.

Introduction to thermodynamics, geometrical optics and physical optics. Among the topics included are the ideal gas, thermodynamic processes, multi-lens systems and diffraction theory. Prerequisite: Physics 200; Mathematics 202 is suggested as a co-requisite. Every year.

## PHYS- 214. Intermediate Physics Laboratory. 1 credit.

An experimental study of lens systems, the diffraction and interference of single and multi-slit gratings, and the thermodynamic properties of matter. Some modern physics experiments will be included as well. Prerequisite: Physics 200; Physics 213 is required as a co-requisite. Every year.

## PHYS- 215. Special Relativity and Applications. 2 credits.

Introduction to Einstein's special theory of relativity including the kinematics and dynamics of rapidly moving objects and the apparent paradoxes. A redefinition of the concepts of energy and
momentum. Applications may include the Compton effect and elementary nuclear physics. Prerequisite: Physics 200; Mathematics 202 is suggested as a corequisite. Every year.

## PHYS- 218. Introductory Electromagnetism. 5 credits.

Introduction to electric fields, magnetic fields, and DC and AC circuits. The laboratory will emphasize both passive and active electric circuits and such instruments as oscilloscopes, digital multimeters and signal generators. One three-hour lab per week. Prerequisite: Physics 200; Mathematics 202 is required as a co-requisite. Every year.

## PHYS- 220. Modern Physics. 5 credits.

An introduction to quantum mechanics with applications from atomic, molecular, condensed matter, nuclear, and elementary particle physics. One three-hour lab per week. Prerequisite: Physics 218. Co-requisite: Physics 215. Writing intensive. Every year.

## PHYS- 280. Topics 1-4 credits.

Offered on demand.

## PHYS- 311. Classical Mechanics. 4 credits.

Analytical study of the dynamics of particles, rigid bodies and vibrating systems. Lagrangian and Hamiltonian techniques are included. Prerequisites: Physics 220. Mathematics 212 and/or 215 recommended. Every year.

## PHYS- 312. Wave Phenomena. 4 credits

Unified treatment of the general properties of waves, including the mathematical representation of mechanical and electromagnetic waves, refraction, propagation, interference, diffraction and geometrical optics. Prerequisites: Physics 220 and 214. Mathematics 212 and/or 215 recommended. Alternate years.

## PHYS- 313. Electronics. 2 credits.

Practical course in electronics for science majors. Topics include the use of solid state devices in digital and analog circuits. The laboratory will involve the use of standard electronic instrumentation. Prerequisite: Physics 218. Every year.

## PHYS- 314. Digital Electronics. 2 credits.

Fundamentals of digital electronics, including Boolean logic, gates, flip-flops, clocks, counters, memory, and methods of digital-to-analog and analog-to-digital conversion. These concepts will be applied to a project involving a programmable microcontroller. Prerequisite: Physics 313. Alternate years.

## PHYS- 320. Computational Physics. 2 credits.

Introduction to numerical methods in physics using the FORTRAN programming language. Prerequisites: Physics 220, Mathematics 202 and Computer Science 150. Alternate years.

## PHYS- 321. Signal Processing. 2 credits.

Study of Fourier methods, with emphasis on digital signal processing, digital data acquisition and digital analysis systems. Prerequisites: Physics 218 and Mathematics 202. Alternate years.

## PHYS- 325. Topics in Contemporary Physics. 2 credits.

Topics courses in astrophysics, atomic physics, condensed matter physics, elementary particle physics, nuclear physics, plasma physics, and biomedical physics are offered to provide breadth in contemporary physics. Each course addresses the current state of these fields. Courses may be taught from a research perspective with the possibility of either an experimental or theoretical component or both. A student desiring a specific topic should petition the Physics Department. Prerequisite: Physics 213, 214, and 220 or permission of the instructor. Every year. This course may be repeated for credit.

## PHYS- 330. Statistical and Thermal Physics. 4 credits.

Statistical mechanics approach to the study of many particle systems. Topics include the Maxwellian distribution, classical and quantum physics, entropy, heat and thermodynamics. Prerequisites: Physics 311 and Mathematics 212. Alternate years.

## PHYS- 332. Electromagnetism. 4 credits.

Mathematical theory of electric and magnetic fields. Emphasizes three dimensional boundary value problems for evaluating the physical behavior of electric and magnetic fields. Maxwell's equations are developed in both the differential and the integral forms and are used in the analysis of electromagnetic phenomena. Prerequisites: Physics 311 and Mathematics 212. Every year.

## PHYS- 350. Advanced Laboratory. 1 credit.

A laboratory course emphasizing experimental design, laboratory techniques, analysis and interpretation of data, and written reports of experiments. A variety of advanced physics experiments will be performed. Prerequisite: Physics 220. Every year. This course may be repeated for credit.

## PHYS- 360. Junior Seminar. 1 credits.

Year course. Every year.

PHYS- 380. Topics. 1-4 credits.
Offered on demand.

## PHYS- 410. Mathematical Physics. 4 credits.

Introduction to the mathematical techniques used in physics, such as complex variables, vector and tensor analysis, group theory, Green's functions and the calculus of variations. Prerequisites: Physics 311 and Mathematics 212 and 215. Alternate years.

## PHYS- 411. Quantum Mechanics. 4 credits.

In-depth study of quantum mechanics with an emphasis on simple systems and the operator approach as applied to the harmonic oscillator and angular momentum. Applications such as perturbation theory are included. Prerequisite: Physics 311. Writing intensive. Every year.

## PHYS- 460. Senior Seminar. 1 credit.

Year course. Every year.

## PHYS- 490. Independent Study. 1-4 credits.

Offered on demand. This course may be repeated for credit.

## PHYS- 491. Internship. 1-4 credits.

Reserved for supervised research during summers or while off campus. This course may be repeated for credit.

## PHYS- 498. Senior Thesis. 1-4 credits.

Writing intensive. Offered on demand. This course may be repeated for credit.
PHYS- 499. Honors Thesis/Project. 1-4 credits.
Prerequisite: 3.50 GPA and permission of the Department Chair.

## Political Science

Go to faculty and staff page.

## Requirements for Major

Required in Political Science
A minimum of 36 credits, including Political Science 101S, 102S or 251S, 260Z, and any political theory class chosen from among the following: 211R, 212R, 215R, or 216R. A minimum of 4 credits must be taken in each of the three areas listed below. (The required political theory course counts as a course in that area.) Sixteen credits must be completed at the 300 level or above. Methodology (260Z) should be taken no later than the spring semester of the junior year. Exceptions may be granted to permit students to take advantage of year-long off campus programs. Topics courses in each area, the Political Science Seminar, Independent Study, or the Internship may satisfy area requirements depending on course content. In addition, students must attend two department colloquia each semester and prepare a one-page reaction paper after each colloquium. Finally, all majors are required to complete a two-part senior assessment during the spring semester of their senior year.

## Requirements for Minor

A minimum of 20 credits, including 101S, 102S or 251S, any political theory class chosen from among the following: 211R, 212R, 215R, or 216R, and 8 additional credits with a minimum of 4 credits at the 300 level or above. Minors should consult with an adviser in the department

## Special Programs Related to Political Science

Local Government Management Internship Program
Washington Semester Program.

## General Courses

## POLI-101S. American National Government. 4 credits.

Study of the basic concepts, background, constitutional basis, organization, functions, and political processes of the United States government. Every year.

POLI-102S. Introduction to Comparative Politics. 4 credits.
Examination of the principal features of democratic, communist, post-communist and Third World political systems. Every year.

## OR

## POLI-251S. International Relations. 4 credits.

Introduction to some key theoretical concepts and approaches to the study of international relations. Also an application of the concepts to historical case studies of war and peace, diplomacy, arms control, international political economy, international organizations and other issues. Every year.

## POLI-260. Methodology. 4 credits.

Study of the approaches to the framing and investigation of political questions. Writing intensive. Every year.

## One of the following:

## POLI-211R. Ancient and Medieval Political Philosophy. 4 credits.

An examination of the history of political philosophy from ancient Greek drama to medieval thought through a combination of primary textural analysis and interpretive commentary. Questions considered include: What is the nature of human beings? What is nature itself? What is justice? How can we begin to understand power? What is the good life for human beings? What is the best form of political rule? What is the proper relationship of philosophy to politics? On what basis might we construct our ethical life? Are men and women different, and, if so, how might this impact the political? Readings include Thucydides, Plato, Aristotle, Cicero, Aquinas, Augustine, and de Pizan..

## POLI-212R. Modern Political Philosophy. 4 credits.

An exploration of the revolutionary challenge to ancient and medieval political philosophy posed by the development of liberal democratic thought, as well as various modern critiques of liberalism. Readings include Machiavelli, Hobbes, Locke, Wollstonecraft, Mill, Rawls, Rousseau, Marx, and Arendt.

## POLI-215R. American Political Thought. 4 credits.

An examination of a selection of key political-theoretical debates and controversies, from the points of view of dominant and marginalized groups, dating from the Founding to contemporary America.

## POLI-216R. Family Values: The Politics of Virtue, Care, and Equality. 4 credits.

An examination of the theoretical underpinnings of the contemporary debate over family values, from the influential conceptions of the proper relationship between the family and public life offered by the canonical political philosophers to thoughtful analyses of the conflict of rights involved in contemporary debates over the family.

## Area I: Comparative Politics and International Relations

## POLI-202S. Comparative Political Economy and Public Policy. 4 credits.

This course provides an introduction to understanding the relationship between politics and economics, or to put it another way, between "states and markets." What is the appropriate role for government in managing the economy? Should politics and economics be completely separate, or are the two inextricably linked? This course examines how great political economists such as Adam Smith, Karl Marx, and others have addressed these questions. It will also consider, from a comparative public policy perspective, the variety of ways in which governments and markets actually interact within advanced capitalist democracies through an examination of economic policy making.

## POLI-205C. Chinese Politics. 4 credits.

Introduction to Chinese politics since 1949. Topics include a brief overview of modern Chinese history and a survey of contemporary analyses of the Chinese political process. Emphasis is given to Chinese political culture, major political institutions and current policy issues. Every third year.

## POLI-209. Topics in Comparative Politics. 4 credits.

Introductory course on a special topic, normally offered on a one-time basis only. This course may be repeated for credit.

## POLI-210C/S. East Asian Politics. 4 credits.

The course introduces students to the political structure and dynamics of three major countries in East Asia: Japan, China (Mainland, Taiwan and Hong Kong), and Korea (South Korea and North Korea). The major objective is to make students familiar with their history, politics and economy, their relationships with each other and the impact of East Asia as a whole on global affairs.

## POLI-251S. International Relations. 4 credits.

Introduction to some key theoretical concepts and approaches to the study of international relations. Also an application of the concepts to historical case studies of war and peace, diplomacy, arms control, international political economy, international organizations and other issues. Every year.

## POLI-252S. International Organizations. 4 credits.

Study of the role of international organizations as they operate in the international political system. Particular emphasis is given to a study of the United Nations through an extended simulation of that body's activity. Alternate years.

## POLI-253S. International Political Economy, 4 credits.

This course provides an introduction to the subfield of international political economy, which explores the linkages between politics and economics in the international system. We will first critically examine the dominant theories used to interpret and explain patterns of international economic relations. We will then examine institutions and features of the international political economy, relating to areas such as trade, foreign investment, foreign aid, and relations between "advanced industrial" and "less developed" countries. Evaluation will be based on two exams, two short analytical papers, class participation, and a project that uses computer forecasting software to assess major challenges to states in the international system.

## POLI-259. Topics in International Relations. 4 credits.

Introductory course on a special topic, normally offered on a one-time basis only. This course may be repeated for credit.

## POLI-302. North American Politics. 4 credits.

This course is a comparative survey of the political systems of the North American continent: Canada, Mexico, and the United States (although more emphasis will be placed on Canada and Mexico). Topics covered in the course from a comparative perspective include political culture and values, political institutions, the practice of federalism, political parties and electoral systems, and public policies. A section of the course will also focus on the development and future of the North American Free Trade Agreement. Prerequisites: Political Science 102S and junior standing. Writing intensive. Every year.

POLI-305. European Politics. 4 credits.
Comparative analysis of political systems and public policy issues in Europe. Prerequisite: Political Science 102 and junior standing. Writing intensive. Every year.

## POLI-309. Advanced Topics in Comparative Politics. 4 credits.

Advanced class on a special topic, normally offered on a one-time basis only. Prerequisite: Determined by the instructor. Writing intensive. This course may be repeated for credit.

## POLI-350. American Foreign Policy. 4 credits.

Analysis of U.S. foreign policy since 1945, with emphasis on policy processes and issues. Prerequisite: Political Science 101 and junior standing. Writing intensive. Every year.

## POLI-352. Russian Foreign Policy. 4 credits.

Analysis of the instruments and priorities of the foreign policy of the Russian Federation. Attention is given to the historical context of Soviet foreign policy from 1917 to 1991. Prerequisite: Political Science 102 or 204 and junior standing. Writing intensive. Alternate years.

## POLI-354. Chinese Foreign Policy. 4 credits.

Analysis of the evolution and workings of Chinese foreign policy behavior in terms of historical patterns, the role of ideology, military and strategic factors, economics, domestic politics and the decision-making process. Chinese relations with the United States, Russia, Japan and other nations are discussed. Prerequisite: Political Science 102 or 205 and junior standing. Writing intensive. Alternate years.

## POLI-355. East Asian Foreign Relations 4 credits.

The course introduces students to the dynamic interactions between major powers in East Asian ( Japan, China, the United States, Russia and Korea). The objective is to make students understand and be able to critically analyze diplomatic process, patterns of external behavior of major powers, and transnational forces at work in the region. Prerequisite: Political Science 102, 210 or 251.

## POLI-359. Advanced Topics in International Relations. 4 credits.

Advanced class on a special topic, normally offered on a one-time basis only. Prerequisite: Determined by the instructor. Writing intensive. This course may be repeated for credit.

## Area II: Political Theory and Law

## POLI-211R. Ancient and Medieval Political Philosophy. 4 credits.

An examination of the history of political philosophy from ancient Greek drama to medieval thought through a combination of primary textural analysis and interpretive commentary. Questions considered include: What is the nature of human beings? What is nature itself? What is justice? How can we begin to understand power? What is the good life for human beings? What is the best form of political rule? What is the proper relationship of philosophy to politics? On what basis might we construct our ethical life? Are men and women different, and, if so, how might this impact the political? Readings include Thucydides, Plato, Aristotle, Cicero, Aquinas, Augustine, and de Pizan..

## POLI-212R. Modern Political Philosophy. 4 credits.

An exploration of the revolutionary challenge to ancient and medieval political philosophy posed by the development of liberal democratic thought, as well as various modern critiques of liberalism. Readings include Machiavelli, Hobbes, Locke, Wollstonecraft, Mill, Rawls, Rousseau, Marx, and Arendt.

## POLI-215R. American Political Thought. 4 credits.

An examination of a selection of key political-theoretical debates and controversies, from the points of view of dominant and marginalized groups, dating from the Founding to contemporary America.

## POLI-216R. Family Values: The Politics of Virtue, Care, and Equality. 4 credits.

An examination of the theoretical underpinnings of the contemporary debate over family values, from the influential conceptions of the proper relationship between the family and public life offered by the canonical political philosophers to thoughtful analyses of the conflict of rights involved in contemporary debates over the family.

## POLI-217R. Ideology and Identity in Polish Culture, 2-4 credits (field study)

Often referred to as "God’s Playground" because of its persistent history of foreign invasion, occupation, violence and suffering, Poland occupies a unique place in European politics. Rarely an independent nation in modernity, Poles have lived under the sway of a variety of political ideologies, including imperialism, authoritarianism, totalitarianism, "communism," and democracy. Given this confusing reality, how have Poles retained a national identity? How have "Polishness" and Polish culture been shaped by occupation, resistance, and collaboration, and both the historical presence and current absence of religious and ethnic minorities? What is the role of Catholicism in Polish civil society? How does gender ideology play into present political discourse? Traversing the landscape from Krakow and Zakopane to Gdansk, exploring everything from traditional Folk culture to contemporary popular culture, Poland's ongoing political transition and ideological complexity will provide us with the ultimate political theory text, ripe for analysis. Field study.

## POLI-219. Topics in Political Philosophy. 4 credits.

Introductory course on a special topic, normally offered on a one-time basis only. This course may be repeated for credit.

## POLI-315. Feminist and Postmodern Political Thought. 4 credits.

An exploration of the major figures, schools of thought, and concepts in Feminist and Postmodern political thought, culminating in an examination of the often uneasy relationship between feminism and postmodernism. Readings include Nietzsche, Heidegger, Derrida, Foucault, Wollstonecraft, Goldman, MacKinnon, Elshtain, and Irigaray, among others. Prerequisites: junior class standing and either Political Science 211R, 212R, 219, or permission of instructor. Writing intensive. Every year.

## POLI-319. Advanced Topics in Political Philosophy. 4 credits.

Advanced class on a special topic, normally offered on a one-time basis only. Prerequisite: Determined by the instructor. Writing intensive. This course may be repeated for credit.

## POLI-322. American Constitutional Law. 4 credits.

An examination of judicial review, judicial activism and restraint, and theories of Constitutional interpretation, as well as the Court's role in several policy areas, including property rights, the
economy, separation of powers, federalism, presidential powers, and in interpreting the equal protection and due process clauses as they bear on race and gender equality. Prerequisites: Political Science 101 and junior standing. Writing intensive. Every year.

## Area III: American Politics

## POLI-221S. State and Local Government. 4 credits.

Consideration of the politics, organization, functions, and role of state and local government in the United States. Outside speakers are used when appropriate. Every year.

## POLI-222S. Urban Politics. 4 credits.

Examination of politics and government in American cities. Emphasis is on how changes over time in local political structures and processes have affected the delivery of services at this most basic level of the federal system. Every year.

## POLI-223. Introduction to Local Government Administration. 4 credits.

An introduction to the politics and administration of city governments in America with particular emphasis on the power, role and responsibilities of administrators in the delivery of city services. The course is taught during designated summers only as a component of an off-campus city management internship program. No prerequisites.

## POLI-224S. The American Presidency. 4 credits.

The course will examine the powers of and constraints on the American Presidency with particular emphasis on the modern presidency. Students will look at the modern presidency and its relations with Congress, the media, the courts and the public. The course will also explore presidential campaign politics with particular attention to the role of party, interest groups, the media, and money. No prerequisites.

## POLI-229. Topics in American Politics. 4 credits.

Introductory course on a special topic, normally offered on a one-time basis only. This course may be repeated for credit.

## POLI-230. Campaigns and Elections. 4 credits.

Investigation of the nature of the campaign and election process in the United States from a theoretical and a practical perspective. As such, it provides a framework for analyzing electoral politics, both now and in the future. Examples of recent and past campaigns and elections are used in the course to highlight general principles. Every year.

## POLI-232S. Public Opinion. 4 credits.

Study of the formation, development and role of public opinion in American politics. Every year.

## POLI-234S. Black Politics. 4 credits.

Introductory course on the political dimensions of black life in the United States. It examines the role of individuals, institutions and the relative impact of protest versus electoral politics in addressing the status of blacks in the United States. Every year.

## POLI-236S. Media and Politics. 4 credits.

Introductory course on the factors that shape media coverage of politics in the United States and the impact of that coverage. How politicians try to use various media and the rise of new communication technologies are also covered. Every year.

## POLI-320. Public Administration. 4 credits.

Exploration of the political dynamics of the federal bureaucracy. Particular emphasis is placed on the interactions of bureaucrats and agencies with each other and with other actors in the political system. Prerequisite: Political Science 101 and junior standing. Writing intensive. Every year

## POLI-321. Public Policy. 4 credits.

Exploration of the politics of the national policy-making process. Special emphasis is placed upon the role of political institutions and the media in shaping the public agenda. Prerequisite: Political Science 101 and junior standing. Writing intensive. Every year.

## POLI-323. U.S. Congress. 4 credits.

This course will examine the institution of Congress and the behavior of its members. Particular emphasis will be placed on how the motivations of members of Congress contribute to how the institution is organized and how it functions as well as how it relates to other key political actors and institutions. This course is writing intensive. Prerequisites: Political Science 101S and junior standing.

## POLI-329. Advanced Topics in American Government. 4 credits.

Advanced class on a special topic, normally offered on a one-time basis only. Prerequisite: Determined by the instructor. Writing intensive. This course may be repeated for credit.

## POLI-332. Political Parties and Interest Groups. 4 credits.

Study of the organization, function, and operation of political parties and interest groups in the United States. An investigation of elections and the role of political action committees is included. Prerequisite: Political Science 101 and junior standing. Writing intensive. Every year.

## Other Courses:

## POLI-460. Political Science Seminar. 4 credits.

Advanced study and research of a particular area or problem. Results are presented in written and oral reports. Prerequisite: Determined by the instructor. Writing intensive.

POLI-490. Independent Study. 1-4 credits.
Concentration on research projects reflecting the student's interest completed under the direction of a professor. Prerequisite: Determined by the instructor; proposals must be submitted and approved. Writing intensive. Every year. This course may be repeated for credit.

## POLI-491. Internship. 2-4 credits.

Work-study course opportunity enabling the student to observe decision making processes and relate course material to practical political problems. Prerequisite: Determined by the instructor. Every year. This course may be repeated for credit.

## POLI-499. Honors Thesis/Project. 1-6 credits.

Prerequisite: 3.50 GPA and permission of the Department Chair. Submission of proposal required.

## Pre-Health

The student interested in a career in human or veterinary medicine, dentistry, optometry, nursing, occupational therapy or another health profession needs to plan the sequence of courses in order to complete the prerequisite courses for the various health profession schools and prepare for the national admission tests. Prerequisite courses for the health professional schools typically include one year of biology, two years of chemistry, one year of physics, one year of mathematics, and one year of English. In addition to these requirements, schools may have other courses that they require from the humanities or social sciences. While most Wittenberg Pre-Health students major in biology, chemistry, or biochemistry/molecular biology, a major in the sciences is not required by most health profession schools. Students may choose any major as long as they take the professional school prerequisite courses.

Admission is predicated on academic achievement (GPA and national test scores), volunteer experience, exposure to research, as well as general character and personality (altruism, leadership and empathy). It is important for students to accumulate a significant number of volunteer (or internship) credits in a variety of situations (private practice, hospital) in their field of interest. There are also opportunities available for our students to participate in research projects with Wittenberg faculty and alumni who have volunteered to involve students in summer research. Students with specific questions should seek guidance from the Pre-Health Professions Adviser.

## Nursing

Wittenberg has 3-4 cooperative programs with the Frances Payne Bolton School of Nursing at Case Western Reserve University. The pre-nursing student spends three years at Wittenberg obtaining a background in science and liberal arts, prior to entering nursing school in the fourth year.

If accepted, after satisfactory completion of the first year of nursing school, the student receives the Bachelor of Arts degree from Wittenberg.

At Case Western Reserve University, the student spends four years in the nursing program. The goal of the program is to prepare the student for advanced practical and clinical research in nursing. Satisfactory completion of this program leads to the awarding of the Doctor of Nursing (N.D.) degree by Case Western Reserve University.

Additional information about these nursing programs may be obtained from the Pre-Health Professions Adviser or the Office of Admission.

## Occupational Therapy

Wittenberg has a cooperative program with Washington University (St. Louis) School of Medicine through its program in occupational therapy. The pre-occupational therapy student spends three years at Wittenberg obtaining a background in basic science and liberal arts, while completing the major portion of the biology major requirements. If accepted by Washington

University, the student begins the occupational therapy program in the fourth year. The Bachelor of Arts degree from Wittenberg is conferred at the end of the first year at Washington University, and the Master of Science degree in occupational therapy is awarded at the end of the second year there.

Additional information about this program may be obtained from the Pre-Health Adviser or the Office of Admission.

## Pre-Law

The student generally concentrates in a broad program rather than a specialized one. Individuals may major in any discipline. Elective courses are recommended in economics, English, history, philosophy and political science. Courses that train students to write and express themselves orally are extremely helpful.

Success on the LSAT and in law school is related to the rigor of the courses taken and the extent to which those courses develop the skills of logical thinking and critical analysis. Additional information about the pre-law program may be obtained from the Pre-Law Adviser or the Office of Admission.

## Psychology

Go to faculty and staff page.

## Requirements for Major (B.A.)

The minimum requirements for a B.A. major in psychology are 39 credits in psychology, which include, as required courses, Psychology 110-160 (12 credits); Psychology 207 (five credits); eight credits at the 200 level beyond Psychology 207; 10 credits at the 300 level; Psychology 390: Junior Seminar; and one course at the 400 level, which must be either 400, 410, or 499, at least four credits. In addition to the required 39 credits in psychology for the major, a student must complete a statistics course: Psychology 107, Business 210, or Mathematics 127.

Recommended in Psychology
The student who plans a career in a service-oriented field related to psychology may not need graduate training. This student may choose additional courses in psychology related to the interest area. The student planning a professional career as a psychologist should prepare to go to graduate school, and additional courses at the 300-and 400 -level are recommended.

Recommended in Other Departments
Each student is urged to take courses in biology, Computer Science 150, language courses, including a conversational course, Mathematics 201 and Philosophy 240. The student planning to go to graduate school should also take Mathematics 202 and further courses in biology, chemistry and physics. Additional courses in expository writing and in the social sciences and humanities should reflect the student's needs and interests.

## Requirements for Major (B.S.)

## Required in Psychology

The minimum requirements for a B.S. major in psychology are 43 credits in psychology, which include as required courses: Psychology 110-160 (12 credits); Psychology 207 (five credits); eight credits at the 200 level beyond Psychology 207; 10 credits at the 300 level; Psychology 390 Junior Seminar; and two courses at the 400 level, which must be either 400, 410, or 499, at least eight credits.

## Required in Other Departments

In addition to the required 43 credits in psychology for the major, a student must complete a statistics course; Psychology 107, Management 210, or Mathematics 127 or 227. Additional preparation in mathematics and the natural sciences or economics is required for the student wishing to complete the B.S. In consultation with the academic adviser, the B.S. candidate will take Math 201 or above, eight credits; and 16 credits from any of the following: Philosophy of Science, Biology 170, 180, or above, Chemistry 121 or above, Computer Science 150 or above, Economics 190S or above, Geology 150 or above, Mathematics 202 or above, or Physics 101 or above.

## Requirements for Minor

The minimum requirements for a psychology minor are 20 credits in psychology, which include, as required courses, at least eight credits of the Proseminars, Psychology 110-160; the remaining 12 credits are to be selected in consultation with the minor adviser. Psychology 100 cannot be used to satisfy the requirements for a minor in psychology. The student must also complete a statistics course: Psychology 107, Business 210, or Mathematics 127.

## Course Listings

## PSYC- 100S. Understanding Psychology. 4 credits.

Introductory-level survey course in psychology intended for the student who does not plan to major or minor in psychology. Covers topics in biological foundations of behavior, learning, memory, cognition, development across the life span, personality, and abnormal and social psychology. Note: A student may not receive credit for Psychology 100S if the student has received credit for any of the six Psychology Proseminars (110N-160S). Every year.

## PSYC- 110N. Proseminar I-Physiological. 2 credits.

Introduction to the study of the biological bases of behavior, including the structure and function of neurons, brain organization, and sensation and perception. Every year.

PSYC- 120B. Proseminar II - Learning. 2 credits.
Introduction to the scientific bases, methods, theories, and findings in the study of learning and memory in humans and animals. Includes laboratory exercises. Every year.

## PSYC- 130S. Proseminar III - Developmental. 2 credits.

Exploration of developmental changes that occur across the life span. Physical, cognitive, social, emotional and personality development are emphasized. Every year.

## PSYC- 140S. Proseminar IV - Differential. 2 credits.

Introduction to psychological tests and their applications, and a survey of the structure and dynamics of personality. Every year.

## PSYC- 150S. Proseminar V - Abnormal. 2 credits.

Introduction to the powerful motivations and emotions of animals and humans. The central role of motives and emotions in mental illness and its treatment is examined. Every year.

## PSYC- 160S. Proseminar VI - Social. 2 credits.

Social psychology is the scientific study of how others influence our beliefs, emotions and behavior. Topics examined include conformity, persuasion, social cognition, attribution, attitudes, prejudice, aggression and nonverbal communication. Every year.

## PSYC- 180. Introductory Topics. 2-4 credits.

Examination of special topics not included under other course descriptions. Offered occasionally according to student and faculty interest. Such topics may include, but are not limited to, violence, impact of television and racism. Courses at this level do not count toward the psychology major or minor. This course may be repeated for credit.

## PSYC- 190S. Psychology of Women. 4 credits.

Introduction to emerging theories and research concerning women and their behavior, emphasizing uniquely female experiences throughout the life cycle and influences on women in contemporary society. Every year.

## PSYC - 201Q. Statistics. 4 credits

An application-oriented introduction to descriptive and inferential statistics. Includes techniques and principles used in the behavioral, natural and social sciences. Prerequisite: Level 23 or higher on the Math Placement Exam. Note: a student may not receive credit for more than one statistics course: Psychology 201, Mathematics 127 or 227 or Business 210. Every year.

## PSYC-202. Experimental Design. 4 credits

This laboratory course gives you hands-on experience with the basic principles of research in psychology: the logic and methodologies of collecting data in a scientific manner, and the concepts and practical techniques involved in applying statistics to data in order to draw psychological conclusions. We will cover a variety of methodologies, emphasizing how you can use each of them yourself. As part of this course, you will design and implement a number of studies that involve collecting, analyzing, interpreting, and reporting on original data. Each study will illustrate a different type of analytic tool or procedure, but the specific questions to be addressed in these studies will be determined by you. Prerequisite: Psychology 201 or another statistics course.

## PSYC- 211. Sensation and Perception. 4 credits.

Study of the sensory systems and human perception from physiological, sensory, psychophysical, information-processing and cultural perspectives. Prerequisite: Psychology 110. Alternate years.

## PSYC- 212. Health Psychology. 4 credits.

Introduction to theory, research and practice in health psychology, emphasizing the promotion and maintenance of health, the identification of causes of particular illnesses, and behavioral prevention and treatment of illness. Prerequisite: Psychology 107 or another statistics course. Alternate years.

## PSYC- 217 The Psychology of the Holocaust. 2-4 credits

We will learn about Polish history, in an attempt to understand the country as it once was; strikingly multicultural if segregated. A major part of this Field Studies trip entails visiting important religious sites for the history of Jews, Catholics, and Tatar Muslims in Poland. We feel this experiential knowledge is essential for the bulk of the academic content. Students will gain an understanding of key social psychological phenomena and then come to understand the social psychology of the holocaust - of the perpetrators, the bystanders and the heroic helpers. We will read research about obedience to authority and conformity and apply this knowledge of the personal and situational variables that affect behavior to these different groups of people. We also will see the "living" Poland, in which small minority or disenfranchised groups attempt to revitalize themselves (jews, muslims, gays). In this way we connect research in social psychology aimed at understanding prior events and will search for evidence that these basic psychological principles are still in effect and seen in Polish societal attitudes toward minority groups. No prerequisites.

## PSYC-221. Psychology of Language. 4 credits

People use language day in and day out, so effortlessly that it often may seem automatic. Yet language use is a complicated phenomenon that plays an important role in almost every aspect of high-level human functioning. In this course, language will be examined from a variety of perspectives, including acquisition, production, comprehension, human biology, cultural variation, and more. By the end of the course, students will have gained a heightened awareness of just how complex language use really is, and will have a richer appreciation of the far-reaching impact that it has on their everyday lives. Course requirements include exams, projects, written reports, and class participation. Prerequisites: Any Language course at the 112 level or higher or any Psychology course at the $\mathbf{1 0 0}$ level

## PSYC- 231. Child Development. 4 credits.

The study of children from prenatal development to preadolescence, with emphasis on motor, cognitive, language, social and personality development. Theoretical issues such as nature versus nurture, critical periods and cultural differences, as well as more current topics such as the effects of daycare and divorce are examined. Prerequisite: Psychology 130. Every year.

## PSYC- 232. Psychology of Adolescence. 4 credits.

The study of youth from puberty to adulthood. Changes in cognition, morality, sexuality and identity, and how they influence adolescent behavior are examined. Prerequisite: Psychology 130. Writing intensive. Every year.

## PSYC- 241. Psychology of Personality. 4 credits.

Study of the structure and dynamics of personality, emphasizing psychoanalytic, interpersonal, cognitive, behavioral and existential/ humanistic theories. Prerequisite: Psychology 140. Writing intensive. Every year.

## PSYC- 242. Industrial/Organizational Psychology. 4 credits.

Introduction to the study of work-related behavior. Topics covered include job analysis, personnel selection and training, performance appraisal, motivation, job satisfaction, leadership and human factors engineering. Prerequisite: Psychology 107 or another statistics course, e.g., Business 210 or Mathematics 127 or 227 . Alternate years.

## PSYC- 243. Community Psychology. 4 credits.

Introduction to theory, research and practice in community psychology, emphasizing the prevention of psychological, social and health-related problems, e.g., psychopathology, child abuse and AIDS. Prerequisite: Psychology 107 or another statistics course. Alternate years.

## PSYC- 251. Abnormal Psychology. 4 credits.

Study of the etiology, diagnosis and treatment of emotional disorders. Various theories, models, and diagnostic and therapeutic procedures are presented and discussed. Prerequisite: Psychology 150. Every year.

## PSYC-252. Child Abnormal Psychology. 4 credits

This course examines the etiology, diagnosis, and treatment of psychological disorders in children and adolescents. Various theories, models, and diagnostic and therapeutic procedures are investigated in the context of research, case studies, and service-learning. An advanced course intended for students interested in working with youth in the fields of clinical psychology, social work, counseling, special education, and related specialties. Prerequisite: Psychology 130S or Psychology 150S

## PSYC-253: Intro to Mental Health Practice. 4 credits

This course provides an introduction to the field of clinical/counseling psychology. Historical and current trends in the field will be covered, as well as assessment and intervention techniques. Major theories of psychotherapy to be covered include humanistic-existential, cognitive-
behavioral, and psychoanalytic. Topics to be covered will be applicable to a broad range of mental health/counseling-related fields (e.g., social work, case management, guidance counseling). Prerequisite: Psychology 150S

## PSYC 271C. Psychology and Culture. 4 credits

People cannot speak without having an accent from somewhere. In much the same way, people's psychological functioning is not accent-free. This course highlights the extent to which all levels of psychological functioning, even "basic" ones, are grounded in culture-specific assumptions about what matters, what is "good" and how the world works. Students are expected to emerge from this class with a sharpened ability to critique generalizations made about human psychology, a greater appreciation of interpersonal diversity, and a richer understanding of how their own ways of thinking and being derive from culture-bound experiences. Course requirements include exams, research projects, and class participation. This course contains substantial East Asian content and counts toward the East Asian Studies major/minor. This course also includes an optional "Cultures and Languages across the Curriculum" (CLAC) component. Prerequisite: Sophomore standing (or higher)

## PSYC- 280. Topics in Psychology. 4 credits.

In-depth examination of special topics not included under other course descriptions. Offered occasionally according to student and faculty interest. Such topics may include, but are not limited to, psychology of aging, environmental psychology, forensic psychology and human factors. This course may be repeated for credit.

## PSYC- 311B. Behavioral Neuroscience. 5 credits.

Laboratory course examining the biological bases of behavior, including the functioning of the nervous system, motivational and attentional processes, and clinical syndromes. Prerequisites: Psychology 110 and 207. Every year.

## PSYC- 321B. Learning, Memory, and Cognition. 5 credits.

Laboratory course examining methods, findings, and theoretical interpretations in the study of learning, memory and cognition. Prerequisites: Psychology 120 and 207. Writing intensive. Every year.

## PSYC- 341B. Psychological Testing. 5 credits.

Laboratory course examining principles of test construction, validation, and interpretation with emphasis on measures of cognitive ability, personality characteristics and vocational interests. Prerequisites: Psychology 140 and 207. Every year.

## PSYC- 361B. Experimental Social Psychology. 5 credits.

Laboratory course examining current research and theories in social psychology. Emphasis on experimental investigations done both in the laboratory and in the field. Topics include attribution, social cognition attitude formation and change, altruism, aggression, nonverbal communication and group dynamics. Prerequisites: Psychology 160 and 207. Writing intensive. Every year.

## PSYC- 390. Junior Seminar. No credit.

This seminar is designed to help students prepare for senior research projects and internships, senior comprehensive and GRE exams, graduate school applications, and graduate school and job interviews.

## PSYC- 400. Research. 4 credits.

Advanced seminar in which the participants, under the guidance of the instructor, perform all phases of actual, i.e. not simulated, research in an area consistent with the skills and research interest of the instructor. Prerequisites include appropriate content and methods courses as specified by the instructor and permission of the instructor. The course may be taken repeatedly but only with different instructors. Every year.

## PSYC- 410. Senior Thesis. 2-4 credits.

Intensive research project, extending over one or two semesters. Requirements include a written thesis. See advisor or Departmental Chair for further information and prerequisites. Writing intensive. Every year.

## PSYC- 490. Independent Study. 2-4 credits.

Intensive research under close faculty supervision. Reserved for the advanced student. Permission of the Chair required. Writing intensive. Every year. This course maybe repeated for credit.

## PSYC- 492. Research Internship. 1-4 credits.

Open to the junior and senior psychology major by Departmental permission only. See adviser or Chair for details. Writing intensive. Every year. This course may be repeated for credit.

## PSYC- 493. Clinical Internship. 1-4 credits.

Students must submit an Internship proposal to Career Services, Shouvlin Center, Room 215, for final approval. After final approval, the student will be officially registered for the credits.

PSYC- 496. Urban Term. 1-4 credits.
(See Urban Studies for description.) Open to the junior and senior pyschology major by Departmental permission only. See adviser or Department Chair for details. Every year. PSYC- 499. Honors Thesis/Project. 2-4 credits.

Prerequisite: 3.50 GPA and permission of the Department Chair.

## Religion

Go to faculty and staff page.

## Requirements for the Major:

Eight (4 credit) courses including at least three at the 300 level and Reli 498 Senior Capstone (1 credit).

Required Courses (6)
112 Introduction to Buddhism or 134 Chinese and Japanese Religious Traditions 221 Understanding the Old Testament or 222 Understanding the New Testament 241 Christian Tradition
498 Senior Capstone (1 credit)

## and

One course from two of the following groups.
Group I (History of Religions) 333, 335, 336, 339
Group II (Biblical Studies) 321, 324, 326, 327
Group III (Religious Ethics) 342 or 378
Note: With the advance permission of the chair, one related course in another department may be counted toward the major.

## Requirements for Minor

Five courses including at least one 300 level.
One course from each of following groups.
Group I (History of Religions) 112, 134, 212, 213,333, 335, 336, 339
Group II (Biblical Studies) 121, 221, 222, 321, 324, 326, 32
Group III (Religious Ethics and Christian Thought) 177, 241, 342, 378

## Course Listings:

## General Studies

## RELI-100. Topics. 4 credits.

This course may be repeated for credit.

## RELI -200. Topics. 4 credits.

This course may be repeated for credit.

## RELI -300. Topics. 4 credits.

This course may be repeated for credit.

## RELI -499. Honors Thesis/Project. 1-4 credits.

Prerequisite: 3.50 GPA and permission of the Department Chair.

## Traditions and Texts

## RELI- 112C/R Introduction to Buddhism - 4 credits

Buddhism, one of the great world religions, has numerous manifestations through time and a variety of cultures. In this course we will examine the Buddhist tradition beginning with its founder, Siddhartha Gautama. We will then focus on key Buddhist teachings in the Theravada and Mahayana traditions, including the Vajrayana school. A significant amount of the course will look at contemporary manifestations of Buddhism, including recent growth outside of Asia. In this course we will look not only at ideas of Buddhism, but also Buddhism in practice. No prerequisites. Offered each year.

## RELI -121R. Art of Biblical Literature. 4 credits.

Designed to help readers understand the content and appreciate the artistry of literature from the Old Testament, New Testament and Apocrypha by paying close attention to creative aspects of the texts. Also considers the reinterpretation of biblical literature in the music, stories and movies of contemporary culture. Writing intensive. Every year.

## RELI-134 C/R. Chinese and Japanese Religious Traditions. 4 credits.

This course examines several religious traditions that have shaped East Asian civilizations. We will study the formal traditions of Taoism, Confucianism, Buddhism, Shinto, and the New Religions; we will also consider the popular religious traditions of China and Japan. Classes include both lecture and discussion; students will be evaluated through essay exams, short papers, and analysis of scripture and other texts. Every year.

## RELI-221R. Understanding the Old Testament. 4 credits.

Comprehensive survey that attempts to place Old Testament texts in their historical context, understand the religious and cultural perspectives, which shape the texts, and develop the student's skills in biblical interpretation and assessment of secondary literature. Writing intensive. Every year.

## RELI-222R. Understanding the New Testament. 4 credits.

Comprehensive survey emphasizing the historical context, and religious and cultural perspectives of the New Testament books. Writing intensive. Every year.

## RELI -241R. Christian Tradition. 4 credits.

Historical survey of major theologians and the development of Christian doctrine in the West. Topics include perennial tensions between reason and revelation, the humanity and divinity of Christ, nature and grace, justification and sanctification, spirit and structure, and differences between Roman Catholic and Protestant doctrine. Some sections writing intensive. Every year.

## RELI -333C/R. Buddhist Thought and Scriptures. 4 credits.

Seminar studying the teachings and practices of schools of the Buddhist tradition through pivotal scriptures. Sutras and other texts from Theravada and Mahayana Buddhism will be considered in their historical and cultural contexts, and within the framework of central themes of Buddhism. Requirements include class discussion and presentations, two exams, one short paper, and a term paper. Writing intensive. Every third year.

## RELI -335C/R. Confucianism and Its Critics. 4 credits.

Seminar on the history, central teachings, and institutions of the Confucian and Neo-Confucian traditions and Confucianism as manifest in the modern world. We will read pivotal works of Confucians including the Analects, Mencius, the writings of Zhu Xi, Wang Yangming and Tu Wei-ming. These will be assessed in part in contrast to critics of Confucianism ranging from classical philosophers to twentieth century Marxists. Writing intensive. Every year.

## RELI-336C/R. Religious Daoism and Chinese Popular Religion. 4 credits.

Religious Daoism has been a way of self-cultivation, influential in Chinese imperial politics and history. This course will examine the tradition of Religious Daoism in historical context and through the study of practices, including ritual, meditation, and yoga. We will also look at Religious Daoism from the vantage point of Chinese Popular Religion, the practices that have been the basis of the religion of the people to the present. Class will be a combination of lecture and discussion, with student presentations and a term paper. Writing intensive.

## Comparative and Thematic Courses

## RELI -171S. Urban Life and Social Ethics. 4 credits.

Examination of representative challenges facing contemporary cities using Springfield as an example. Background readings inform practical issues facing city government with emphasis upon the ethical dimension of the issues throughout. Writing intensive. Every year. This course

## RELI -176R. Racism and Social Ethics. 4 credits.

Consideration of basic understandings of racism in the United States in terms of their basic views of American values. Writing intensive. Every year.

## RELI-177R. Religious Perspectives on Contemporary Moral Issues. 4 credits.

Introduction to basic moral concepts in Judaism and Christianity and their application to issues such as lying; sexuality and procreation; abortion; euthanasia; genetic engineering; human rights; war, terrorism and nuclear deterrence; equality and gender; justice in access to health care; and environmental ethics. Some sections are writing intensive. Every year.

## RELI- 212R/C PILGRIMAGE: Journey to the Sacred - 4 credits

Pilgrimage is an ancient practice in which a person separates him or herself from familiar places, faces and routines to go on a quest to become closer to the divine physically, spiritually, and emotionally. The experience of pilgrimage is described as "liminal" (an in-between state); this state allows for great personal transformation. We will look at several different examples of pilgrimage from around the world, including the Hajj, Santiago de Compostela, Canterbury, and Mt. Fuji, which range from reverently spiritual to the festive and bawdy. Assessment will include tests, short papers, and a project on a pilgrimage of the student's choice.

## RELI-213 R/C RELIGION AND MEDICINE - 4 credits

This course will look at health, medicine and disease through the lens of religious belief, eveloping a method to compare and understand differences between places, times and cultures. This will include how diseases are identified and mapped; the effect disease has on culture and society; the meanings of disease and health for individuals and societies; how diseases have been understood and through history; and ideas and methods developed to cure, heal, and understand what it means to be sick and healthy. Disease may be viewed as a problem to be fixed, as retribution for wrongdoing, and as part of the human experience. Healing and wellness may be viewed as technological "repair" or as divine grace. Moreover, religions may change from the experience of disease and attempts to understand that experience, especially in time of plague or epidemic. No prerequisite.

## RELI -321. Biblical and Modern Prophets. 4 credits.

Investigation of the historical settings, rhetorical techniques and messages of prophets from Amos of Tekoa to John of Patmos. The student also considers the possibility of prophetic voices in contemporary society. Writing intensive. Alternate years.

## RELI -324R. Apocalyptic Vision in Ancient and Modern Literature. 4 credits.

Study of religious views, historical context, literary style, and imagery of ancient Jewish and Christian apocalyptic texts, followed by an analysis of the way in which selected modern films and literature use apocalyptic themes and images. Writing intensive. Alternate years

## RELI -326 . Word and Sword. 4 credits.

This seminar confronts some of the disturbing passages in the Bible: traditions of holy war and conquest, narratives of rape and murder, cries for vengeance, violent images of God, sharp prophetic invective, responses to political oppression, theological reflections on Jesus'
crucifixion, stories of martyrs, and apocalyptic visions of wrath. Biblical texts are examined in their ancient literary and historical context, and consideration is given to how modern individuals and groups have responded to these texts, whether as justification for violence, critiques of violence, or challenges to the relevance and authority of the Bible.
Prerequisite: One previous biblical course. Writing Intensive.

## RELI -327R—Manhood and Woman in the Bible. 4 credits

Placing the biblical texts in their Ancient Near Eastern and Greco-Roman contexts, this seminar examines concepts of sexuality and gender roles in Jewish and Christian scripture. In addition to considering the historical context of the biblical literature, the course helps students develop skills in literary and rhetorical analysis of the ancient poetry, narrative, and epistles concerned with sexuality and gender roles. Students also examine how the Bible is used in discussions of contemporary issues such as same-sex relations, marriage and divorce, and women's religious leadership. The course is conducted as a seminar with daily student presentations and responses to the readings, several short essays, and a research paper.

## RELI -339R/C. Monkeys, Samurai, and Gods. 4 credits.

This seminar will look at religious meaning and message in some of the best loved literature of China and Japan, including Journey to the West, Tale of Heike, Dream of the Red Chamber, Account of my Hut, and others. Class will be a combination of lecture and discussion, with student presentations and a term paper. Videos and other media will be used when possible. Writing intensive. Alternate years.

## RELI -342R. Comparative Religious Ethics. 4 credits.

Seminar analyzing and comparing ethical systems of several religious traditions including Confucianism and Buddhism in East and South Asia, and Judaism and Christianity in the West. Examines their assumptions, norms, characteristic patterns of moral reasoning, and conceptions of virtue and vice. Attention is given to the relations between religion, morality and law in each tradition; the question of whether there are any common features of religious moral reasoning that are universal; and the status of appeals to universal human rights. Writing intensive. Alternate years.

## RELI -378R. Bioethics. 4 credits.

Seminar on contemporary issues and debates in bioethics. Topics may include abortion, genetic engineering, reproductive technologies, euthanasia, autonomy, paternalism, use of human subjects in research, access to health care, allocation of scarce resources and environmental ethics. Writing intensive. Every year.

## Other Courses

RELI -490. Independent Study. 1-4 credits.
This course may be repeated for credit.
RELI -491. Internship. 1-4 credits.
May be taken for credit/no credit only. This course may be repeated for credit.
RELI -498. Senior Capstone. 1 credit.
Note:
Other departments sometimes offer courses that, with the advanced permission of the chair, may be counted for the major.

## Russian and Central Eurasian Program

Go to faculty and staff page.

## Requirements for Major

The major in Russian and Central Eurasian Studies (RCEP) was established to give the Wittenberg student the opportunity to study the complicated fabric of Russian and Central Eurasian societies by means of an interdisciplinary approach.

In addition to the required courses, each major and minor is required to attend an RCEP Colloquium at least once each term. Overall, majors must take at least 10 credits of coursework at the 300 -level or above. Classes with Central Eurasian content are listed with an asterisk.

## Course Selections

Thirty-eight credits required, distributed in the following manner:

- Russian Language

Eight credits above Russian 112 or the equivalent. These courses may be chosen from the following: Russian 205: Readings in Russian Culture; Russian 210: Beginning Conversation and Composition; and Russian 310: Advanced Conversation and Composition.

- Humanities and Social Sciences

At least one course must be at the 300 -level or above.

Four credits in Russian literature in translation chosen from the following: Russian 230: Topics course in Russian literature; Russian 151: Real to Reel: Russian War on Film; Russian 152: Journey into the Fantastic; Russian 153: St. Petersburg: Myth and Soul of a Russian City; Russian 154: The Modern Hero; Russian 260: 19th-Century Russian Literature; and Russian 261: 20thCentury Russian Literature.

History 253: Soviet Russia plus four credits in history chosen from the following: History 251: Medieval Russia; History 252: Imperial Russia; and History 101/201/301: Topics.

Twelve credits in the social sciences, chosen from at least three different departments, from the following: Political Science 204: Russian Politics; Political Science 208: Moscow: Local Politics and Urban Planning; Political Science 352: Russian Foreign Policy*; Economics 231: European Economic History*; Economics 275: Economies in Transition*; Sociology 301: Topics; Sociology 390: Russian and Central Eurasian Societies and Cultures*;

- Elective

Four credits chosen from among the courses in RCEP, including advanced language. Elective must be at the 300-level or above. This elective allows the student to pursue a special emphasis.

- RCEP 495: Senior Capstone Seminar*. Offered every Spring semester.
- Language Across the Curriculum

The Russian and Central Eurasian Area Studies Program heartily encourages the concept of "languages across the disciplines."

The student with sufficient language background may do a portion of his or her course work in the Russian language. This allows the student not only to practice the language but also to apply it to an area of interest. Prior approval of a text will be given by the Russian language instructor to ensure the appropriate level for the student. Participation is voluntary, but highly recommended.

## Requirements for Minor

The minor in Russian and Central Eurasian Studies should complete at least one class that has non-Russian, Central Eurasian content, chosen in consultation in his or her advisor. Those classes are marked with an asterisk. In all, twenty-two credits of coursework is required and should be distributed in the following manner:

- Language

Ten credits from the following or the equivalent: Russian 111: Elementary Russian I; and Russian 112: Elementary Russian II.

- Humanities

Four credits from the following: Russian 151: Real to Reel: Russian War on Film; Russian 152: Journey into the Fantastic; Russian 153: St. Petersburg: Myth and Soul of a Russian City; Russian 154: The Modern Hero; Russian 260: 19thCentury Russian Literature in Translation; Russian 261: 20th-Century Russian Literature in Translation; History 251: History of Russia to 1917; History 252: History of Russia Since 1917; History 101/201/301: Topics

## - Social Sciences

Four credits from the following: Political Science 204: Russian Politics; Political Science 208: Moscow: Local Politics and Urban Planning; Political Science 352: Russian Foreign Policy*; Economics 231: European Economic History*; Economics 275: Economies in Transition*; Sociology 301: Topics; Sociology 390: Russian and Central Eurasian Societies and Cultures*;

## - Elective

Four credits chosen from languages, humanities, or social sciences.

## Course Listings

## 499. Honors Thesis/Project. 1-4 credits.

Prerequisites: 3.50 GPA and permission of the Director.

## See Department for full description

- Economics

231: European Economic History*
275: Economies in Transition*
490: Independent Study

- History

251C: The History of Russia to 1917
252C: The History of Russia Since 1917
101/201/301: Topics
490: Independent Study

- Russian Language and Literature

111: Elementary Russian I
112F: Elementary Russian II
130: Topics in Russian Literature in Translation
205C: Readings in Russian Culture
210: Beginning Conversation and Composition
230: Topics Course in Russian Literature in Translation
260A/C: 19th-Century Russian Literature in Translation
261A/C: 20th-Century Russian Literature in Translation
310: Advanced Conversation and Composition. (required for study abroad)
330: Topics in Advanced Language
490: Independent Study in Russian

- Political Science

204H: Russian Politics
208S: Moscow: Local Politics and Urban Planning
352: Russian Foreign Policy*
490: Independent Study

- Russian and Central Eurasian Studies

490: Independent Study
495: Senior Capstone Seminar*
499: Honors Thesis/Project. Prerequisites: 3.50 GPA and permission of the Director

- Sociology

301C: Topics
390C: Russian and Central Eurasian Societies and Cultures* 490: Independent Study

## Service Learning

Service learning integrates a service experience that meets a community need with an academic course. Service learning involves reflection activities to assist students in thinking about the relation between course content and the service experience as well as to foster social responsibility.

## Service Learning 100 (SVLN 100)

This course provides students an opportunity to link a service experience to a particular course for one credit. The precise nature of the service activity and its appropriate connection to course content are determined in consultation with the faculty member teaching the course to which Service Learning 100 is to be linked.

## Service Learning 100 Guidelines

- Students will provide unpaid service to non-profit organizations, schools, or other entities in the community.
- Students will complete at least 15 hours of service for one credit of Service Learning 100 credit.
- One credit per course is allowed. No more than four credits of Service Learning 100 will be credited to a student's transcript. (Note: students may receive no more than sixteen credits total in the four categories of internships, independent studies, senior thesis, and Service Learning 100).
- Credit is given for the learning and its relation to the course, not for the service alone.
- SVLN 100 is graded Satisfactory/No Credit.


## Service Learning 100 Process

1. Student talks with faculty member about linking service to a particular course.
2. Student and faculty member review the Service Learning 100 guidelines.
3. Student works with faculty member and community organization to determine the type of service the student will provide and to establish learning objectives, assignments/reflection activities, and a method for assessment.
4. Student submits four copies of the completed proposal to the Assistant Provost for Academic Services by the end of the second week of the semester that he/she wants to register for Service Learning 100.
5. Once approved, the proposal will serve as registration for Service Learning 100.

## Course Listings

SVLN- 100. Service Learning. 1 credit.

## Sociology

Go to faculty and staff page.

## Requirements for the Major in Sociology

The sociology major is comprised of 37 credits in sociology. The student selecting the major is required to complete the Sociology Core: SOCI 101S, Introduction to Sociology; SOCI 307, Research Methods; SOCI 360, Sociological Theory; and 498, Senior Thesis. Twenty additional credits are to be selected from departmental offerings as electives; eight of these credits must be at the 300 or 400 level. The student may use only four credits in Sociology 460, 490, Independent Study, or 491, Internship, toward the major. A 2.0 GPA in sociology courses is required, and majors are expected to attend regularly scheduled Sociology Colloquia.

## Required in Related Departments

The student must complete one of the following Quantitative Reasoning or "Math Intensive" (Q, M, or Z) courses outside the department: COMM 300, COMP 121Q, COMP 150Q, ECON 190S, BUSN 210Q, MATH 112Q, MATH 127Q, MATH 227Q, PHIL 110R, POLI 260, PSYC 107Q.

## Sociology Major with a Criminology Concentration

Students may complete a Concentration in Criminology within the Sociology Major by completing the four Core courses listed above plus SOCI 370, Criminology and Criminological Theory, and selecting two other courses within the list of electives for the sociology major that are designated for the Criminology Concentration. These criminology electives include : SOCI 212, 214, 250S, 312, 376S, 380 and other courses approved by the department chairperson. An Independent Study (SOCI 490) or Internship (SOCI 491) of no more than 4 credits and related to criminology or criminal justice may be used as one of the Criminology elective courses with the approval of the department chairperson. Finally, to complete the concentration, the student must complete two additional courses (8 cr. hrs.) as electives in the Sociology Department, for a total of 20 cr. hrs. beyond the Sociology Core.

## Requirements for the Minor in Sociology

The sociology minor is comprised of Sociology 101 and 16 additional credits in sociology courses. Eight of these 16 credits must be at the 300 or 400 level. Sociology 490 and 491 can be used toward the minor only with Departmental approval.

## Course Listings

## SOCI- 101S. Introduction to Sociology. 4 credits.

Analysis of human interaction. Focus upon social structure, culture, socialization, and the nature of basic institutions and social processes. Occasional writing intensive sections. Every semester.

SOCI- 110C/S. Cultural Anthropology. 4 credits.
Introduction to cultural anthropology, paying particular attention to the concept of culture and to the cultural patterns around the world. Topics include fieldwork method, institutions of society, and symbols and meaning. The student reads descriptions of societies from different ethnographic areas, including the United States. Occasional writing intensive sections. Every year.

## SOCI- 201. Topics in Sociology/Anthropology. 2-4 credits.

Courses in areas of special interest not covered in regular course offerings. Alternate years. This course may be repeated for credit.

## SOCI- 210S. Sociology of Family. 4 credits.

Sociocultural study of marriage and the family with emphasis on variations in organization, function and value orientation arising from status, ethnic and religious differences. Implications for family life in American society. Writing Intensive. Every year.

SOCI- 212. Topics in Criminology and Criminal Justice. 2-4 credits.
Courses in areas of criminology and criminal justice not covered in regular course offerings. Every year. This course may be repeated for credit.

## SOCI- 214S. Penology and Social Control. 4 credits.

A critical examination of topics related to penology, social control, and the use of imprisonment in modern societies. Every third year

## SOCI- 245C/S. Gender and Society. 4 credits.

Gender is a key component of all human groups. Topics to be covered include gender roles, division of labor by gender, gender inequalities, gender relations in production and reproduction, and symbolic expression of gender differences. May be taught from either an anthropological or a sociological perspective. Alternate years.

## SOCI- 250S. Sociology of Deviance. 4 credits.

Analysis of deviance as an interactive process with emphasis on the social context of deviance and the process by which deviants are socially defined. Every year.

## SOCI- 270S. Sociology of Minority Groups. 4 credits.

Meaning and nature of minority groups, theories and patterns of interaction, and current trends and problems. Every year.

## SOCI- 277C/R. Islam and Islamic Societies. 4 credits.

A sociocultural introduction to the beliefs and practices of Islam, including a review of its development from its origins in the Middle East to its spread around the globe; evaluation of the place of Islam in shaping modern Islamic societies and cultures, with special attention to Muslim family relations; assessment of the experience of Muslims in societies where they form a minority population, including the United States; and consideration of the role of Islam in contemporary world affairs. Alternate years.

## SOCI- 290C/S. Global Change. 4 credits.

Critical examination of the major theories of social change with respect to the emergence of global political and economic systems. Topics include the industrial revolution and colonialism as well as modernization, socioeconomic development, with a particular focus on understanding issues significant to the Third World. Every year.

## SOCI- 292S. Population Problems. 4 credits.

Population theories, problems of population growth, birth and death rates, and sociocultural factors in the composition and distribution of population. Every third year.

## SOCI- 296S. Urban Sociology. 4 credits.

Exploration of urban studies, e.g., urban culture, lifestyle problems of institutional sectors, social change and planned development. Alternate years.

## SOCI- 301. Special Topics in Sociology/Anthropology. 2-4 credits.

Courses in special areas of the discipline, e.g., sociology of education, contemporary social problems, collective behavior, etc. Prerequisite: One sociology course of at least three credits. Alternate years. This course may be repeated for credit.

## SOCI- 307. Research Methods. 5 credits.

Overview of the fundamental concepts and methods of sociological research providing experience with all phases of research from conceptualization and design through data-gathering, analysis, and the reporting of results. Descriptive and inferential statistics are used in the course. Includes both field and laboratory components. To be taken by all majors during their junior year before Senior Thesis. Prerequisites: SOCI 101S and minimum math placement 23. Writing and math intensive. Every year.

## SOCI- 312. Special Topics in Criminology and Criminal Justice. 2-4 credits.

Courses in criminology and criminal justice that cover material different from that of regular offerings. Prerequisite: One sociology course of at least three credits. Alternate years. This course may be repeated for credit.

## SOCI- 314 . Women and Crime. 4 credits.

This course considers historical and contemporary issues of girls and women involved in crime. We will examine such topics as the gender difference in offending, theoretical explanations for female offending, the social construction of offending women, the social construction of masculinities leading to violence against women, and the sexualization and criminalization of women's bodies. We will also explore the challenges for women working in the CJ system.

## SOCI- 330S. Wealth, Power, and Poverty. 4 credits.

Theoretical aspects and empirical studies of social classes, their origins, and characteristics with specific reference to the United States. Prerequisites: One sociology course of at least three credits. Alternate years.

## SOCI- 340R. Sociology of Religion. 4 credits.

Examination of the structure and functioning of religious organizations and institutions, their relationships to the social structure and their role in social change. Prerequisite: One sociology course of at least three credits. Writing intensive. Alternate years.

## SOCI- 350S. Race and Ethnicity. 4 credits.

Race and ethnicity continue to be important markers of identity, stratification, and political action. This course will expose students to concepts and theories that can promote an understanding of the roles of race and ethnicity in contemporary society and guide new ways of thinking about these issues. Specifically, the course will introduce students to the sociological analysis of race and ethnic group membership in its various historical and geographical contexts, especially that of the contemporary United States. Why has racial/ethnic group membership remained a salient factor in social life? What factors perpetuate racial/ethnic stratification in our society? When does racial/ethnic group membership form the basis of social and political mobilization? Key concepts will be critically evaluated, with attention drawn to their ideological basis, explanatory power, and policy implications. Students will be encouraged to think critically about the social issues under study and their relevance to their own lives as members of a multi-ethnic society. No prerequisites required.

## SOCI- 360. Sociological Theory. 4 credits.

Fundamental concepts of the discipline and their interrelationships in general theories of society. The relationships between theory and research, theory and philosophical presuppositions, and
theory and social structure. To be taken by each major, preferably in the junior year. Prerequisite: One sociology course of at least three credits. Writing intensive. Every year.

## SOCI- 364. Political Sociology. 4 credits.

Analysis of the role of power in society especially as institutionalized in the polity, with an emphasis on how political processes are related to the economy, education, family and religion. Prerequisite: One sociology course of at least three credits. Writing intensive. Every year.

## SOCI- 370. Criminology and Criminological Theory. 4 credits.

Theories of the nature and extent of crime, factors conditioning criminal behavior, methods of punishment and rehabilitation, and programs of crime prevention. Prerequisite: One sociology course of at least three credits. Occasional writing-intensive sections. Every years.

## SOCI- 376S. Law and Society. 4 credits.

Study of the functioning of both the formal structure and informal mechanisms of the legal domain within a society. Topics include the use of law as social control, the conflict-resolution function of the law and the structure of legal organizations. May be taught from either a sociological or anthropological perspective. Prerequisites: One sociology course of at least three credits. Alternate years.

## SOCI- 380. Identity, Self and Society. 4 credits.

Examination of the concepts of identity and identity formation to construct a more integrated view of self and society and to assess the value of these concepts for understanding human behavior. Draws upon various behavioral science materials. Prerequisite: One sociology course of at least three credits. Writing intensive. Alternate years.

## SOCI- 390C. Russian and Central Eurasian Societies and Cultures. 4 credits.

Analysis of the societies and cultures of the post-Soviet realm, emphasizing family life, religion, stratification, politics, law and education. Prerequisite: One sociology course of at least three credits. Writing intensive. Alternate years.

## SOCI- 430. Seminar. 4 credits.

Exploration of areas such as social theory, research methods, human ecology and population, social psychology, social organization and anthropology. Prerequisite: One sociology course of at least three credits. Writing intensive. Every third year. This course may be repeated for credit.

## SOCI- 490. Independent Study. 2-4 credits.

Individual research elected by the student in consultation with the department faculty. Prerequisite: One sociology course of at least three credits. This course may be repeated for credit but only four credits can be counted toward the major in Sociology. Can be used for the minor in Sociology only with departmental approval.

## SOCI- 491. Internship. 2-4 credits.

Work-study course that provides opportunity to observe decision-making processes, relate course materials to practical problems and participate appropriately in a work environment. Prerequisite: One sociology course of at least three credits. This course may be repeated for credit but only four credits can be counted toward the major in Sociology. Can be used for the minor in Sociology only with departmental approval.

## SOCI- 498. Senior Thesis. 4 credits.

Comprehensive written project and an oral defense. The thesis is a requirement of each major. For further details on the structure of the senior thesis requirement, please consult the department's designated senior adviser. Prerequisites: Sociology 307 and completion of an approved statistics course (Psychology 107, Mathematics 127 or 227, or Business 210). Sociology 360 must be completed or taken concurrently with Sociology 498. Writing intensive. Every year.

## SOCI- 499. Honors Thesis/Project. 1 - 4 credits

Prerequisite: 3.50 GPA and permission of the Department Chair.

## Theatre and Dance

Go to faculty and staff page.

## Requirements for the Theater Major

A theatre major completes 36 credits of course work. Required courses are Theatre and Dance $222,226,230,260,270,300,401$, and two courses chosen from 232, 233, 234, or 235 . The student must also complete one of the following: 240, 250, $322,331,400,490$, or 492 . The student also takes two dance technique classes, fulfills a number of production requirements, completes an integrated learning unit, and passes a two-part senior comprehensive examination.

## Requirements for the Dance Major

A dance major completes 38 credits of course work. Required courses are THDN 211, 215, 311, 313, and 401. The student also completes two credits of THDN 102; eight credits chosen from THDN 030, 031, 032, 040, 041, 042, 050, 051, and 052--these eight credits must include either THDN 032, 042, or 052 . The student completes either THDN 112, 210, or 200--a dance culture topics course and four credits chosen from THDN 180, 181, 182; or THDN 233, 234, 235; or THDN 226. The student also serves on one technical production crew, completes an integrated learning unit and passes a two-part senior comprehensive examination.

38 total credits;

## Requirements for Minors

The student may choose either a technical theatre minor, a theatre performance minor, or a dance minor. To complete a technical theatre minor, a student takes 20 credits of course work: Theatre and Dance 120, 230, 260, two from the following: 232, 233, 234, or 235 , and either 331 or the two courses not taken from among 232, 233, 234, or 235 . The student also fulfills two production requirements. To complete a theatre performance minor, a student completes 20 credits of course work: THDN 120, 222, 226, 260, and another four credits chosen from THDN 300, 322 and 400 (performance topics). The student also takes two dance techniques classes and fulfills a production requirement. To complete a dance minor a student takes 16 credits of required course work: THDN 211, either THDN 213 or 200 (Topics in Dance History), either THDN 112, 210, or 200 (Topics in Dance Culture), and either THDN 226 or 230. In addition, the student completes four credits of dance technique courses chosen from THDN 010-070, earns two credits of THDN 102 by participating in two faculty supervised dance concerts, and participates in the senior dance concert. All four credits of dance technique courses and the two credits of THDN 102 may count toward the total credits needed for graduation.

## Licensure for Teaching in Drama/Theatre

Students interested in pursuing a course of study leading to a license to teach drama/theatre should contact the Chairperson of the Department of Theatre and Dance or the Education Department for specific requirements.

## 010-070. Courses in Dance Technique. 1 credit.

Designated to provide learning, knowledge and performance components in various types and levels of dance technique. Every year. These courses may be repeated for credit. Courses taught include.

- 010A. Aerobic Dance.
- 011A. Folk and Square Dance.
- 012A. Social Dance.
- 013A. Chinese Folk Dance.
- 020A. Theatre Movement.
- 021A. Dance Technique for Theatre.
- 030A. Modern Dance
- 031A. Intermediate Modern Dance
- 032A. Advanced Modern Dance
- 040A. Ballet
- 041A. Intermediate Ballet
- 042A. Advanced Ballet
- 050A. Jazz
- 051A. Intermediate Jazz
- 052A. Advanced Jazz
- 060A. Tap Dance
- 69. Topics: Dance Technique
- 70. Dance Company Workshop

Special Note: THDN 070: Dance Company Workshop is a year-long course. The student must register for the class each semester of the academic year. At the end of spring semester, one credit is awarded. Prerequisite: Permission of the instructor. Every year.

## THDN- 101A. Theatre Production. 1 credit.

For students who participate in main stage theatre productions as a member of the cast or crew or as a crew member of the annual dance concert. Every year. A total of four credits may be earned for successful participation in music ensemble and other production experience courses.

## THDN- 102A. Dance Production. 1 credit.

For students who dance in the annual dance concert. Every year.

## THDN- 112A. Dance in Popular Culture. 4 credits.

Study of dance in Broadway shows, Hollywood musicals, MTV, etc. as an expression of American culture. Writing intensive. Alternate years.

## THDN-120A. Art of the Theatre. 4 credits.

Consideration of the aesthetics of theatre together with the theory and practical techniques of dramatic arts. Every year.

## THDN- 180A. Elements of Dance. 2 credits.

Study of the basic elements of dance that when combined in different ways create different dance styles. Alternate years.

THDN- 181A. Motif Description. 2 credits.
Exploration of the creative potential of motif description-a way of recording movement by use of symbols derived from Laban's system of dance notation. Alternate years.

THDN- 182A. Dance Notation. 2 credits.
An introduction to dance notation, recording movement by means of symbols. Alternate years.

## THDN- 200. Topics in Theatre or Dance. 1-4 credits.

Courses in areas of special interest not covered in regular course offerings. Open to all students. This course may be repeated for credit.

## THDN- 210C. Dance Ethnology. 4 credits.

Consideration of the scope and function of dance as ritual, as social activity, and as entertainment in culture other than our own. Alternate years.

## THDN- 211A. Dance Composition. 4 credits.

Study of the elements of dance composition and how they are used in creating dance. Every year.

## THDN- 215N. Dance Kinesiology. 4 credits.

This course studies the skeleton and musculature of the human body as they relate to dance training and performance. The course develops in students an understanding and appreciation for moving efficiently, thereby preventing injuries. Dance experience is not required; however, the course is designed to address dancers' needs and concerns. Assessment is based on texts, class participation, and a research project.

## THDN- 222A. Acting. 4 credits.

Study and practice of the art and techniques of acting. Every year.

THDN- 226A. Improvisation. 4 credits.
Study and practice of improvisational theatre techniques and theatre games. Writing intensive. Every year.

## THDN- 230A. Stagecraft. 4 credits.

Study of the basic stage equipment and scenery construction with laboratory experience. Every year.

THDN- 233. Lighting and Sound Design. 2 credits.
Examination of the theories, techniques, and equipment involved in the design and execution of production lighting and stage sound. Prerequisite: THDN 230 or permission of instructor. Alternate years.

## THDN- 234: Costume and Make-up Design. 2 credits.

Study of the design process in the areas of costume and make-up with focus on the various ways of communicating the design idea. Prerequisite: THDN 230 or permission of instructor. Alternate years.

## THDN- 235: Stage Management. 2 credits.

Study and practice of stage management focusing on the organizational, leadership, and management skills needed in contemporary theatre and production. Prerequisite: THEN 230 or permission of instructor. Alternate years.

## THDN- 240A. Playwriting. 4 credits.

Study and practice of playwriting theories and techniques. Writing intensive. Alternate years.
THDN- 250A. Child Drama. 4 credits.
Study of dramatic activities with and for children. Alternate years.
THDN- 260H. History of European Theatre. 4 credits.
Study of theories and techniques of theatre arts from ancient Greece to the present. Alternate years.

## THDN- 270A. Contemporary American Drama. 4 credits.

Study of the new dramatic literature produced by the American theatres since 1980. Writing intensive. Alternate years.

## THDN- 300. Directing. 4 credits.

Study and the practice of the art and techniques of play directing. Prerequisite: Theatre and Dance 222 and 230 . Every year.

THDN- 311A. Advanced Dance Composition. 4 credits.
Further study of the elements of dance composition and how they are used in creating dance. Alternate years.

## THDN- 313H. Dance in the 20th Century. 4 credits.

Study of the significant developments in dance during the 20th century with an emphasis on ballet and modern dance. Writing intensive. Alternate years.

## THDN- 322. Advanced Acting. 4 credits.

Further study and practice of acting theories. Prerequisite: Theatre and Dance 222. Alternate years.

## THDN- 331. Advanced Stage Design. 4 credits.

Further study and practice of stage design focusing on the student's individual area of interest resulting in a design portfolio. Prerequisite: Theatre and Dance 232, 233, or 234. Alternate years.

THDN- 400. Topics in Theatre or Dance. 1-4 credits.
Specified study of a field of theatre or dance as described in the course schedule each term.
THDN- 401. Senior Seminar. 4 credits.
In-depth study of theatre or dance. Content may vary each year. Every year.
THDN- 490. Independent study. 1-4 credits.
Individual project in theatre or dance, arranged by the student with a supervising instructor and the Department Chair. Every year.

THDN- 492. Internship. 1-4 credits.
Supervised learning-work experience during the senior year at on- or off-campus sites. Involves a written project, journal or other assignments. Every year.

THDN- 499. Honors Thesis/Project. 1-4 credits.
Prerequisites: 3.50 GPA and permission of the Department Chair

## Urban Studies

The Urban Studies Program fosters student understanding of urban systems and problems, and encourages and emphasizes integrated interdisciplinary approaches to urban studies. The Urban Studies minor often completes a major with a participating department (e.g., Political Science, History, Sociology, Religion, Psychology, Education or Economics). The student, in consultation with an Urban Studies adviser, may design the minor to focus upon a particular interest such as public policy, urban planning or city administration.

The Urban Studies curriculum includes three levels. The first level consists of the interdisciplinary, team-taught course Urban Studies 171. The second level is drawn from existing departmental course offerings and includes a set of basic Urban Studies courses as well as suggested urban interest courses. It is expected that students would also take methodology courses appropriate to their majors; these would also be considered second-level courses, although they are not specifically required for the completion of an Urban Studies minor. A third level comprises several opportunities for higher-level analysis of urban affairs such as the writing of a senior paper and practical experiences in urban agencies. Internships are available in Springfield and in other cities as arranged.

## Requirements for Minor

The Urban Studies minor consists of 21 credits including Urban Studies 171, three 4Credit basic urban courses one of which can be the combination of the two 2credit Education basic urban courses, a 4-credit Urban Internship, Urban Student Teaching or Urban Term field placement, and a 1-credit senior paper in consultation with a student's minor adviser and at least one other member of the Urban Studies faculty. Additionally, to provide a broader contextual background to the minor, the student may wish to take one or more of the suggested urban interest courses listed in the description of the Urban Studies curriculum.

## Course Listings

## URBN- 171S. Introduction to the City. 4 credits.

Focuses on human interaction in the city, highlighting the American city from the perspectives of all participating disciplines - its development, its functions and structures, its population and its problems. Every year.

## URBN- 490. Independent Study. 1 - $\mathbf{4}$ credits

An option in lieu of the internship experience. The student should consult the chair of his or her major department to receive approval, along with that of the Director of the Urban Studies program, to receive credit under Level III of the Urban Studies curriculum.

## URBN- 491. Urban Internship 4- credits or Education 495: Student Teaching.

Work-study course opportunity for the student to observe decision making processes, relate course material to practical urban problems and participate appropriately in an urban work environment. Each student is responsible to the Urban Internship or Student Teaching adviser specified by the student's major department, and an application form must be submitted to participate in this course. Every year.

## URBN- 492. Senior Paper 1 credit

An integrated learning opportunity geared toward assessing student understanding of theories, methods and concepts central to at least two disciplinary approaches to urban studies, the ability to integrate knowledge from two or more disciplines, and the skill in formulating and defending a thesis. The precise nature of the paper is determined in consultation with the student's minor adviser and one other member of the Urban Studies faculty. Every year.

## URBN- 495. Urban Term. 1-4 credits

An off-campus experience that permits the serious student interested in urban problems to do research in a large urban setting. The student studies the life and operations of the metropolitan area in an urban term seminar and works at an urban field placement site. Participation in urban term is encouraged during the student's junior or senior year.

## Basic Urban Courses

Economics 250: Urban and Regional Economics. 4 credits.
Education 206: Survey of Urban Education and Schooling, 2 credits
Education 207: Exemplary practices in Urban Schooling. 2 credits
History 323: Urban History. 4 credits.
Political Science 222: Urban Politics. 4 credits.
Religion 171: Urban Life and Social Ethics. 4 credits.
Sociology 296: Urban Sociology. 4 credits.

## Recommended Urban Interest Courses

Economics 340: Public Finance. 4 credits.
Political Science 221S: State and Local Government. 4 credits.
Political Science 321: Public Policy. 4 credits.
Psychology 361B: Experimental Social Psychology. 5 credits.
Religion 172S: Poverty and Social Ethics. 4 credits.
Religion 176H: Racism and Social Ethics. 4 credits.
Sociology 270S: Sociology of Minority Groups. 4 credits.
Education 280: Topics in Education
Topics: Many topics courses are offered by participating departments that qualify as urban interest courses.

## Women's Studies

Go to faculty and staff page.
The Women's Studies Program provides a forum for students and scholars in different disciplines to share their interests, concerns and methodologies in a rich inquiry into one vitally important topic - the status and accomplishments of women. In pursuing this goal, the Program recognizes and encourages alternative ways of thinking about both disciplines and pedagogy, presents previously ignored or misinterpreted information about women across the disciplines, and promotes the student's self-esteem and personal growth through academic growth and inquiry.

## Requirements for the Minor

Women's Studies 100 plus 16 credits in at least three different disciplines: three of the courses must be numbered 200 or above, and only one course may count for both the student's major and the Women's Studies minor. The student, in the spring of the senior year, will present a portfolio of written work in women's studies to a Women's Studies faculty committee for assessment.

## Course Listings

## WMST- 100L. Women, Culture, Politics and Society. 4 credits.

Introductory survey of major issues in women's studies, including feminist theory, literature and history of women, and lived experiences of women in the United States and globally. No prerequisites. Writing intensive. Every year.

## WMST- 490. Independent Study. 1-4 credits.

Independent research project designed in consultation with the supervising professor.
Prerequisite: Declaration of the Women's Studies minor and permission of the instructor and the Women's Studies Committee. Every year.

## WMST- 492. Internship. 2-4 credits.

Supervised work experience in some area related to women's studies. Prerequisite: Declaration of Women's Studies minor and permission of the instructor. Every year.

The following courses are approved for the Women's Studies minor:
Chinese
130. Chinese Women Writers: Ancient and Modern. 4 credits

Communication
320. Topics: Gender and Communication. 4 credits

English
180. Gender Trouble. 4 credits
180. Making Romance. 4 credits
180. Women in Classical Hollywood Cinema. 4 credits
313. African-American Women's Literature. 4 credits

318A. Women in Literature I. 4 credits.
319A. Women in Literature II. 4 credits.
(Sections of 180 and other topics courses as noted in the master schedule.)
French
390. Contemporary Theory. 4 credits.

Health, Fitness and Sport.
245. History of Women in Sport. 4 credits.

History
202. Silences of the Past. 4 credits
203. Holy Antique Women! 4 credits
319. European Women’s History. 4 credits.
320. American Women’s History. 4 credits.
371. Nationalism, Ethnicity and Gender in 20th Century Africa. 4 credits.
390. Medieval Women. 4 credits.

Management
390. Women in Management. 4 credits.

Music
205. Women in Music.

Philosophy
200. Philosophy of Women’s Lives. 4 credits.
304. Knowing Bodies. 4 credits.

Political Science
319. Feminism and Postmodern Political Thought. 4 credits.

Psychology
190. Psychology of Women. 4 credits.

Religion
374. Advanced Social Ethics: Sexism. 4 credits.
381. Women and Religion: Judaism and Christianity. 4 credits.

Sociology
210. Sociology of the Family 4 credits.
245. Gender and Society. 4 credits.
246. Women and the Family in East Asia. 4 credits.
301. Topics: Sociology of Sexuality. 4 credits.
380. Identity, Self and Society. (Identified sections.) 4 credits.

In addition, topics courses in many departments such as Art, English, History, Language, Philosophy, Religion and Sociology are approved to meet Women’s Studies minor requirements as the chosen topics warrant. Other types of courses may also be offered with a Women's studies emphasis and be approved for Women's Studies credit (such as English 330: Major Authors). Current Women's Studies courses will be listed in the master schedule each semester.

## First Year Seminars (FYS)

First Year Seminar I and First Year Seminar II are required of all traditional incoming students, preparing them for a successful transition to the University; the seminars meet at a common time each week across the first year with a common syllabus and are led by a seminar team including a faculty advisor, a peer mentor, and to the extent available, a professional staff member. First Year Seminar I is connected in the fall to an advising section of a first-year only course with 25 or fewer students. First Year Seminars will meet Tuesdays, 11:40-12:30, throughout the academic year, will be graded (not taken for pass/fail credit), and will not be eligible for the 'Freshmen Forgiveness' policy.

## Course Listings

FYS- 101. FYS Seminar I. 1 credits.
FYS- 102. FYS Seminar II. 1 credits

## Admission Information

Wittenberg strives to select those students who show evidence of academic ability, motivation and continued growth - those who will benefit from the total educational program. No qualified student is ever denied admission because of race, color, creed, sex, disability, age or national origin. Careful personal consideration is given to each applicant. The final decision of the Admission Committee is based on the academic record, ability to do college work as indicated by testing data, academic and extracurricular interests, and recommendations. Admission is selective.

## Admission Requirements

The college preparatory curriculum necessary for admission to Wittenberg University must include four units of English and three units each of mathematics, social science, science and foreign language. The candidate for admission is urged to present credits in at least four major academic subjects each year of secondary school preparation. It is to the student's advantage to take a strong academic program in the senior year. Graduation from an accredited high school is a usual prerequisite for admission.

Applicants are not required to submit scores of either the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board or the American College Test (ACT). Although Achievement Tests of the College Board are not required, the English Achievement Test is recommended for class placement and/or course credit.

## Department of Music

In addition to the application process, an audition is required for all students planning to pursue a major in music. Please follow these steps:

- Submit an Audition Request and arrange to have two Music Recommendation Forms completed and sent to the Department of Music.
- Perform an audition.


## Advanced Placement and/or Credit

Students may receive advanced placement or credit by means of 1) Advanced Placement, Scholastic Aptitude and/or Achievement Tests of the College entrance Examination Board, 2) departmental examinations administered at Wittenberg, 3) courses successfully completed at an accredited college before a student's graduation from secondary school, PSEOP, and 4) International Baccalaureate (IB) Examinations, Advanced Level.

## International Baccalaureate (IB)

The International Baccalaureate (IB) is an internationally recognized program that enables students to obtain credit similar to AP. Students may earn credit for IB Higher Level examinations on which they earn scores of 5,6 or 7 . To receive credit, students should submit IB transcripts to the admissions office.

International Baccalaureate (IB) Diploma holders who achieve a score of 4 or better on SL (Standard Level Exams) or HL (Higher Level Exams) will be awarded up to 29 credits. The Registrar will evaluate these courses upon receipt of the IB Diploma and transcript and, whenever possible, assign general education credit to the classes. In recognition of the writing, rhetorical, and research skills necessary for the successful completion of the Extended Essay and Theory of Knowledge course required to earn the diploma, IB diploma students will receive 4 credits for English 101 if they receive a grade of "B" or higher on the Extended Essay.

## French Baccalaureate

The French Baccalaureate (FB) is an internationally recognized curriculum that qualifies students for university studies. Students may earn advanced placement for FB subject examinations in which a coefficient of 4 or greater and a score of 14 or higher has been obtained. To receive credit, students should submit FB transcripts to the Admissions Office. Notification of placement and/or credit is made soon after a student's arrival on campus.

## Early Decision

Those students who have decided that Wittenberg University is their first choice, present strong academic credentials, and intend to enroll if accepted, are encouraged to apply under the Early Decision Plan. The application must be filed by Nov. 15, with notification by Jan. 1. The students, who are accepted under the Early Decision Plan, must withdraw all previously filed applications to other schools. Within two weeks, the student must confirm acceptance to Wittenberg with a non-refundable enrollment deposit of \$500.

## Early Action I

The Early Action I Plan provides the applicant with early notification. If you choose to apply under the Early Action I, your application must be received by December 1. You will be notified before January 1 of an admission decision. Your $\$ 500$ non-refundable deposit will be due by May 1.

## Early Action II

If you choose to apply under the Early Action II Plan, your application must be received by January 15. You will be notified before February 1 of an admission decision. Your \$500 nonrefundable deposit will be due by May 1.

## Regular Action

Any applications submitted after the Early Action II Plan deadline, of January 15, will be considered under the Regular Action Plan. If you choose to apply under the Regular Action Plan, your application must be received by March 15. You will be notified before April 1 of an admission decision. Your $\$ 500$ non-refundable deposit will be due by May 1.

Applications received after March 15, will be considered on a space-available basis.

## Common Application

Wittenberg University accepts the Common Application in lieu of its own form and gives equal consideration to both. Students may obtain copies of the Common Application from their high school guidance counselors or from the University website.

## Deferred Admission

Students who wish to be accepted during their senior year but wish to postpone entrance for a semester or a year, upon special request in writing, are permitted deferred admission.

## Transfer Admission

Wittenberg welcomes in any semester a student who transfers from another college or university. The applicant must present a cumulative grade-point average no less than 2.0 on a 4.0 scale and must be in good academic and social standing. A maximum of 94 semester credits are transferable; however, at least 50 percent of the credits for all course work in the major while in residence at Wittenberg. Secondary transcripts and aptitude test scores are not normally required if a student has finished a year or more of college work. Unusual mitigating circumstances related to a student's academic or social standing can be taken into consideration by the Admission Committee. Information relating to such matters must be presented in writing.

## International Students

Wittenberg values the presence of international students on campus. Special application forms are required and may be obtained on line at www.wittenberg.edu. Students whose native language is not English must submit results of the Test of English as a Foreign Language (TOEFL) or the Scholastic Aptitude Test (SAT) administered by the Educational Testing Service.

## School of Community Education

The School of Community Education (SCE) provides for the academic, cultural, professional/vocational, and individual development of the non-traditional student within the mission of the university. It is a principal expression of Wittenberg's commitment to the lifelong values of a liberal arts education.

## Degree/Credit Program

SCE administers a program of evening/weekend credit courses for the adult/non-traditional student and also assists the student seeking courses through the day schedule.

## The Adult/Non-Traditional Student

To ensure appropriate attention to the needs of the mature student, the university has established the specific classification of "adult/nontraditional student." Criteria for this status are as follows: being at least 23 years of age, carrying a load of no more than 17 credits per semester or a total of 33 for the two regular semesters of any academic year*, having U. S. citizenship or immigration status other than Student Visa, and enrolling at least two years after ending traditional status. The student taking evening/weekend courses exclusively at a pace less than full-time is usually considered an adult/non-traditional student. An unclassified student seeking classification as a non-traditional student must consult the Dean of the School of Community Education.

The adult/non-traditional student is entitled to take evening and Saturday or day courses at a percredit charge. Such a student may also apply for the Adult Access Award as well as other forms of aid.

Admission, registration and related procedures for the adult/nontraditional student are administered by the School of Community Education in conjunction with appropriate academic entities.
*The student whose semester requirements include laboratory courses or other divergences from the typical four-credit course may obtain permission to carry additional credits in a given semester and more than 33 for two semesters.

## Degree Programs

A complete program leading to a B.A. degree with a major in liberal studies or a major in Organizational Leadership are available through the evening/weekend schedule. Courses are conducted by fulltime university faculty as well as adjunct instructors whose employment and performance are subject to review by both the respective academic departments and the dean. In addition, the adult/non-traditional student is free to pursue the various degree programs offered through the day schedule. The adult student may enroll on either a degree or a non-degree basis, the latter status being normally limited to 24 credits, except for extended teacher licensure programs.

The adult seeking admission as a degree student must submit an application together with relevant transcripts. Although the SAT/ACT test is not required, admission is nevertheless selective, as is the case with the traditional student. In deciding upon acceptance, the university looks for indications of likely success and the ability to contribute to academic life at Wittenberg. These include grades from previous institutions, range of subjects, grades earned on non-degree status at Wittenberg, available standardized test scores and such non-academic indicators as successful performance in responsible employment.

## Major in Liberal Studies

Intended strictly for the evening program for adult/non-traditional students, this interdisciplinary degree program is supervised by the Dean and the Director of the School of Community Education and the Community Education Committee. The major requires 36 credits of coursework, organized around a plan developed by the student and approved by the Dean and Director. The coursework must include SCED 200L: Liberal Studies Colloquium; and at least three courses at the 300 level or above, including SCED 400: Senior Leadership Seminar or SCED 499: Liberal Studies Honors Thesis Project and SCED 400. Courses may be drawn from SCED courses or from other departments’ courses. See the Liberal Studies major in the Department and Program listing for the complete description

## Major in Organizational Leadership

Intended strictly for the evening program for adult/non-traditional students, this interdisciplinary degree program is supervised by the Dean and the Director of the School of Community Education and the Community Education Committee. The major requires thirty-six 36 credits of SCED courses and four credits in Economics. See the Organizational Leadership major in the Department and Program listing for the complete description

## RN to BSN program

The RN to BSN degree completion program enables licensed RNs to complete a four-year Bachelor of Science in Nursing. Students admitted to the program will have earned a two-year degree in Nursing, must have achieved Nursing licensure by the second term of the Wittenberg program, and must meet all other Wittenberg graduation requirements to earn the BSN. Students in the program must maintain a minimum of a 2.0 GPA in their major courses, and must receive at least a C in a NUR course to count it toward the major and degree. See Nursing in the Department and Program listing for a complete program description.

## Criminology and Criminal Justice Major

The Criminology \& Criminal Justice degree completion program enables a student who has completed a two-year degree in Criminal Justice to complete a major in the field and to earn a BA at Wittenberg. The program may be completed entirely in evening courses or in a combination of evening and day courses.

Most CRCJ courses are cross-listed in other departments and can be taken either during the day or in the evening. The evening program is managed administratively by the School of Community Education, in coordination with the Department of Sociology. See Criminology and Criminal Justice in the Department and Program listing for a complete program description.

## SCED Course Offerings

All requirements are met through courses listed under academic departments, with the following exceptions, which are exclusive to the School of Community Education.

## SCED 190/290/390. Topic. 2-4 credits.

Within the Organizational Leadership program or such related programs as may develop, topics of special interest or need that are not readily encompassed by other designations in the curriculum. The 190 courses are at the beginning level, dealing with basic skills, techniques, or concepts. The 290 courses assume some level of college experience - to be designated for each particular course. The 390 courses are at an advanced level, require some experience in one or more disciplines, and are appropriate for students beyond the sophomore level.

## SCED 200L. Liberal Studies Colloquium. 4 credits.

Introduction to the processes and values of interdisciplinary liberal arts inquiry, to modes of expression appropriate to such inquiry and to research techniques in general. Processes and values include identification of underlying premises and sequences of thought, analysis of competing positions, recognition of points requiring research, an appreciation for at least two different disciplinary approaches to a given topic and formation of critical judgment. The subject of the course varies but reflects issues and themes appropriate to the General Education Program's Integrated Learning goal. Products of the course include a research paper and discussion of student projects. The Liberal Studies major should take this course as early as possible while working through the requirements of the major. SCED 200L satisfies the Integrated Learning (Wittenberg Seminar) requirement for SCE students. Prerequisite: English 101. Writing intensive.

## SCED 260S. Organizational Behavior. 4 credits.

Introduction to organizational behavior. Topics such as leadership, motivation, group dynamics, and organizational and work design covered. Writing intensive. Every year.

## SCED 300. Issues in Liberal Studies. 2 credits.

Intensive focus upon topics relating to liberal studies concentrations. Generally these topics are applications of interdisciplinary academic principles to issues that the adult student encounters in work and civic activities. They may also be extensions of topics introduced in other courses. Sophomore standing recommended.

## SCED 340. Readings in Leadership. 4 credits.

Students will read full texts and excerpts from a selected "Top Ten" classic authors in leadership, including Plato, Machiavelli, Drucker, Deming, and Peters. Principal theories of leadership, particularly those relating to business organizations and the effects of historical and economic contexts in shaping them, will be examined. The course objective is to develop a historically grounded understanding of the ways organizations develop and the manner in which leaders operate within them. Projects in the course will be designed to develop a mature set of insights into one's work organization.

## SCED 360S. Human Resource Management. 4 credits.

Introduction to the fundamentals of human resource management. Coverage of the classic topics including the philosophy and assumptions underlying the field, the legal background (EEO, OSHA, ADA, etc.), job analysis, personnel planning and recruitment, employee selection, issues in employment testing, training, employment development and compensation systems. Prerequisites: Any course meeting the General Education requirement in Social Institutions, Processes and Behavior and Economics 190S. Writing intensive.

## SCED 400. Senior Leadership Seminar. 4 credits.

A synthesis of learning from previous study and experience developed into a major report in which the student identifies a problem or process in an organizational setting, provides analysis, and proposes appropriate action. The inquiry process, developed in conjunction with the instructor and through activities with the group, addresses the dimensions of both management and leadership. Students present their report in writing to the instructor and orally to the seminar group. The report also serves as the basis for the oral senior assessment presentation for the major. Prerequisite: senior standing and completion of at least four major courses, including the Liberal Studies Colloquium. Writing intensive.

SCED 490. Independent Study. 1-4 credits.
Individual study that requires approval of the faculty member directing the study and the Dean of the School of Community Education.

## SCED 491. Internship. 1-4 credits.

Individual study centering on a supervised work site or community project. Requires approval from the faculty member directing the study, the work site supervisor, and the Dean of the School of Community Education.

## SCED 499. Liberal Studies Honors Thesis. 0-8 credits.

Prerequisite: 3.50 GPA and permission of the Dean.

## Transfer Credit

SCE believes that Wittenberg's rigorous liberal arts experience is an excellent complement to the variety of prior collegiate studies in which the mature student has engaged. Therefore, SCE welcomes the adult transfer whose record indicates likely success in the Wittenberg community.

To render a Wittenberg education feasible for students from the wide variety of backgrounds that typify contemporary adult experience, Wittenberg has extended its transfer policy in the case of qualified adult/non-traditional students. The student whose prior coursework parallels that in the Wittenberg curriculum is covered by the provisions of the university's general transfer policy. For the student from technical/ professional programs, the university has approved the awarding of partial elective credit for most non-parallel courses plus full credit for academic courses. An additional extension is the acceptance of up to 16 credits for military or corporate training activities that carry the college credit recommendations of the American Council on Education or the Program on Non-Collegiate Sponsored Instruction. The typical standing of associate degree graduates from these programs approaches junior level in the Wittenberg degree program of their choice. Details are available in SCE publications obtainable on request.

## Lifelong Learning Benefit

Persons 60 and over may enroll for up to 17 credits per semester on a space-available basis for a nominal charge.

## Financial Aid

Adult/non-traditional students are eligible to apply for Pell Grants, Ohio Instructional Grants, Ohio Student Choice Grants, and Stafford Loans (OIG and OSCG eligibility require full-time enrollment). Eligible veterans are entitled to funds paid under the G.I. Bill and other programs.

Adults not covered by such sources as employer or V.A. benefits may apply for university-funded Adult Access Awards, covering partial tuition on a semester-by-semester basis. These are based on need guidelines established by SCE.

Transfers who are members of Phi Theta Kappa, the national honorary society for two-year schools, are eligible for a half tuition scholarship. Students can obtain details from the SCE Office.

## The Summer Session

SCE administers the university's Summer Session of credit courses. Summer enrollment in day and evening courses is open to traditional and non-traditional students from Wittenberg as well as transient students in good standing at other institutions. Procedures and costs are published annually in the Summer Session Bulletin.

## Center for Musical Development (CMD)

CMD provides creative musical experiences for students of all ages. Private music lessons in voice, piano and a variety of other instruments are available during the day, after school and on Saturdays.

Group class lessons are available for adults in both piano and vocal technique, while children may take such group classes as beginning piano, Suzuki violin and piano. Young children may also take a course called Discovering Music.

CMD also sponsors occasional workshops and programs in jazz, folk music and chamber music, and, in conjunction with the Springfield Symphony Orchestra, the summer Kaleidoscope Strings Camp.

## Other Non-Credit Programs

SCE has offered a variety of non-credit educational experiences to members of the community and to people from a wider area. SCE also offers programs to meet professional/vocational, organizational, and individual needs as demand arises. Special offerings include the WISE, Young Women's Science Institute, and Summer Honors Institute programs for pre-college students.

## Post-Secondary Options Program

SCE administers the High School Scholars program whereby qualified high school students enroll in college courses under provisions approved by the State of Ohio. The primary expectation for admission is a GPA of 3.5 in a college preparatory curriculum.

Further Information: The administrative office of the School of Community Education is located in the Joseph C. Shouvlin Center for Lifelong Learning on Fountain Avenue at Madison Avenue. Anyone desiring further information should inquire there.


#### Abstract

Alma Mater This is the highest honor bestowed upon a woman at Wittenberg. Students, faculty or staff members may nominate a junior woman. A special screening committee selects five nominations for final consideration. A campus-wide election determines which nominee is selected to represent Wittenberg. The Alma Mater must possess depth of character and show consistent leadership, service and concern for the college community.


#### Abstract

Alma Lux This is the highest honor bestowed upon a male at Wittenberg. Students, faculty members, and staff may nominate a junior male. A special screening committee selects five nominations for final consideration. A campus-wide election determines which nominee is selected to represent Wittenberg. The Alma Lux must process depth of character and show consistent leadership, service, and concern for the college community. This award was instituted in 2003.

\section*{Broadwell Chinn Endowed Achievement Award}

This award was endowed by Dr. George D. and Gertrude Holmes Wilson '24, in memory of Mr. Broadwell Chinn, the first African-American student at Wittenberg. The fund annually provides a monetary award to the African-American junior student with the highest cumulative grade-point average.


## Heimtraut Dietrich Award

This award, established in 1981, is in remembrance of Heimtraut Dietrich, who served Wittenberg as administrator and teacher through her commitment to excellence and a caring for others, attributes that found their source in her steadfast Christian faith. It is presented to the student who best exemplifies the dedication to serve and assist others through a commitment of faith.

## M. Alice Geiger Award

This award was instituted in 1974 to commemorate the 100th anniversary of women at Wittenberg. The award recognizes a senior woman for a specific, outstanding contribution to the performing or literary arts, athletics, extracurricular leadership, new programming, special academic pursuit, or special representation. The student's contribution may have been made at any time during her college career.

## Global Awareness Award

This award, established in 1992, recognizes a graduating senior whose varied activities have contributed significantly to international understanding on campus.

## Martin Luther King, Jr., Award

This award, instituted in 1981, recognizes two outstanding African- American seniors, a man and a woman, who have been positive examples to members of the African-American community and the University during their college careers. Consideration is given to those students who have pursued a challenging course of study, exhibited upstanding character in and outside the classroom, displayed leadership, good citizenship, and an orientation toward service to others, and
exhibited a positive attitude toward higher education in general and an interest in furthering the ideal of African-American achievement at Wittenberg.

## John F. Mitchell Award

This award, named for the first valedictorian at Wittenberg, was instituted in 1979. It recognizes a senior man who represents the liberal arts tradition: a highly respected, good student who is a positive force in academic, cultural and social aspects of the campus. He exemplifies an open mind, understanding, reliability and wide range of interests.

## Presidential Scholars

Presidential Scholars are the junior students having the 13 top grade-point averages of their class through at least the preceding five semesters.

## HONOR SOCIETIES

## Alpha Lambda Delta

Alpha Lambda Delta is a national honor society that seeks to recognize and encourage scholarship among first-year women. Selection is based entirely on achieving a 3.5 grade-point average for fall semester of the first year. Tapping, or notification of membership, occurs in the spring semester.

## Phi Eta Sigma

Phi Eta Sigma is a national honor society that seeks to recognize and encourage scholarship among first-year men. Selection is based entirely on achieving a 3.5 grade-point average for fall semester of the first year. Tapping, or notification of membership, occurs in the spring semester.

## Ivy Ring

Ivy Ring is a junior women's service honorary. Members are chosen in the spring of their sophomore year on the basis of their contributions to the Wittenberg campus and to the community through the quality of their academic work and their participation in extracurricular activities.

## Pick and Pen

Pick and Pen is a junior honorary emphasizing leadership, service and scholarship. Members are tapped during the spring semester of their sophomore year.

## Omicron Delta Kappa

Omicron Delta Kappa is a national leadership honor society recognizing leadership in scholarship, athletics, university publications, cultural life and student affairs. Members are tapped during the spring semester of their junior year.

## Order of Omega

Order of Omega is a national leadership honor society recognizing leaders in fraternities or sororities who exemplify scholarship, leadership and service. Members are tapped in the spring semester of their senior year.

## Mortar Board

Mortar Board is a national senior honorary recognizing scholarship, leadership and service. Candidates must have a 3.3 grade-point average and excel in both curricular and extracurricular leadership and service to the Wittenberg community. Mortar Board is particularly concerned with advancing the status of women in society.

## Phi Beta Kappa

Founded at the College of William and Mary in 1776, Phi Beta Kappa is the oldest and most prestigious of the national honor societies. Students are normally elected as seniors or in special cases as juniors. They must be majoring in one of the liberal arts or sciences, have a high gradepoint average, have taken a variety of courses across the liberal arts spectrum, and have demonstrated a knowledge of mathematics and a foreign language appropriate to a liberal arts education.

## Chi Alpha Sigma

Chi Alpha Sigma is a national college athlete honor society founded in 1996. Members must be of junior class standing, have a 3.4 or higher cumulative grade-point average, be of good moral character, and have earned a letter in a varsity intercollegiate sport.

## DEPARTMENTAL HONOR SOCIETIES

Biology, Beta Beta Beta

Communication, Lambda Pi Eta
East Asian Studies, Epsilon Alpha Sigma
Economics, Omicron Delta Epsilon
Education, the Wittenberg Education Honorary
English, Sigma Tau Delta
Foreign Languages, Sigma Delta Epsilon
French, Phi Sigma Iota
German, Delta Phi Alpha
History, Phi Alpha Theta
Management and Economics, Tau Pi Phi
Philosophy, Phi Sigma Tau
Political Science, Pi Sigma Alpha
Psychology, Psi Chi
Sociology, Alpha Kappa Delta

## SCHOOL OF COMMUNITY EDUCATION

## Alpha Sigma Lambda

Wittenberg houses the Eta Sigma chapter of this national honorary society for adult students. Criteria for selection are: adult/non-traditional status, completion of at least 24 credits at Wittenberg with at least 50 percent being outside a single discipline, and a cumulative GPA in the top 10 percent of SCE students at this credit level. Induction is held annually.

## Excellence in Liberal Studies Award

Eligibility requires a major in liberal studies and completion of at least 44 Wittenberg credits, preferably over the most recent three calendar years. The Community Education Committee bestows the award on the student who, in its judgment, most fully embodies high academic achievement and realization of the principles of the liberal studies program. The person selected receives a plaque and a gift that celebrates the student's connection to the University.

## Student Life

Wittenberg is not a 9 a.m. - 3 p.m., Monday through Friday school. Classes meet an average of only 15-20 hours a week. And even with eight hours of sleep every night, that still leaves 92 hours a week (or more than 13 hours a day) for eating, studying, doing laundry and getting involved in a lot of activities with your friends.

The Student Development mission at Wittenberg University is to strive to develop leaders who act morally, think critically, and serve others. Student Development seeks to incorporate the in and out of classroom experiences by offering a variety of academic clubs, student organizations, fraternity and sorority experiences, honor and recognition societies, student government, media opportunities, and other groups. Of course each one of these organizations requires management and leadership. The number of organizations and the relatively small number of students in each result in virtually all students gaining leadership experience while at Wittenberg. These experiences translate into professional abilities such as the development of motivational, organizational, participatory and management skills.

And getting involved is what student life at Wittenberg is all about. Wittenberg is known nationwide for having one of the most active student bodies of any university in America.

## Clubs

## Student Publications

Wittenberg students publish The Wittenberg Torch, a weekly newspaper; The Witt, the annual yearbook; The Wittenberg Review of Literature and Art, a literary magazine; Spectrum, a journal of cross curricular essays; and the East Asian Studies Journal; the History Journal, a Political Science Journal; and Pholeos, a journal of student research published by the Wittenberg University Speleological Society. In addition, the Student Senate supports most of these academic publications.

## Departmental Organizations

Each academic department at the university has a club, honor society, or association to serve student interests. There also are forums for discussion, social activities and professional advising.

## Honor Societies

Honor societies at Wittenberg include Phi Eta Sigma and Alpha Lambda Delta for first-year students; Ivy Ring and Pick and Pen for juniors; and Mortar Board and Omicron Delta Kappa for seniors. Wittenberg is also one of the only 242 colleges that has a chapter of Phi Beta Kappa, the preeminent honor society for students in colleges of liberal arts and sciences.

## Student Government

Students participate actively in all forms and levels of campus government. The Wittenberg Student Senate, with an annual budget of more than $\$ 250,000$, serves as a liaison among students, administration and faculty. Under the authority of the university faculty, it can recommend policies pertaining to student social activities, organizations, residential and disciplinary regulations, and other aspects of campus life. In addition, it provides for the election and selection of student members to various policy and task committees of the faculty and the board of directors. Eight members of the Student Senate have voting privileges on faculty issues.

The Residence Hall Association (RHA) is the active governing body for students who live in campus residence halls. The elected officers and a representative from each of the eight halls assist in developing a residence hall environment that is both stimulating and beneficial to Wittenberg students. The RHA program also provides events, activities and programs within each hall. The group works collaboratively with all the halls for specialty programming on issues of safety, college transition, resources, stress relief, holiday and social events, bowling nights, and movie nights.

## Union Board

A large number of students are involved in Union Board, an organization that plans various cultural, social and recreational programs for the Wittenberg community. Each week it schedules programs and entertainment including lectures, concerts, dances, movies, coffeehouses and comedians. Union Board annually sponsors Little Sibs Weekend, Homecoming concerts, New Student Days events, and Witt Fest.

## Benham-Pence Student Center

The Benham-Pence Student Center is the center of campus social life. Students meet in the lounge or lobby, check email in the Cyber Cafe, cash a check in the service center, buy books and supplies in the bookstore, pick up their mail, or attend a meeting.

Meals are served in the student center dining room and Post 95 (snack bar). Meal plan options allow students to select the programs that best suit their personal lifestyles. Post 95 is a place to visit with friends, discuss assignments, enjoy a Coke or a pizza, or just relax.

## Intramurals

The intramural program offers year-round activities for men and women. Students may participate in 27 different sports, including badminton, basketball, billiards, flag football, floor hockey, Frisbee golf, racquetball, soccer, softball, table tennis, tennis, volleyball, walleyball and many others. Approximately 60 percent of our students participate in at least one intramural sport. In intramurals, enthusiasm and staying in shape are the crucial ingredients, not necessarily talent.

## Intercollegiate Athletics

Wittenberg has a long history of outstanding athletics and for fielding winning teams in many different sports. Even as our academic programs have gained nationwide visibility and stature, the athletic programs have continued their success.

The Department of Athletics is committed to the pursuit of academic and athletic excellence. Our primary goal is to provide the opportunity for students to experience the personal challenge and enjoyment of high-level competition along with their academic endeavors.

We also take great pride in the number of Wittenberg student athletes who have been named Academic All-America throughout the years.

## NCAA Division III

Wittenberg is a member of the North Coast Athletic Conference - a NCAA Division III conference. This conference brings a group of institutions that share common commitment to academic quality and to the conduct of athletics to support their educational purposes.

## Athletic Facilities

## Club Sports

## Wittenberg Athletic Eligibility Policy

Participating in athletics at Wittenberg University is a privilege all students must earn. Maintaining good academic standing and making satisfactory progress towards a degree are two essential academic goals each student must achieve to graduate.

In order to compete in intercollegiate athletics at Wittenberg University all students must adhere to the following standards: To conform to NCAA Bylaw 14.01.2.1, athletic eligibility is determined by the Board of Academic Standards (BAS). Athletes on academic probation (AP) are considered to be eligible to participate in athletics unless otherwise determined by the BAS.

## Cultural Life

The Wittenberg Series of distinguished lectures and artistic events enriches Wittenberg's academic environment. Throughout the year, students may attend (free of charge) lectures by respected scholars and public figures, concerts and performances by internationally recognized performers and companies, and art exhibits. Further, the university's membership in the Cincinnati Council on World Affairs brings foreign affairs specialists to the campus each year.

Speakers brought to the campus address critical issues in public forums, lecture in classes, and meet informally with small groups of interested students and faculty members. Departmental colloquia (campus-wide symposia on specific topics) and the university chapel programs provide additional opportunities for interaction with wellknown scholars, theologians and political figures.

Notable among the distinguished authors, scholars, lecturers and performers who have recently visited campus are Rita Dove (U.S. Poet Laureate), Jonathan Sarna (historian), E. O. Wilson (biologist), Dudley Herschbach (Nobel Laureate in Chemistry), Calvin Trillin (writer and satirist), Peter Beinart and Jonah Goldberg (political commentators), Julian Bond (NAACP Chair), Kevin Powell (civil rights activist, writer and hip-hop historian), Twyla Tharp Dance, Hubbard Street Dance Chicago, John Corigliano (Pulitzer Prize-winning composer) and the Corigliano Quartet, Tomoe Kaneko Ensemble (Japanese shakuhachi virtuoso), the Shaolin Warriors, Second City, Reduced Shakespeare Co., and The Acting Company. All were impressed with the intellectual interests and friendliness of Wittenberg students, the dedication of the faculty, the beauty of the campus and the support of the community.

## Music, Theatre, Art and Dance

Wittenberg has a very active music program, with classes, events, and activities that are available to all students. Courses cover a wide variety of music - Western classical music (both old and new), world music, and popular music; the study of music from an analytical or historical perspective; and the study of music education itself. Music lessons (in voice, piano, and the various orchestral and band instruments) are open to all students, as is participation in music ensembles, including the Brass Ensemble, Chamber Singers, Flute Choir, Handbell Choir, Chamber Orchestra, Wittenberg Choir, Wittenberg Singers, and Wittenberg Symphonic Band. Concerts and recitals are presented on campus throughout each semester.

Dedicated to the study, development, and practice of theatre and dance, Wittenberg's Chakeres Memorial Theatre serves as a center of theatre and dance activity for all interested students. Each year it presents a series of main stage theatre and dance performances designed and directed by faculty members and guest artists in addition to another series of plays and dance concerts designed, directed, and choreographed by students. Play productions of recent years include Major Barbara, As You Like It, Picnic, The Laramie Project, The 25th Annual Putnam County Spelling Bee, and Nunsense. The Department of Theatre and Dance also presents a fall dance concert and a faculty and seniors spring concert. Besides these, there are both a student improvisation theatre group called Pocket Lint and a student dance club. For students interested in the study of theatre and/or dance, the university offers both theatre and dance majors, a
technical theatre minor, a theatre performance minor, and a dance minor. The Ann Miller Gallery in Koch Hall hosts rotating exhibits of professional and student art.

## Academic Policies and Procedures

## Academic Advising

A faculty adviser is assigned to each entering student. This faculty member is also the instructor in one of the student's first semester courses. The adviser is available to explain program options and planning, to discuss graduation requirements, and to assist with pre-registration. Every student is urged to consult an adviser during each semester to review the student's program, progress and plans.

Although the student may request a change of adviser at any time, generally the student retains the adviser until declaring a major. At that time the student requests an adviser in the department in which the major is declared. Each department assists its junior and senior advisees in planning their programs of study.

The advice of the faculty adviser does not constitute a promise or a contract ensuring a student's graduation on schedule or the completion of specific requirements. The responsibility for understanding and meeting degree requirements rests entirely with the student.

## Declaration of Major

To ensure the student's in-depth understanding of at least one area of knowledge, the requirements for a departmental or major concentration must be fulfilled.

To satisfy this requirement, the student must select not later than the end of the Spring semester of the sophomore year a department or program in which to concentrate. Early declaration is possible (and encouraged) for majors that require a carefully planned program of study. Registration for the junior year is not permitted until a major declaration has been filed with the Registrar's Office. Declaration of the major is made through the Department Chair and by filing with the Registrar.

## Amount of Work to Be Carried

A normal load is 16 credits per semester. A student must carry 12 credits to be full-time. Fulltime tuition covers 12 through 19 credits. A student who wishes to carry more than 19 credits must request permission to overload by petitioning the Registrar. The 20th credit triggers the first per credit overload charge, with each additional credit generating an additional fee.

## Registration

A student is expected to register for the next semester during the designated registration period. The registration dates are published in the University Calendar and the Master Schedule each semester. Under certain circumstances, approved by the Registrar, a student may register during
the first week of classes. The university reserves the right to cancel classes having low enrollments at the end of the registration period.

## Change of Registration

A student may add/drop normal 15-week courses according to the following schedule:
Adds are permitted only during the first week of the semester.

Drops without record are permitted through the fifth week of the semester.
Drops with a grade of "W" are permitted through the 10th week of the semester. All drops/withdrawals after this date appear on the student transcript with a grade of "F." (However, first-year students in the first semester of their enrollment, not including transfer students, may withdraw late from one course and receive the mark of W for that course, through the last official day of classes. The petition for late withdrawal must be signed by the instructor for the course and the student's faculty adviser. Students should submit the withdrawal to the Office of the Registrar, not later than the last official day of classes.)

Note: Courses that meet for fewer than 15 weeks have different deadlines. Please consult the Academic Calendar for appropriate dates.

All changes must be filed with the Registrar's Office on an Add/Drop form before the specified dates. Credit or grades may not be adjusted on the academic record unless the appropriate forms have been correctly filed before the deadline. Changes of registration that occur after the first day of the semester do not qualify a student for a refund of tuition or overload fees.

## Auditing Courses

Auditing courses is permitted if a petition to audit is first approved by the professor whose course it is to be audited and then by the Registrar's Office. The student must also agree in writing not to expect credit for the audited course at any future time. The student is not required to take examinations and is not given a grade (instead of a grade, the mark of " L " will appear on the student's transcript). Verification of auditor's status must be confirmed by the instructor of the course prior to entry on the student's permanent record. Permission to Audit forms are available in the Registrar's Office. A traditional student who audits a course is billed for one credit of overload fee for the course.

## Repeating Courses

If a student repeats a course, the credit value and grade received from the last registration is used to compute the grade point average. Only the credits earned from the last registration count toward the graduation requirement of 126 credits, major requirements, or other requirements. A student's transcript shows both the original grade for the course and the grade earned when the
course was repeated. Only academic work that has been taken at Wittenberg is repeatable and it can be repeated only with a Wittenberg course. FYS 101 and FYS 102 may not be repeated.

## General Education Program Evaluation

A General Education Program Evaluation is a computerized review of each student's course transcript matched against the university's requirements for a degree. Except for progress in some majors and residency requirements, it tells the student's standing relative to graduation at a given moment. A General Education Program Evaluation is available online. Other than faculty advisers and university officials, third parties cannot receive copies. An evaluation is a planning aid only. Its accuracy is not guaranteed, and it cannot be considered a promise or a contract between the university and the student. The student is responsible for reporting printed evaluation errors to the Registrar. The responsibility for understanding and meeting degree requirements rests entirely with the student.

## Transferring Courses

Credit for course work taken at any institution accredited by an agency approved by the U.S. Department of Education, including distance-learning courses, may be applied toward the completion of a Wittenberg program, subject to review by the Registrar, the Director of General Education, and/or the Chair of the Department in which the credit is requested.

Transfer credit from semester system institutions is evaluated and placed onto the academic record on a 1:1 ratio, e.g., three credits are evaluated as three credits on the academic record.

Transfer credit from quarter system institutions is evaluated and converted to credits on .67:1 ratio, e.g. four quarter credits are evaluated as 2.68 credits on the academic record.

The Registrar, in consultation with the Director of General Education, determines how, or whether, transfer credits may satisfy general education requirements. The Department Chair determines how, or whether, transfer credits may satisfy requirements in the department's major and minor programs. The student may be asked to present a portfolio of work, syllabi, or other materials to assist with this determination and to establish placement in a major or minor program.

In applying transfer credits to general education requirements, three credits are sufficient to fulfill a four -credit requirement, and likewise two three-credit courses are sufficient to meet a twocourse eight-credit requirement. This rule can apply to major requirements if prior approval has been granted by the Department Chair.

Grades of "C" or better must be earned for transfer credit to be accepted. Although the grades granted for the transfer work appear on the transcript, they are not calculated into the GPA.

Course work to be taken through international education programs sponsored either by Wittenberg University or by other accredited institutions must be approved by the Office of International Education at Wittenberg prior to enrollment in the program.

Grades are reported for all study abroad programs (including affiliated domestic programs) as they are transmitted to the Registrar. The grades are shown on the transcript but not calculated in the GPA.

Transfer credit is not accepted for courses in which the content has already been included in previous credit on the record. Transfer credit is also not accepted for a course taken at an institution affiliated with the Southwestern Ohio Council for Higher Education if the course is available at Wittenberg.

Also, work taken at another institution does not count under the repeat rule; i.e., the grade earned at the other institution does not replace the grade earned at Wittenberg.

## Ohio Community College Transfer Credits

Students who have completed the Ohio Transfer Module and have been awarded an A.A. or A.S degree can apply their coursework toward the graduation requirements at Wittenberg University.

1) The entire 60 credits of the A.A. or A.S. degree will count toward Wittenberg's graduation requirements (up to 94 credits can be transferred). Courses with a grade of C - or below will not be transferred.
2) Students will be considered to have met the requirements of the General Education program at Wittenberg; students who have completed less than the equivalent of one year of foreign language at their home institution will be required to complete the Wittenberg General Education Language requirement. In addition, students will be required to complete the Community Service requirement and four writing-intensive courses at Wittenberg to fulfill graduation requirements.

## Advanced Placement (AP)

Superior students have the option of receiving advanced placement. Advanced placement is generally based on scores received on standardized examinations in such subjects as English, foreign languages and mathematics. Advanced placement and credit are granted for a grade of 4 or 5 on any Advanced Placement Examination of the College Entrance Examination Board (CEEB). Based on departmental recommendations, advanced placement and/or credit is granted for a grade of 3 . Neither placement nor credit is granted for a grade of 2 or 1.

## International Baccalaureate

The International Baccalaureate (IB) is an internationally recognized program that enables students to follow a special curriculum and take specific examinations to fulfill secondary school graduation requirements. Students may earn advanced placement for IB Higher Level
examinations on which they earn scores of five, six, or seven. To receive credit, students should submit IB transcripts to the Admissions Office. Notification of placement and/or credit is made soon after a student's arrival on campus.

International Baccalaureate (IB) Diploma holders who achieve a score of 4 or better on SL (Standard Level Exams) or HL (Higher Level Exams) will be awarded up to 29 credits. The Registrar will evaluate these courses upon receipt of the IB Diploma and transcript and, whenever possible, assign general education credit to the classes. In recognition of the writing, rhetorical, and research skills necessary for the successful completion of the Extended Essay and Theory of Knowledge course required to earn the diploma, IB diploma students will receive 4 credits for English 101 if they receive a grade of "B" or higher on the Extended Essay.

## French Baccalaureate

The French Baccalaureate (FB) is an internationally recognized curriculum that qualifies students for university studies. Students may earn advanced placement for FB subject examinations in which a coefficient of 4 or greater and a score of 14 or higher has been obtained. To receive credit, students should submit FB transcripts to the Admissions Office. Notification of placement and/or credit is made soon after a student's arrival on campus.

## Internship and Independent Studies

A student may earn credits by participating in internship opportunities or independent studies supervised by a faculty member. In order to participate in either of these opportunities, the student must have completed the sophomore year and be in good academic standing with a cumulative grade point average of 2.000 or better. The student must fill out the appropriate form with the supervising faculty member, secure all necessary signatures and submit the form by the semester deadline for adding courses. Independent Study forms are taken to the Registrar's office for final approval. Internship agreement proposals are approved in the Director of Career Services. A student must register for an internship experience during the period the internship is completed. Credit will not be granted for an internship completed in a prior semester. A total of 18 credits of credit through a combination of internships, independent study, and/or senior thesis is permitted. A maximum of 10 credits of internship credit is possible.

## Placing Out

A student may request to place out of any required course or any prerequisite course in the curriculum by taking and passing an examination. To gain permission to take the examination, the student should present reasonable evidence of preparation to the department responsible for the course.

## Credit by Examination

A student may also acquire credit by examination. However, a student may not receive credit for any course that includes content for which a grade has already been received (including NC or F) or that was audited officially or unofficially.

The chair of the department and the instructor of the course in which credit is to be earned must approve the student's petition to attempt credit by examination. The petition must also be approved by the Assistant Provost for Academic Services. After all approvals are granted, the student must then pay the appropriate fee (cost of one overload credit) before taking the exam. The grade for the examination appears on the student's transcript.

## Cross-Registration

A student registered for 12 or more credits may cross-register for a course offered by a member of the Southwestern Ohio Council for Higher Education (SOCHE). The student may register only for courses that are not offered at Wittenberg. There is no additional billing as long as the student's total credits for the semester remain below 20. Registration forms are available in the Registrar's Office.

## The Class Day

A typical four-credit class meets three hours per week, normally in one of three patterns: three 1hour (MWF), two 1.5-hour (TTh), or one three-hour period. A few classes may be held on a daily basis. Some schedule additional laboratory periods.

## Attendance

Each Wittenberg student is expected to attend class except for reasons of ill health, of travel mishaps, or of illness or death in the family. From time to time legitimate educational activities or participation in university-sponsored co-curricular activities may result in student absences. In such cases, the faculty or staff members planning these activities should weigh carefully their educational benefits.

A student's absence from class due to any of these circumstances is considered excused. Nonetheless, each student is expected to meet the academic responsibilities for each course, even though excused from class. Faculty members are expected to cooperate in helping the student to meet these responsibilities.

The Health and Counseling Center provides written verification of illness only when the university physician orders hospitalization or strict bed rest for a specific affliction.

The following procedures are to be followed for excused absences:

In each case, the student should tell the appropriate faculty members the circumstances of the absence and should request assistance in meeting academic responsibilities. This should be done before the absence, if possible.

Faculty or staff members sponsoring group activities should submit the names of the participating students to the Assistant Provost for Academic Services, who provides all faculty with a roster of the persons involved, explains the reason for the absence and identifies the date(s) on which the students are to be absent.

A student or faculty member may ask either the Dean of Students or the Assistant Provost for Academic Services to clarify the circumstances of an absence and to verify that the absence is excused.

## Grading System

The letter grades A, B, C, D, NC (No Credit), S (Satisfactory), and F are awarded by instructors and describe the student's performance relative to the expectations of completed course work. The first four grades may be further described by the use of a plus (+) or a minus (-) sign to indicate a greater or lower level of achievement for that letter grade. Marks of I (incomplete), L (audited course work), X (satisfactory, course in progress), NR (no report), W (withdrawal), and XF (failure due to academic dishonesty) may also be given under appropriate circumstances.

## Grade- Point Average

For the letter grades A, B, C, D, including any related pluses or minuses, and for the grade F, the Registrar determines a grade-point average by dividing the total number of quality points earned (credits for each graded course times the quality-point factor for the grade awarded) by the number of graded credits attempted. The following chart gives the quality points for each grade. The semester and cumulative grade-point averages reflect only course work so graded and are the averages used to determine scholastic standing, certification for selected honors, qualifications for graduation and other actions based upon a grade-point average.

| Description | Grade | Quality Points |
| :--- | :--- | :--- |
| Outstanding <br> performance | A+ | 4.000 |
|  | A | 4.000 |
|  | A- | 3.667 |
| Good <br> performance | B+ | 3.333 |
|  | B | 3.000 |
|  | B- | 2.667 |
| Adequate |  |  |
| performance | C+ | 2.333 |
|  | C | 2.000 |
|  | C- | 1.667 |
| Marginal <br> performance | D+ | 1.333 |
|  | D | 1.000 |
|  | D- | 0.667 |
| Failure | F | 0.000 |
|  | XF | 0.000 |


| Mark | Descriptor |
| :--- | :--- |
| S | Satisfactory, Credit Earned |
| NC | No Credit |
| I | Incomplete |
| X | Satisfactory, Work in Progress |
| L | Audited Course |
| NR | No Report |
| W | Withdrawn |
| XF | Failure due to Academic Dishonesty |

## Significance of Grades and Marks

Grades in the A range indicate outstanding performance characterized by distinguished achievement in all aspects of the course.

Grades in the B range indicate good performance characterized by a high level of achievement in major aspects of the course.

Grades in the C range indicate adequate performance demonstrating a basic understanding of the subject.

Grades in the D range indicate marginal performance characterized by recognizable deficiencies but still deserving credit.

A grade of F indicates failure to meet the minimum standards of the course. No academic credit is given for course work so graded, even though the grade is calculated into the grade-point average.

A grade of XF is assigned as a sanction for academic dishonesty. It is recorded on the student's transcript with the notation "failure due to academic dishonesty." The grade of XF is treated in the same way as the grade of F for the purposes of grade point average, course repeatability, and the determination of academic standing.

The marks S (Satisfactory) and NC (No Credit) are used in several circumstances:
An academic department or program may determine to use the $S$ and NC marks for selected curricular offerings for all registered students in a course, subject to faculty approval.

## The Pass/Fail Option

A student may elect one course a semester under the Pass/Fail Option, provided that the student is registered for a minimum of 15 credits in the case of traditional students, and 12 credits in the case of adult/non-traditional students. The election is to be made during the third week of the semester by completing the appropriate form available in the Registrar's Office. That a student has exercised this option for a course is known to only the Registrar, who converts the regular grade awarded to an S or NC mark. The S mark replaces all grades from C- to A+ inclusive; the NC replaces all grades from D+ to F inclusive. Neither the $S$ nor the NC mark has any impact on the semester or the cumulative grade-point averages. Once elected, the Pass/Fail Option cannot be changed, nor can there be a subsequent reconversion of the grade. Students should be aware that graduate and professional schools are increasingly counting an S mark as a C when evaluating transcripts. Restrictions regarding this option are:

If a student registers for a departmentally determined Pass/Fail course that is weighted at three or more credits, the student can make no other Pass/Fail course selection during that semester.

A student may not elect the pass/no credit option in coursework of declared major programs or in FYS 101 or FYS 102.

Exceptions may be made at the discretion of the Department Chair or Program Director. Internships, which are graded pass/no credit, may be counted in coursework of declared major programs at the discretion of the Department Chair or Program Director.

In case a student changes the declared major in which one or more courses have already been completed with a mark of S, such courses may be counted toward the requirements of the new major only with the written approval of the chair of the new department, a communication to be forwarded to the Registrar.

A Pass/Fail course with the mark of NC is not counted toward the minimum number of credits required for graduation.

The mark I (Incomplete) is given only at the end of a semester in which course work has not been completed because of illness or other circumstances beyond the control of the student. The mark of I must be removed no later than the end of the eighth week of the next semester or it automatically becomes an F or NC (No Credit).

The mark X (Satisfactory, Course work in Progress) is given only at the end of a semester for certain kinds of course work that may properly carry over more than one semester. The X is replaced by a final grade at the end of the grading period in which the work involved is completed.

The mark L (Audited Course) is given to those students who, by petitioning the instructor and the Registrar's Office, have gained permission to audit a course.

The mark NR (No Report) indicates that a grade report is missing or has been left blank. The mark is replaced by the appropriate grade when the Registrar has been officially notified of a change.

The mark W (Withdrawal) indicates that a student, after filing a Change of Registration form with the Registrar's Office, has officially withdrawn from a course after the fifth week of the semester and before the beginning of the 11th week of the semester. This mark is also used when a student is suspended during the course of a semester for other than academic reasons. First-year students in the first semester of their enrollment may withdraw late from one course other than FYS 101 and receive the mark of W for that course, through the last official day of classes. FYS 101 and FYS 102 may not be dropped. The petition for late withdrawal must be signed by the instructor for the course and the student's faculty adviser. Students should submit the withdrawal to the Office of the Registrar, not later than the last official day of classes.

## Notification of Grades

At the end of each semester, a grade report is available online or can be requested from the Registrar.

## Transcripts

A permanent academic record is maintained by the Registrar's Office for each student who registers at Wittenberg. Wittenberg student records are administered in accordance with the Family Privacy Act of 1974. For information on obtaining an official transcript of the academic record Contact the Registrar's office. Normally, a transcript request is filled within three to five working days after receipt. An official transcript can be released only if the student's account is clear of outstanding balances and university holds.

## General Academic Standards

The successful completion of 126 credits is a requirement for graduation.
Cumulative grade-point averages of 2.000 for all work completed at Wittenberg University and of 2.000 for all course work used to meet the requirements of declared major and minor programs are requisites for graduation.

At least 32 credits for all course work and 50 percent of the credits for course work in the major are to be completed while in residence at Wittenberg University. The student must be in residence for at least one of the last two semesters.

The student is to maintain an acceptable rate of progress toward meeting both the cumulative grade average and the total credits required for graduation as defined in the standards for academic progress.

## Student Classification

A student is classified according to the number of credits successfully completed: sophomore standing is achieved with the successful completion of 32 credits; junior standing, 64 credits; and senior standing, 96 credits.

## Eligibility for the Dean's List and Academic Honors

At the end of each Fall and Spring semester, a Dean's List announces the names of students who have earned a grade point average of at least 3.500 for a minimum of 12 graded credits. A traditional student who completes 12 or more graded credits over the summer session, with a GPA of at least 3.500 is also eligible for the Dean's List. Further, students so honored may not have received a grade of F, NC (No Credit) or I (Incomplete) for the semester and may not have been under disciplinary probation or suspension any time during the semester. See below for criteria applying to adult / non-traditional students.

As a result of distinguished academic performance throughout their undergraduate education, graduating students may receive their degrees with academic honors. Students are awarded academic honors as follows: when the final grade-point average is between 3.500 and 3.699 , the
degree is conferred cum laude; between 3.700 and 3.799, magna cum laude, and between 3.800 and 4.00 summa cum laude.

## Standards of Academic Progress

Students are advised to complete 25 percent ( 32 to 33 credits) of the requirements in academic courses for the degree during each academic year. To meet acceptable academic standards, the student regularly enrolled as a degree candidate must accomplish the following:

Achieve a minimum cumulative grade-point average of
1.667 at the end of the first semester,
1.750 at the end of the second semester,
1.850 at the end of the third semester, and
2.000 at the end of the fourth semester and thereafter.

Note: The Board of Academic Standards may send informal letters of warning or concern to students when the grade-point average or status shows signs of falling below acceptable levels.

At the end of the fourth semester and each semester thereafter, maintain a grade-point average of 2.000 or better.

Earn at least:

24 credits by the end of the second semester,
52 credits by the end of the fourth semester, and
80 credits by the end of the sixth semester.
Note: This rate of accumulating successfully completed credits is a minimum standard and, if followed, requires nine to 10 semesters of acceptable academic work to meet the expectations for graduation.

## Academic Probation

A student is placed on academic probation when judged to be making less than satisfactory progress toward graduation:

When the semester grade-point average or the cumulative gradepoint average falls below stated minimums.

When the rate of course completion falls below stated minimums.
A student is removed from academic probation when the semester and cumulative grade-point averages and the rate of course completion reach stated minimums. A student on academic probation may not receive a letter of good academic standing from the university.

Any student on academic probation must have the academic adviser's approval prior to adding, changing, or withdrawing from a class. Further, the student is to meet at least twice (in addition to the pre-registration conference) with the academic adviser during the semester to discuss current academic work and related matters. The adviser reports the nature of the discussion and recommendations considered to the Board of Academic Standards using the appropriate form. The forms are initially sent to the student, who is to take them to the adviser.

## Academic Suspension

Academic suspension occurs at the end of an academic year (except in the case of gross disregard of academic standards and responsibilities) and involves the involuntary and immediate withdrawal of the student from Wittenberg University for at least one full semester. A student is suspended as a result of any one of the following circumstances:

A student fails to make sufficient progress toward meeting graduation requirements after being on probation for two or more consecutive semesters.

Grave academic difficulty during the first year may not be known until the end of the second semester. In such cases, the Board of Academic Standards may decide to suspend a student when the extent of academic deficiency warrants this action.

Failing to meet stipulations set by the Board. A suspension for a failure to meet stipulations may occur at the end of any semester.

For gross disregard of academic standards and responsibilities, defined here as earning a gradepoint average below 1.000 for any semester, the Board of Academic Standards determines the status of the student after a review of the student's grades for the current semester and previous semesters and of the reports of the student's instructors. A suspension for gross academic disregard my occur at the end of any semester.

## Appeal of Academic Suspension

The Board of Academic Standards does consider a timely letter of appeal from the academically suspended student but reverses its decision only when presented with new evidence of significant mitigating circumstances. The letter of appeal is to be typewritten and no more than two pages in length; it may include additional supportive information or give a corrective devised by the student. The Assistant Provost for Academic Services provides information regarding the appeal process. Should the appeal of academic suspension be granted, the Board of Academic Standards often stipulates a course of action specific to the student for the successful completion of future academic work. Should it be denied, the student may appeal further, but only in writing, to the Provost.

The communication to the Provost must demonstrate that the appeal did not receive a fair and an impartial hearing.

## Re-admission after Academic Suspension

A student suspended for academic reasons may be re-admitted on probationary status after being away for at least one full semester (excluding summer semester) by filing an application for readmission with the Director of Admission. A student on academic suspension may not receive a letter of good standing. It is the responsibility of the student to determine the readiness to return and accomplish academic work. The re-admitted student must strive toward being removed from the status of academic probation and must meet with minimal expectation of completing at least 12 credits with a semester grade-point average of 2.0.

To be readmitted a student must:

Submit a petition to the Board of Academic Standards, prior to the semester the student wishes to return, requesting that they be reinstated to Wittenberg and outlining their plan for successfully accomplishing academic work. Petitions may be submitted between October 1 and December 1 for spring reinstatement and between June 1 and August 1 for fall reinstatement.

Provide information about how the student used their time during the period of suspension, i.e., job, volunteer work, course work, or a combination thereof. Students may transfer in a maximum of 8 credits taken during the suspension period. Students are encouraged to consult with the Registrar prior to registering for courses to be taken while suspended from Wittenberg.

Provide supporting materials including:
a transcript for any coursework taken during the suspension period and/or
a reference letter from a supervisor (for work or volunteer experience undertaken during this time) and/or a faculty member.
documentation of the successful completion of any other stipulations placed on the student by the Board.

## Academic Dismissal

If an academically suspended student is readmitted, continues to remain on academic probation and subsequently becomes liable for suspension a second time, academic dismissal results. Academic dismissal is a permanent separation from the University.

## Academic Standards and Policies for Adult/Non-Traditional Students

For adult/non-traditional students, the university uses academic standards, policies, and credit requirements for academic progress and eligibility for the Dean's List which are keyed to the pace of enrollment typical of these students. The University publishes these policies in the Faculty Manual and the School of Community Education Handbook for Adult/Non-Traditional Students.

## Withdrawal During Semester

A student who wishes to withdraw from the university during a semester must apply for permission to withdraw in good standing. A withdrawal during semester form is available at the Registrar's Office. When the withdrawal form is completed, the student should have an exit interview with a member of the Student Development staff before leaving campus.

The date of withdrawal determines the grades to be received for the courses in which the student has been enrolled:
one-five weeks: - Without Grade or Credit
six-10 weeks: - W(Withdrawn)
11-15 weeks: - F

It is the student's responsibility to petition the Registrar if there are circumstances that would warrant a waiver of the above policy.

## Tuition Refund Policy

Tuition charges are refunded according to the following schedule. The refund calculation will be based upon the date in which the student submits appropriate withdrawal paperwork:

One week or less: $\quad 90 \%$ refund
Two weeks or less: $80 \%$ refund
Three weeks or less: 60\% refund
Four weeks or less: $\quad 40 \%$ refund
Five weeks or less: 20\% refund
More than five weeks: no refund

## Room and Board Refunds

Students who withdraw from the University within the semester must move out of university housing within 48 hours following the exit interview. If leaving at the end of the semester, the
normal closing schedule is followed. Exceptions must be approved by the Assistant Dean of Students/Director of Residence Life. Before leaving campus, students must check out of their room or rental property with the appropriate staff member (RC or RA and/or someone in the Student Development Office). Upon checking out students must turn in the appropriate paperwork along with the key.

For students withdrawing on a voluntary basis, housing and board refunds are granted on a prorated basis through the 5th week and are based on the date of the exit interview and proper check out. After the 5th week, no refund is granted.

## Financial Aid Refund

Students who withdraw prior to the first day of classes have all of their financial aid returned to the program administrators.

Students who withdraw during the first five weeks of the semester have part of their financial aid returned to the appropriate agencies:

* Wittenberg and State financial aid is returned at the same percentage rate as tuition is refunded; for example, if a student receives a $20 \%$ refund of tuition, $20 \%$ of institutional aid will be returned to the institutional funds and Ohio state aid will be returned to the Ohio Board of Regents.
* Federal financial aid, including parent and student loans, is earned on a per diem basis. For example, if there are 100 days in a semester, each day attended allows the student to keep $1 \%$ of the federal aid total for that semester. A student who stayed 30 days would be able to keep $30 \%$ ( 30 days/100 days) of his or her federal aid and $70 \%$ (the remainder) would be returned to the federal program administrators.
* Federal financial aid that is to be returned is credited first towards student loans, then towards parent loans, and finally towards grant programs. For example, if a student receives \$1000 in loans and $\$ 500$ in grants and we are required to return $\$ 900$, the full $\$ 900$ is credited towards the loan - i.e. the student would withdraw with a $\$ 100$ loan and a $\$ 500$ grant.

For students who withdraw after the first five weeks of the semester but before $60 \%$ of the semester is over, no Wittenberg or State financial aid is returned.

* Federal financial aid is still returned on a per diem basis - see above.
* It is possible for a student to withdraw and owe more money to the University than if they were to finish the semester.

For students who withdraw after $60 \%$ of the semester is over, no Wittenberg, State, or federal financial aid is returned upon withdrawal.

A calculation of the amount of financial aid to be returned will be done within 30 days of notification that the student has withdrawn. The official withdrawal date will be determined by the Student Development Office and communicated to all University departments involved. If the amount of remaining federal aid eligibility exceeds the balance due to the University, the excess may be refunded to the student or to any remaining loan programs, at the student's discretion.

Students must usually begin paying back student loans six months after the official withdrawal date. Students who re-enroll on at least a half-time basis during the six months do not enter repayment. Should you have any questions about the Financial Aid adjustments, please contact the Financial Aid Office prior to withdrawing.

## End of Semester Withdrawal

A student who withdraws at the end of any semester is required to apply for permission to withdraw in good standing. The form is available at the Registrar's Office. An exit interview with a member of the Student Development staff is required. The student who is interrupting attendance to study abroad or to participate in a special program may request a leave of absence.

## Re-admission

Any person who has withdrawn from the college or has been asked to withdraw is eligible to apply for re-admission upon completion of a formal application for re-admission. An application form may be obtained from the Admission Office. The completed application must be received by at least four weeks before the beginning of the semester in which the person wishes to re-enter the college.

An adult/non-traditional student who is absent from Wittenberg for two calendar years or longer must apply for re-admission. The student is subject to the academic requirements in force at the time of return. In extraordinary cases a student may appeal to the Registrar for continuation according to older requirements.

## Campus Security

Wittenberg University is committed to providing a safe living and learning environment for its students, faculty, staff, and visitors. As part of the university's overall effort to provide important
information about personal safety to the campus community, a campus security report is published annually. This publication is prepared in compliance with the requirements of the Federal Crime Awareness and Campus Security Act of 1990. The report is available electronically via the Police and Security office or on the university's webpage. You may also request a paper copy of this report from the Campus Police and Security Department.

The following policy statements and information are included:
Current campus policies regarding procedures and facilities for reporting crimes and emergencies and the university's response to such reports;

Current law-enforcement policies, including the authority of security personnel and policies encouraging the reporting of crimes;

A description of the type and frequency of programs to inform the campus community about security procedures;

A description of crime prevention programs;
Statistics on the reports of certain crimes and arrests;
The policy for monitoring and recording off-campus crime through local police agencies;
The university's policy on the possession, use, and sale of alcohol, as well as the policy regarding illegal drugs; A description of drug or alcohol abuse education programs; and the policy regarding programs to prevent sex offenses and procedures to follow when a sex offense occurs.

# WITTENBERG UNIVERSITY CODE OF ACADEMIC INTEGRITY <br> Approved April 24, 2015 

Approved by the faculty April 7, 2015
Approved by the student body April 24, 2105

## Preface

Wittenberg University is dedicated to the pursuit of knowledge and truth. At the heart of our search for knowledge is personal honesty, an honesty that makes possible an open and vibrant exchange of ideas. True community and academic excellence thrive at Wittenberg through honesty, trust, and mutual respect. It is the aim of this Code of Academic Integrity to foster an atmosphere in which individuals can reach their fullest potential as students and teachers and, ultimately, as human beings.

## Honor Statement

All academic work submitted at Wittenberg will carry the honor statement: "I affirm that my work upholds the highest standards of honesty and academic integrity at Wittenberg, and that I have neither given nor received any unauthorized assistance."

## Definitions of Academic Dishonesty

Academic dishonesty is a serious violation of community standards. It undermines the bonds between members of the community and defrauds those who may eventually depend upon our knowledge and integrity. Such dishonesty includes:

## Cheating

Using or attempting to use unauthorized materials, information, study aids, or assistance in any academic exercise.

## Fabrication

Falsifying or inventing of any information or citation in an academic exercise.

## Facilitating academic dishonesty

Helping or attempting to help another to violate any provision of this code.

## Plagiarism

Representing the words or ideas of another as one's own in any academic exercise.

## Student and Faculty Responsibilities

To achieve the aims of this code of academic integrity, every student, faculty member, and administrator is responsible for upholding the highest standards of personal integrity. It is expected that every member of the Wittenberg community will honor the spirit of the code by refusing to tolerate academic dishonesty.

It is the responsibility of the instructor to provide students with clear guidelines for what constitutes "authorized" and "unauthorized" assistance, and the responsibility of every student to ensure understanding of those guidelines. In cases of collaborative work, the Honor Statement applies to the contributions of each individual student within the collaborative group.

Students who intend to submit work that has previously been submitted in another course, or who intend to simultaneously submit similar work in more than one course, are required to inform the instructor(s). This includes both significant portions of work and work in its entirety. The professor has the option of accepting, rejecting, or requiring modification of the content of previously or simultaneously submitted work.

## Honor Council

The Honor Council is composed of five (5) faculty, two (2) administrators, and ten (10) students. Every year the faculty will elect one or two of its members to serve three-year terms. The Provost and the Dean of Students will each appoint an administrator to serve a three-year term. The students will be selected by a committee consisting of the chair and vice-chair of the Honor Council, two (2) additional volunteer members of the Honor Council, and three (3) students appointed by Student Senate.

This committee will strive to make the Honor Council representative of the diverse nature of the Wittenberg community. At least one student from each class will be a member of the council, and, once selected, student members will serve until they graduate. The Honor Council will elect a chair and vice-chair from its membership. The chair will be a student with at least one-year's service on the council. The vice-chair will be a faculty member with at least one-year's service on the council.

The Honor Council has the following responsibilities and authority:
(a) To maintain and enforce standards of academic integrity.
(b) To create and conduct educational programming designed to promote academic integrity.
(c) To advise and consult with the student body, faculty members, and administrative officers on matters pertaining to academic integrity.
(d) To designate from among its members students, administrators, and faculty to serve on Council Hearing Boards.
(e) To consider petitions for removal of the grade of XF from university records.
(f) To issue an annual report to students, faculty, and staff, which would typically include a summary of cases and a description of the Council's activities.
(g) To review policies and procedures of the Code of Academic Integrity and the Honor Council on at least a bi-annual basis and to recommend changes to the faculty and students.

The Honor Council will be advised by a faculty member appointed by the Provost, in consultation with the Faculty Executive Board, who will be known as the Honor Council Faculty Advisor. The Honor Council Faculty Advisor will be responsible for the oversight of the Honor Council and its processes.

## Procedures

## Allegations of Academic Dishonesty and Resolution Options

Allegations are referred to the Honor Council (through the Assistant Provost for Academic Services) from four sources: (a) the involved faculty member; (b) the involved student; (c) a student having knowledge of academic dishonesty; (d) the Assistant Provost for Academic Services (when a second report of academic dishonesty has been filed for a student).

## a. Faculty/Student Resolution:

If a faculty member suspects that a violation has occurred, the faculty member will make a reasonable effort to meet with the student(s) to inform him/her/them of the allegation. The faculty member and student(s) will discuss the allegation, and agree to either pursue student/faculty resolution or refer the case to the Honor Council. Faculty members are responsible for informing students of their option to refer the incident to the Honor Council for review at any time during the student/faculty resolution.

If the student and faculty member agree to student/faculty resolution, they will discuss the case and the sanction to be imposed by the faculty member. If both student and faculty agree to the student's responsibility for the violation and to the sanction to be imposed by the faculty member, the faculty member writes a report describing the incident that gave rise to the allegations, including:
(a) the date, time, and location of meeting or meetings with student,
(b) the nature of their conversations,
(c) the student's admission of responsibility for the violation,
(d) evidence and relevant supporting information,
(e) the sanction to be imposed,
(f) whether or not a hearing has been requested.

The faculty member will send copies of the report to the student and to the Office of the

If the student is either unwilling or unable to meet with the faculty member within five insession school days then the faculty member must submit the case to the Assistant Provost for Academic Services, who will refer it to the Honor Council. The case will then be reviewed by a Hearing Board.

## b. Student request for hearing

If the student does not admit responsibility for the violation or disagrees with the sanction to be imposed by the faculty member, the student may request that the case be referred to the Honor Council. Faculty members are responsible for informing students of their option to refer the incident to the Honor Council for review at any time during the student/faculty resolution. Student requests for hearings are submitted to the Assistant Provost for Academic Services.

## c. Students who have knowledge of academic dishonesty

A student who suspects that a violation of the code of academic integrity has occurred should take some form of action. If the student is uncomfortable addressing the student believed to be in violation of the code, the student will meet with the faculty or staff member involved in the matter. After consultation with the faculty or staff member, the student may report the violation to the Assistant Provost for Academic Services using the form for student reports. In this report, the student should describe any action taken, such as talking with the other student involved or with a faculty or staff member. Every effort will be made to preserve the anonymity of the student reporting the incident; however, confidentiality cannot be guaranteed.

## d. A second report of academic dishonesty

All reports of academic dishonesty will be reviewed by the Assistant Provost for Academic Services to verify whether previous reports have been received, indicating that the student has been found responsible for any other act of academic dishonesty. If the Assistant Provost for Academic Services finds that the case is a repeat offense, the case is automatically referred to the Honor Council for review by an Honor Council Hearing Board.

## Honor Council Resolution

Cases not resolved through student/faculty resolution will be referred for a hearing. A hearing is initiated when the Honor Council receives a report from the Assistant Provost for Academic Services or the Honor Council Faculty Advisor of a request for a hearing by either the student or the faculty member.

## Composition of Hearing Boards

A hearing is conducted by a Hearing Board. The board will normally consist of seven (7) persons, six (6) of whom will be voting members. Hearing Boards are made up of three (3) students, two (2) faculty members, and one (1) administrator selected by the Honor

Council chair from the membership of the Honor Council. Determinations of the board will be by a majority vote (four votes or more). The chair or vice-chair of the Honor Council will serve as the Hearing Board chair and will vote only in the event of a tie. If the chair or vice-chair is unavailable or the caseload becomes unmanageable, the Honor Council Faculty Advisor will appoint another member of the Honor Council to serve as chair of the Hearing Board.

## Hearing: Preliminary Procedures

The initial report of an allegation of academic dishonesty will be reviewed by the Honor Council Chair and the Honor Council Faculty Advisor, who will then appoint a Hearing Board and designate a chair of the Hearing Board. The Honor Council chair will inform the student of the allegation in writing, including the faculty member's report. The Honor Council chair will request a written statement from the student in response to the allegation, and, if the student so desires, he/she can submit a list of witnesses to appear at the hearing on the student's behalf. Witnesses are limited to individuals who can present evidence that bears directly on the allegation. The student's written statement will become part of the case and be reviewed by the Hearing Board in preparation for hearing the case, but it will not take the place of the student's presence at or comments within the hearing.

The chair will select the date, time, and place for the hearing and notify both the referring faculty member and the student a minimum of seventy two (72) hours prior to the hearing. The Honor Council Faculty Advisor will meet with the student to review hearing procedures and process. In the event that a student is unwilling or unable to meet with the Honor Council Faculty Advisor, he/she will meet with the Honor Council vice-chair as long as the vice-chair is not presiding over the hearing. Lastly, if the student is unwilling or unable to meet with the vice-chair, he/she must meet with the Director of Student Conduct. Whoever meets with the student will serve as the Honor Council Process Advisor during the hearing and will also meet with the student following the hearing to discuss the ramifications of the findings and the student's options for appeal. Students have the right to object to any member of the Hearing Board they believe to be biased in the case. In cases where the student objects to a member of the Hearing Board, the chair of the Honor Council and the Honor Council Faculty Advisor will decide whether or not to act on that objection. Members of the Hearing Board have the responsibility to recuse themselves from cases in which there is a conflict of interest.

Before filing a report alleging academic dishonesty, a faculty member may seek the advice of his or her department chair or other members of the department. However, after an allegation of academic dishonesty has been officially filed, the faculty member must not discuss the specifics of the case with anyone, including other faculty members or members of the Honor Council. All questions and concerns should be directed to the Honor Council Faculty Advisor.

Students accused of academic dishonesty are free to seek the advice of peers and faculty members; however, students must not discuss their case with members of the Wittenberg

Honor Council. Students who violate this rule will be referred to The Office of Student Conduct. Students who have questions or concerns about Honor Council policies and procedures should contact the Honor Council Faculty Advisor.

Faculty members other than the one making the allegation have no standing in the process and must refrain from getting involved in the proceedings of the Honor Council. Faculty members not directly involved may not act as advocates for students accused of academic dishonesty and must not contact members of the Honor Council. All questions regarding policies and procedures should be addressed to the Honor Council Faculty Advisor. Violations of this policy will be referred to the Provost.

Once an allegation of academic dishonesty has been made, students may not drop the course until the matter has been resolved. Students may not drop a course or use late withdrawal available to first-semester students to drop a course in which they have received an XF.

## The Hearing Board Process

The purpose of a hearing is to explore and investigate the incident giving rise to the appearance of academic dishonesty and to reach an informed conclusion as to whether or not academic dishonesty occurred. All persons at a hearing are expected to assist in a thorough and honest exposition of all related facts. Honor Council Hearing Board proceedings are not a court of law, and attorneys are not permitted to be present at any hearings.

The sequence of a hearing is necessarily controlled by the nature of the incident to be investigated and the information to be examined. It lies within the judgment of the presiding officer to determine the most reasonable approach. The following steps are generally recommended:
(a) The referring faculty member or the individual reporting an alleged violation, and then the student, will briefly summarize the matter before the Hearing Board, including any relevant information or arguments. The faculty member may recommend a sanction.
(b) Witnesses will be called who have first-hand evidence of the incident and can offer documents or other materials bearing on the case.
(c) Members of the Hearing Board may request additional material or the appearance of other persons, as needed.
(d) The referring faculty member or individual reporting the allegation and the student may make brief closing statements.
(e) The Hearing Board will meet privately to discuss the case and determine whether a violation has taken place based on a preponderance of evidence.
(f) If the student is found in violation, the Hearing Board will determine an appropriate sanction. When determining the sanction, the Hearing Board will be informed of any other violations of academic integrity on the part of the
student.
(g) The Hearing Board chair will provide the referring faculty member or reporting individual, the student, and the Assistant Provost for Academic Services with a written report of the facts found, identifying the parts of the policy that have been violated and describing the sanction, if any, to be imposed.

The Hearing Board chair will ensure that the following rules and points of order are observed:
(a) The student may be accompanied by a person of his or her choosing for emotional support only, provided that the support person is not a parent, an attorney, a member of the Wittenberg faculty or staff, a party to the case, or a person having any matter pending before the Honor Council.
(b) Hearings will be recorded for the purposes of the Hearing Board's deliberations and/or any Student Appellate Board action.
(c) Presence at a hearing lies within the judgment of the Hearing Board chair. A hearing requires a deliberative and candid atmosphere, free from distraction. Accordingly, it is not open to the public or other interested persons. The Hearing Board chair may remove from the hearing any person, including the student, who disrupts or impedes the investigation, or who fails to adhere to the rulings of the chair. The Hearing Board chair will direct that those persons called upon to provide information be excluded from the hearing except for that purpose. The members of the Hearing Board may conduct private deliberations at such times and places as they deem proper.
(d) Failure to appear before a Hearing Board will not preclude the Hearing Board from hearing evidence and determining outcomes.
(e) It is the responsibility of the person desiring the presence of a witness before a Hearing Board to ensure that the witness appears. Because experience has demonstrated that the actual appearance of an individual is of greater value than a written statement, the latter is discouraged and should not be used unless the individual cannot reasonably be expected to appear. Any written statement must be dated, signed by the person making it, and witnessed by a university employee. The work of a Hearing Board will not, as a general practice, be delayed due to the unavailability of a witness.
(f) A hearing is not a trial. The Hearing Board will consider all relevant, probative, and credible evidence. The Hearing Board chair will determine what evidence will be considered.

If the Honor Council Faculty Advisor determines that a Hearing Board cannot be convened within a reasonable period of time after an allegation is made, two students and one faculty will be appointed as an ad hoc Hearing Board. Members of ad hoc Hearing Boards shall be current or former members of the Honor Council. A non-voting Hearing Board chair will also be appointed.

## Hearing Board Outcomes

If the Hearing Board determines that the allegations of academic dishonesty are unfounded, no record of the allegation and/or hearing is kept and no sanctions are imposed.

## Sanctions

All reports of violations of academic integrity are kept on file.

Sanctions available to faculty members for faculty/student resolution include:

- Formal warning. (The violation is kept on file and no other sanction is imposed.)
- Formal warning with educative opportunities for reflection on the offense, as determined by the faculty member.
- A reduction in grade for the assignment and/or an additional reduction in the grade for the course.
- A failing grade for the assignment and/or an additional reduction in the grade for the course.
- A failing grade in the course (XF).

Sanctions available to the Honor Council include:

- Formal warning. (The violation is kept on file and no other sanction is imposed.)
- Educative opportunities to be determined by the Hearing Board of the Honor Council.
- A reduction in grade for the assignment and/or an additional reduction in the grade for the course.
- A failing grade for the assignment and/or an additional reduction in the grade for the course.
- A failing grade in the course (XF).
- Removal of the privilege of representing the university in co-curricular activities, including athletics, as well as the privilege of running for or holding office in any student organization that is allowed to use university facilities or receives university funds. The duration will be determined by the Hearing Board of the Honor Council.
- Suspension from the university for one to two semesters, excluding summer terms. Students suspended for academic dishonesty must apply for readmission according to the Board of Academic Standards guidelines. However, students suspended for academic dishonesty cannot transfer into Wittenberg any credits earned during the suspension. Readmission applications by students suspended for academic dishonesty must be approved by the Honor Council.
- Dismissal from the university.


## The grade of XF

If a sanction of XF is assigned, an XF will be recorded on the student's transcript with the notation "failure due to academic dishonesty." The XF shall be treated in the same way as an F for the purposes of grade point average, course repeatability, and determination of academic standing.

A student may file a written petition to the Honor Council to have the grade of XF removed and replaced with the grade of F. The petition should provide a convincing argument for the change of grade. Prior to deciding on a petition, the Honor Council will review the record of the case and consult with the Honor Council Faculty Advisor and, whenever possible, the faculty member who originally reported the violation. Both the Honor Council Faculty Advisor and the faculty member serve in an advisory capacity only.
The grade of XF may be removed only if the following conditions are met:
(a) at the time the petition is received, at least twelve (12) months have elapsed since the grade of XF was imposed; and,
(b) at the time the petition is received, the student has successfully completed a non- credit seminar on academic integrity; or, for the person no longer enrolled at the university, an equivalent educational activity to be determined by the Honor Council; and,
(c) the Assistant Provost for Academic Services certifies that no reports have been received indicating that the student has been found responsible for any other act of academic dishonesty at the university or at another institution; and,
(d) the majority of a quorum of the council votes to approve the petition. (A quorum for the Honor Council is five (5) students and three (3) faculty members.)

If any of these conditions are not met, the student may not submit another petition for four (4) years, unless the Honor Council specifies an earlier date.

## Subsequent Allegations of Academic Dishonesty

In the event of a subsequent allegation of academic dishonesty, the case is automatically referred to the Honor Council and reviewed by an Honor Council Hearing Board.
Ordinarily, a second substantiated allegation of academic dishonesty results in either suspension for one or two full semesters, excluding summer terms, or permanent dismissal from the university. In the event of extraordinary or extenuating circumstances, the Hearing Board has the right to assign a lesser sanction.
Unless otherwise designated by the Honor Council, suspension for academic dishonesty will take place immediately. In the case of an appeal, the suspension is held in abeyance until the appeal process is completed.

## Appeals

A student is allowed one opportunity to appeal the decision of the Hearing Board to the Student Appellate Board. Appeals must be received by the Student Appellate Board at the Student Development office within five (5) business days of receipt of the Honor Council Hearing Board decision. Appeals must be based on one or more of the following three conditions:

1. New and significant evidence is presented which may further clarify and support the defense of the student, at which point the case will be referred back to the original Hearing Board for reconsideration.
2. There is clear reason to believe that the sanction is not consistent with the seriousness of the violation. In cases where the Student Appellate Board determines that this is the case, it may issue a different sanction.
3. There is substantial credible evidence that the initial hearing was not fair and impartial, or that the established process was not followed, in which case the Student Appellate Board will request that a new Hearing Board be selected from the Honor Council to rehear the case.

In cases of academic dishonesty, decisions of the Student Appellate Board are final and may not be appealed.

## Review of the Code of Academic Integrity

The Honor Council will review the policies and procedures described in the Code of Academic Integrity at least bi-annually and will recommend any revisions to students and faculty.

The Committee for Academic Integrity is indebted to the Center for Academic Integrity for key ideas found within this Code of Academic Integrity. Please refer to their web site at http://www.academicintegrity.org/. We also owe a debt of gratitude to Gary Pavela, who provided us with a model code of academic integrity, a copy of which can be found in the following: Pavela, Gary. "A model code of academic integrity" in Synthesis: Law and Policy in Higher Education, 9:1 (Summer 1997), p. 640.09/2007

## Graduate Programs

## Masters of Science in Analytics

Wittenberg's MSA program is what we believe to be a perfect intersection of Wittenberg's mission and an area of great educational and professional opportunity for our students. In recent years, the relevance of data has increased exponentially in many aspects of our lives, inherently changing the way we live and work. In so many ways, the field of analytics is where the best practices of intellectual inquiry are emerging. This has created great opportunities for people who are able to combine a deep interest in solving problems with an effective use of analytical techniques and an appreciation for the human and contextual issues that come into play. Wittenberg's MSA program offers students a unique blend of depth and breadth as they prepare to lead in a wide variety of professional settings.

The curriculum will include the following courses

| Credits | M.S. in Analytics Curriculum |
| :---: | :---: |
| 3 | ANLT 500 - Design Challenges of Wicked Data Problems |
| 3 | ANLT 510 - Advanced Statistics and Modeling |
| 3 | ANLT 520 - Business Intelligence and Analytics Fundamentals |
| 3 | ANLT 530 - Data Mining |
| 3 | ANLT 540 - Descriptive, Predictive and Prescriptive Analytics |
| 3 | ANLT 550 - Data Visualization |
| 3 | ANLT 560 - Data Management |
| 3 | ANLT 570 - Case Studies I: The Power and Breadth of Analytics |
| 3 | ANLT 580 - Case Studies II: Targeted Applications of Analytics |
| 1 | ANLT 591 - Analytics Capstone I (Project Exploration) |
| 2 | ANLT 592 - Analytics Capstone II (Project Design and Proposal) |
| 2 | ANLT 593 - Analytics Capstone III (Project Execution) |
| 1 | ANLT 594 - Analytics Capstone IV (Project Finalization and Reporting) |

33 Total credits

Courses:

## ANLT 500 - Design Challenges of Wicked Data Problems - 3 credits

Course Description:
A wicked data problem is a problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize. The use of term "wicked" has come to denote problems that are resistant to resolution. Moreover, because of complex interdependencies, the effort to solve one aspect of a wicked problem may reveal or create other problems. This course will introduce students to the program by exploring a diverse set of complex problems - and relevant data - across many facets of life and work. In doing so, students will be introduced to the terms, concepts and techniques of data analysis as a basis for future courses and projects. Prerequisites: Open only to MSA students

## Learning Objectives:

At the end of this course, students should be able to:

- Recognize the breadth of Big Data problems and opportunities - current challenges, trends, and applications.
- Identify algorithms for Big Data analysis - mining and learning algorithms that have been developed specifically to deal with large datasets.
- Understand the fundamental concepts of Big Data management and analytics.
- Appreciate challenges faced by applications dealing with very large volumes of data as well as in proposing scalable solutions for them.
- Distinguish the layers of problems that are not well understood;
- Conceptualize the processes needed to attack wicked data problems; a wicked data problem is one that has the following attributes:
o Solutions to wicked data problems are seldom right or wrong.
o Every wicked data problem is essentially novel and unique.
o Solutions to wicked data problems often represent trade-offs among competing goods.
o Wicked data problems often don’t stay permanently "solved."


## List of Topics:

- The past, present and future of data analysis
- Identifying and attacking wicked problems
- Theory and practice of design thinking
- Research methods and data issues in the problem solving process
- Analytics terms and concepts
- Introduction to analytics methodologies
- Challenges in the work of analytics
- The intersection of current event and chronic problems
- Big data as a creator of opportunity
- The use of analytics in a broad range of contexts


## ANLT 510 - Advanced Statistics and Modeling - 3 credits

## Course Description:

This course develops fundamental knowledge and skills for applying statistics to decision making. Topics include descriptive statistics, probability distributions, sampling, confidence intervals, hypothesis testing and the use of computer software for statistical applications. Prerequisites: ANLT 500; Open only to MSA students

## Learning Objectives:

At the end of this course, students should be able to:

- Organize and summarize data using appropriate descriptive statistics and graphical methods.
- Understand the concept of probability and be able to calculate probabilities required in order to perform statistical inferences.
- Understand the concept of a random variable and use discrete and continuous random variables and their corresponding distributions to calculate probabilities.
- Understand the concept of a sampling distribution and be familiar with the primary sample statistics and their distributions.
- Estimate population parameters using point estimates and confidence intervals.
- Given a research question, formulate appropriate null and alternative hypotheses, choose a test statistic, describe the rejection criteria, make a decision using a critical value and/or p-value, and draw an appropriate conclusion or course of action.


## LIST OF TOPICS

- Descriptive statistics and graphical methods
- Advanced probability
- Statistical inference techniques
- Sampling and distribution
- Population parameters
- Confidence intervals
- Research question formulation
- Advanced hypothesis development and testing
- Simple and multiple regression
- Decision analysis
- Linear and nonlinear programming


## ANLT 520 - Business Intelligence and Analytics Fundamentals - 3 credits

## Course Description:

This course provides an introduction to Business Intelligence, including the processes, methodologies, infrastructure, and current practices used to transform data into useful information and support decision-making. Business Intelligence requires foundation knowledge in data storage and retrieval, thus this course will review logical data models for both database management systems and data warehouses. Students will learn to extract and manipulate data from these systems and assess security- related issues. Data mining, visualization, and statistical analysis along with reporting options such as management dashboards and balanced scorecards will be covered. Prerequisites: ANLT 510; Open only to MSA students

## Learning Objectives:

At the end of this course, students should be able to:

- Develop a foundation in analytics and business intelligence (BI).
- Understand decision makers, the decision making process and the role of decision support tools in an organization.
- Understand the different aspects key success factors of the analytics environment.
- Design, develop and implement a desktop BI system.
- Recognize situations where analytics can add value.
- Formulate, analyze, \& interpret commonly encountered mathematical models.
- Effectively utilize currently available software packages for analyzing mathematical models.

LIST OF TOPICS:

- Mathematical Modeling
- Linear Programming
- Fundamentals of BI
- Database management
- Dimensional modeling
- BI Infrastructure: The data warehouse
- BI Infrastructure: End user tools
- BI Applications
- Management of BI
- Emerging trends in BI


## ANLT 530 - Data Mining - 3 credits

## Course Description:

Data mining, or intelligent analysis of information stored in data sets, has recently gained a substantial interest among practitioners in a variety of fields and industries. Almost every organization now collects data, which can be analyzed in order to make better decisions, improve policies, discover computer network intrusion patterns, design new drugs, detect credit fraud, make accurate diagnoses, predict important events, monitor, evaluate reliability and preempt failures of complex systems, etc. This course will provide the participants with understanding of the fundamental data mining methodologies, and with the ability to formulate and solve problems with them. Particular attention will be paid to practical, efficient and statistically sound techniques. Lectures will be complemented with hands-on experience with data mining software. Students will have a chance to develop intuition needed to effectively evaluate and analyze data. Prerequisites: ANLT 520; Open only to MSA students

Learning Objectives: At the end of this course, students should be able to:

- Understand the basic concepts and techniques of data mining.
- Demonstrate skill in using data mining software to solve practical problems.
- Evaluate the strengths and limitations of popular data mining techniques and to be able to identify promising applications of data mining.
- Actively manage and participate in data mining and analysis projects.
- Use visual data mining techniques to describe data.
- Explain the assumptions of K-Means Clustering.
- Interpret the results of cluster analysis, multiple regression, discriminant Analysis, logistic regression and neural networks.
- Validate models using the Kolmogorov Smirnov (K-S) test.
- Interpret classification trees.
- Use interaction detection methods such as CART and CHAID for classification.


## LIST OF TOPICS

- Introduction to Data Mining
- Data Warehouse and OLAP
- Data preprocessing
- Data mining knowledge representation
- Attribute-oriented analysis
- Data mining algorithms: Association rules, classification and prediction
- Evaluating what's been learned
- Mining real data
- Clustering
- Advanced techniques, Data Mining software and applications
- Data Mining software and applications


## ANLT 540 - Descriptive, Predictive and Prescriptive Analytics - 3 credits

## Course Description:

This course provides students with a rigorous course of study in all three areas of analytics: Descriptive, predictive, and prescriptive techniques. The techniques in each respective area will lead students in a journey that begins first with understanding what the data are describing in a given situation. Students then focus on evaluating data to predict likely outcomes in varied situations. The course also exposes students to cutting edge techniques for using data to inform best practice in a wide range of contexts. Coverage of each topic is complemented by case studies, team projects, and guest speakers from industry, ensuring an academic experience that is well grounded. Prerequisites: ANLT 530; Open only to MSA students

## Learning Objectives:

At the end of this course, students should be able to:

- Understand the application of analytics in various environments.
- Apply critical thinking and inductive and deductive reasoning in the practice of analytics.
- Frame the question(s) of concern to various organizations that will then drive the data requirements.
- Utilize basic and advanced tools for descriptive, predictive and prescriptive analytics - Excel, Minitab, SPSS and more advanced tools.
- Demonstrate proficiency in descriptive analytics - understanding what the data might be telling you.
- Demonstrate proficiency in predictive analytics - can the data provide us with insights about future events or potential results?
- Understand information systems-assisted decision-making and knowledge acquisition tools and how these tools benefit organizational competitiveness, efficiency and effectiveness.
- Ask important questions about the analytics tools available to managers.
- Reconcile theoretical and conceptual descriptions of analytics tools with the use of these tools.
- Demonstrate effective and clear methods of visual representation of data and practice the appropriate application and interpretation of selected statistical
algorithms used for predictive analytics.
- Apply skills acquired in earlier courses by presenting effective arguments, employing listening skills in class discussions and making individual and group presentations on a variety of topics.
- Determine how the location and source of data may impact analysis and conclusions.


## LIST OF TOPICS

- Applications of analytics
- Descriptive analytics
- Predictive analytics
- Prescriptive analytics
- Relational databases
- Enterprise analytics
- Human issues in applying analytics
- Visual analytics
- R algorithms


## ANLT 550 - Data Visualization - 3 credits

## Course Description:

This course will introduce students to the field of data visualization. Students will learn data visualization design and evaluation principles, and learn how to acquire, parse, and analyze large datasets. Students will also learn techniques for visualizing multivariate, temporal, textbased, geospatial, hierarchical, and network/graph-based data. Prerequisites: ANLT 540; Open only to MSA students

## Learning Objectives:

At the end of this course, students should be able to:

- Understand and apply strategies of analytical design.
- Understand and apply principles of data visualization given particular requirements imposed by the data.
- Acquire, parse, and analyze abstract data sets.
- Design and implement standard visualization techniques.
- Interpret meaning from multidimensional formats and presentation techniques.
- Use techniques learned to generate visualizations appropriate to the specific audience type, task and data source.
- Quantitatively and qualitatively evaluate and critique existing visualizations.
- Rapidly prototype visualizations.


## LIST OF TOPICS

- Self-service business intelligence
- Taxonomy of data visualization
- Interactive data selection
- Using visual analysis to find and tell stories
- Advanced charting
- Visualization design objectives and options
- Images and presentation
- PowerView and PowerPivot
- Data mapping
- Data transformation


## ANLT 560 - Data Management - 3 credits

## Course Description:

The course examines issues related to data organization, representation, access, storage, and processing. This will include topics such as metadata, data storage systems, self-descriptive data representations, semi-structured data models, ontology, semantic web, and large-scale data analysis. Developing and managing data requires understanding the fundamentals of database systems, techniques for designing databases, and principles of database applications and administration. This course provides an introduction to the fundamental concepts and practices of relational database systems.

In addition this course will introduce the student to the major activities involved in data warehousing. The class will begin with an in-depth review of baseline data warehouse principles and concepts. Once the basic principles have been established, the remainder of the class will be built around a group data warehouse project. Prerequisites: ANLT 550; Open only to MSA students

## Learning Objectives:

At the end of this course, students should be able to:

- Understand the concepts, skills and methods for designing data management systems.
- Use normalization procedures to properly analyze and create relations.
- Use an ER diagram to design and create a data model.
- Complete a data management design based on the requirements definition of a problem.
- Explain the need for managing/sharing research data, relevant public policies, and the lifecycle continuum for managing and preserving research data.
- Identify potential re-users, communicate the value of their research data for re-use, and formulate a dissemination strategy.
- Formulate an abbreviated data management plan or data curation profile to manage research project data and define roles/responsibilities of research staff.
- Explain the range of research data types, stages, formats, and relevant software that may need to be managed and preserved.
- Propose what descriptive data needs to be documented in a standard way via metadata to allow research data sets to be managed and preserved.
- Plan how to handle issues involved in securely storing research data in central databases, archives and/or repositories, backing it up, and managing access to the data.
- Explain legal (ownership) and ethical considerations related to data sharing.
- Plan for issues related to long-term preservation, discovery, and reuse.


## LIST OF TOPICS

- Understanding the need for managing/sharing research data
- Data management lifecycle continuum
- Data management plan (DMP) requirements
- Types, formats, and stages of data
- Standard operating procedures for data management and documentation
- Data storage, backup and security
- Best practices for data storage, access control, security and migration to newer storage media
- Formulate an approach to creating a data storage, backup and security plan for your project
- Metadata and its importance
- Legal and ethical considerations for research data
- Data sharing \& reuse policies
- Data spaces and related issues
- Data archiving and preservation


## ANLT 570 - Case Studies I: The Power and breadth of analytics - $\mathbf{3}$ credits

## Course Description:

This course will provide an introduction to analytical methods for a variety of industries and contexts. Key management issues in each situation will be evaluated, and concepts learned throughout the program will be applied to demonstrate the potential of data and analytics to add value. The goal of this course will be to convey the breadth of the field and explore contextual differences in the application of analytics techniques. Prerequisites: ANLT 560; Open only to MSA students

## Learning Objectives:

At the end of this course, students should be able to:

- Appreciate the breadth of analytics applicability.
- Understand how to employ mathematical modeling and solution tools differently depending upon the details of a given situation.
- Engage case studies based on real world data, opportunities and constraints.
- Learn how analytics can help drive improvements in organizational effectiveness and efficiency.
- Recognize how big data principles drive modern analytics and study how this departs from traditional statistical approaches.


## LIST OF TOPICS

- Supply Chain Analytic Strategy
- Prescriptive analytics
- Supply chain design
- Demand forecasting
- Marketing campaign key performance indicators (KPI)
- Return on Investment (ROI)
- Sensitivity analysis
- Value based marketing
- Aggregate planning
- Internet marketing metrics and optimization
- Marketing data mining
- Retail analytics
- Inventory management


## ANLT 580 - Case Studies II : Targeted Applications of Analytics - $\mathbf{3}$ credits

## Course Description:

This class will be used to explore applications of analytics and open problems of particular interest to the class. In some instances, case studies will complement the capstone experience. Whereas the capstone projects will involve substantial depth and time to complete, this course will require students to assess problems quickly, evaluate data efficiently and develop plans of action that can add value in real time.
This experience is designed to mimic the conditions all students will face when they put their skills to work following completion of the program. The overarching goal of this course is to demonstrate to cohort members the breadth of applications - and depth within these applications - where their analytics skills are relevant. This course is also designed to expand the range of skills and perspective of all members of the class. Prerequisites: ANLT 570; Open only to MSA students

## Learning Objectives:

At the end of this course, students should be able to:

- Apply mathematical modeling and solution tools to tackle analytics problems in diverse situations.
- Analyze strategic, tactical, and operational decisions related to implementing the recommendations that result from analyzing data.
- Understand how analytics can help support greater speed, efficiency and effectiveness.
- Evaluate models of how to converge disparate data to support operations and management.
- Select among various display methods to present data and recommendations to different stakeholder groups.
- Develop skills in manipulating and analyzing large data sets.
- Appreciate the breadth of contexts in which analytics techniques can add considerable value to employees, managers and consumers.


## LIST OF TOPICS

- Supply Chain Analytic Strategy
- Prescriptive analytics
- Supply chain design
- Demand forecasting
- Marketing campaign key performance indicators (KPI)
- Return on Investment (ROI)
- Sensitivity analysis
- Value based marketing
- Aggregate planning
- Internet marketing metrics and optimization
- Marketing data mining
- Retail analytics
- Inventory management


## ANLT 591 - Analytics Capstone I (Project Exploration) - 1 credit

## Course Description:

The capstone project is designed to demonstrate your accumulated training in analytics in a single original project of your choice, subject to the instructor's approval and under the additional supervision of a faculty mentor. The capstone project will be completed in four phases, each with its own specific focus:
i. Project exploration
ii. Project design and proposal
iii. Project execution
iv. Project finalization and reporting

The completed thesis or project should bring together your theme, focus, expertise, and practitioner experience. The Capstone necessitates multiple drafts of your research that are subjected to heightened review and regular feedback from your instructor, your peers and your mentor. By the completion of the project, students will be able to clearly articulate the nature, relevance and context of the problem, related research questions, methods, and results in a well-written and orally presented project report.
Prerequisites: ANLT 500; Open only to MSA students

## Learning Objectives:

At the end of ANLT 591 (Phase I), students should be able to:

- Identify an original capstone project that adds value to a significant real problem.
- Describe the issues that are central and peripheral to the problem or opportunity the student seeks to focus on for the capstone project.
- Begin thinking in detail and documenting a preliminary proposal for a suitable capstone project.


## ANLT 592 - Analytics Capstone II (Project Design and Proposal) - 2 credits

## Course Description:

The capstone project is designed to demonstrate your accumulated training in analytics in a single original project of your choice, subject to the instructor's approval and under the additional supervision of a faculty mentor. The capstone project will be completed in four phases, each with its own specific focus:
v. Project exploration
vi. Project design and proposal
vii. Project execution
viii. Project finalization and reporting

The completed thesis or project should bring together your theme, focus, expertise, and practitioner experience. The Capstone necessitates multiple drafts of your research that are subjected to heightened review and regular feedback from your instructor, your peers and your mentor. By the completion of the project, students will be able to clearly articulate the nature, relevance and context of the problem, related research questions, methods, and results in a well-written and orally presented project report.
Prerequisites: ANLT 591; Open only to MSA students

## Learning Objectives:

At the end of ANLT 592 (Phase II), students should be able to:

- Present and defend a project proposal that is sound and thorough, one that when executed, should yield valuable information and insights about the target problem or opportunity.
- Identify the specific data that gathered/used will be analyzed to complete the capstone project.
- Understand all details related to the research methods to be used in the student's capstone project.


## ANLT593 - Analytics Capstone III (Project Execution) - 2 credits

## Course Description:

The capstone project is designed to demonstrate your accumulated training in analytics in a single original project of your choice, subject to the instructor's approval and under the additional supervision of a faculty mentor. The capstone project will be completed in four phases, each with its own specific focus:
v. Project exploration
vi. Project design and proposal
vii. Project execution
viii. Project finalization and reporting

The completed thesis or project should bring together your theme, focus, expertise, and practitioner experience. The Capstone necessitates multiple drafts of your research that are subjected to heightened review and regular feedback from your instructor, your peers and your mentor. By the completion of the project, students will be able to clearly articulate the nature, relevance and context of the problem, related research questions, methods, and results in a well-written and orally presented project report.
Prerequisites: ANLT 592; Open only to MSA students

## Learning Objectives:

At the end of ANLT 593 (Phase III), students should be able to:

- Document all results of the data analysis conducted as part of the capstone project.
- Assess the validity of the findings.
- Ascertain the applicability of the findings to practitioners.
- Evaluate any limitations related to relevance, context or other issues that will be encountered by those attempting to act on the results the student's capstone project.


## ANLT 594 - Analytics Capstone IV (Project Finalization and Reporting) - 1 credit

## Course Description:

The capstone project is designed to demonstrate your accumulated training in analytics in a single original project of your choice, subject to the instructor's approval and under the additional supervision of a faculty mentor. The capstone project will be completed in four phases, each with its own specific focus:
v. Project exploration
vi. Project design and proposal
vii. Project execution
viii. Project finalization and reporting

The completed thesis or project should bring together your theme, focus, expertise, and practitioner experience. The Capstone necessitates multiple drafts of your research that are subjected to heightened review and regular feedback from your instructor, your peers and your mentor. By the completion of the project, students will be able to clearly articulate the
nature, relevance and context of the problem,
related research questions, methods, and results in a well-written and orally presented project report. Prerequisites: ANLT 593; Open only to MSA students

## Learning Objectives:

At the end of ANLT 594 (Phase IV), students should be able to:

- Develop a final presentation that is thorough, insightful and relevant to practitioners.
- Successfully deliver and defend the presentation to peers and program faculty.
- Effectively deliver the presentation to practitioners who share an interest and understanding of the issues at hand.


## Master of Arts in Education

## Wittenberg University

Wittenberg University is a nationally recognized college for the liberal arts and sciences affiliated with the Lutheran Church of America. Its long-standing commitment to the liberal arts tradition includes a whole-hearted commitment to teacher education and to community involvement. Wittenberg has a distinguished faculty of 140 full-time members. The Education Department includes 10 full time faculty with expertise in special education, math and science education, literacy, curriculum and instruction, and ethics and philosophy. Situated at the edge of Springfield Ohio in close proximity to Dayton and Columbus, Wittenberg allows for many educators and youth advocates to take part in professional development courses and activities.

> Wittenberg teaches moral responsibility, social consciousness, vocational commitment, and constructive social change as the foundations of citizenship in the world's human community and in each person's particular society. The University emphasizes learning that prepares its candidates for the many occupations and professions necessary for society's well being.

Mission Statement Wittenberg University

## The Master of Arts in Education

Wittenberg's Master's program serves current practitioners by addressing the issues of teaching in challenging and rapidly changing environments. Our program combines teacherdirected investigations of best practices with opportunities for deepened content knowledge. It connects teacher education to liberal learning by strengthening capacities for reflection, systemic inquiry, and collaboration. The theme for the master's of arts degree is "Leaders for Constructive Social Change." We are committed to helping teachers, administrators and other youth service workers and advocates do a better job in their classrooms, in their schools, and in their communities. We believe that as an important part of democratic citizenship and service, it is a professional responsibility to share what one knows and discovers with students and colleagues.

Graduate Program Learning Goals-Graduates will be able to:
A. Knowledge of Content, Schools, Students (Respond with understanding to the depth and complexity of human experience, develop a sense of vocation)
$\square$ Explain current developments in their teaching fields
$\square$ Articulate ways schools and teachers have responded to the challenges and opportunities of diverse social environments
$\square \quad$ Frame curriculum in developmentally appropriate ways
$\square$ Describe educational missions in personal and institutional terms
$\square$ Describe models of school change in reference to the need for teacher leadership
B. Skills to Plan and Assess (Recognize, define, and solve problems)
$\square$ Respond flexibly and coherently to classroom problems
$\square$ Assess the effectiveness of instruction and interpret candidate response and work
$\square$ Access and apply best practice techniques in the classroom
$\square$ Form collaborative networks for problem solving in and beyond the classroom $\square$ Develop and carry out research projects which directly affect student learning
C. Attitudes and Values (Take moral responsibility, assume leadership)
$\square$ Respond positively to the opportunities, challenges and issues of diverse environments
$\square$ Form, articulate, and defend personal and collective senses of mission
$\square$ Value opportunities to supplement their existing knowledge through new and imaginative research
$\square$ Form supportive learning communities in their buildings and classrooms

## Time and Place

The majority of the graduate level classes, seminars, and conferences will take place on Wittenberg's campus, making particular use of Blair Hall. Wittenberg follows a semester calendar. Candidates can take classes during those semesters and in a summer semester that extends generally from the beginning of June through the end of July. The Education Department makes efforts to hold graduate classes at times conducive to the needs of practicing educators. Particular class times and room locations will vary and are available through the Education Department on Wittenberg's campus or on line at www5.wittenberg.edu/academics/education

## Admission Requirements

Admission to the Master of Arts in Education program is selective. To be considered for admission, the candidate must:

1. Have completed a teacher education program from an institution accredited at least at the state and regional level,
2. Have attained a baccalaureate cumulative gradepoint average of 3.0 or higher on a 4point scale,
3. Have completed one year of teaching,
4. Submit three references from qualified professionals,
5. Complete an application process that includes a personal interview and a writing sample.

## Admission as a Non-Degree Student

Candidates are required to register each term using a registration form available through the Education Department and online at www5.wittenberg.edu. To receive graduate credit, candidates must have at least a baccalaureate degree from an approved college or university.

Non-degree students are eligible to enroll in all of the courses of the graduate program on a space-available basis. Degree-seeking students will have priority.

Note: Successful completion of core courses is no guarantee of admittance to the Master of Arts degree program. Acceptance to the degree program is dependent upon several criteria. Admission to the degree program is usually granted before course work begins.

> Wittenberg University does not discriminate on the basis of sex, race, color, religion, national origin, sexual orientation, handicap, age, or veteran status in its educational programs and activities, admissions, recruitment, housing, counseling, financial aid, access to courses, employment, health and insurance benefits, athletics, and marital and parental status as required by Title IX of the Education Amendments of
> 1971, Title VI and VIII of the Civil Right Act of 1964, Sections 503 and 504 of the Rehabilitation Act of 1973, and Executive Order 11246 and all its amendments. The Business Office and Student Development are responsible for the Title IX institutional compliance and should be contacted if students have questions or wish to file a complaint.

## Course Registration

An online course registration form needs to be completed and returned to the Education Department's Administrative Assistant or Director of Graduate Studies by the close of the registration period. Late registrations must be accompanied by an add slip, found in Education Department main office. Candidate's withdrawing from a course must complete a "drop slip," found in the Education Department main office, and submit it to the registrar's office after obtaining appropriate signatures.

## Grading System

The letter grades A, B, C, D, NC (no credit), S (Satisfactory), and F are awarded by instructors and describe the candidate's performance relative to the expectations of completed course work. The first four grades may be further described by the use of a plus $(+)$ or a minus (-) sign and indicate a greater or lower level of achievement for that letter
grade. Marks of I (Incomplete), X (Satisfactory, Course in Progress), NR (No report), and S/NCW (Withdraw) may also be given under appropriate circumstances.

| Performance | Grade | Quality Points |
| :--- | :--- | :---: |
|  |  |  |
| Outstanding | A | 4.000 |
|  | A- | 3.667 |
|  |  |  |
| Good | B+ | 3.333 |
|  | B | 3.000 |
|  | B- | 2.667 |
|  |  |  |
| Adequate | C+ | 2.333 |
|  | C | 2.000 |
|  | C- | 1.667 |
| Marginal | D+ | 1.333 |
|  | D | 1.000 |
| Failure | D- | 0.667 |
|  |  | F |

- The grade of I (Incomplete) is to be given only at the end of a semester, or summer term, when work is not completed because of illness or other circumstances beyond the control of the student. A mark of I must be removed no later than the end of the eighth week of the next semester or it automatically becomes an F. A course for which I is given shall not be included in calculation of the student's GPA until the I is removed.
- The grade X (Satisfactory, Course in Progress) is to be given only at the end of a semester, or summer term, for certain kinds of work, or courses, which may properly carry over for more than one semester, or summer term. The grade X is to be replaced by a final grade at the end of the grading period in which the work involved is to end. A course for which $X$ is given shall not be included in calculation of the student's GPA until the grade X is replaced by a final grade.
- The grade of W (Withdrawal) is given upon notification by the Registrar of the dropping of a course after the fifth week and through the tenth week of the semester.


## Assessment of Master's Thesis

The successful completion and defense of the master's thesis is required to earn a Master of Arts degree at Wittenberg University. Candidates should refer to the "Thesis Project Preparation Guide" for information about preparing and submitting their work. Each member of the thesis committee evaluates the candidate's scholarship using the rubric included in the guide materials. The committee will meet following the thesis defense to come to a common determination of whether the candidates receive a "Pass" or "Pass with Distinction" for their work.

## Pass/Fail

The Pass/Fail option is reserved for specific professional development course offerings designated by the Director of Graduate Studies. Graduate students will receive the mark of "S" for successful completion of work in these courses and a mark of "NC" for work that doesn't meet minimal course requirements. Education 600: Directed Research is also evaluated on a pass/fail basis with completion of the course contingent on successful completion and defense of the master's thesis.

## Academic Probation Policy

Degree seeking candidates must maintain a 3.00 grade point average in all coursework taken for graduate credit. No more than six (6) semester hours of "C: work or below is permitted if the candidate is to remain in the program. Candidates are responsible for keeping apprised of their academic status by referral to the final grade reports and to the permanent record on file in the Registrar’s Office.

1. A graduate candidate on academic probation may be restored to good academic standing by achieving a GPA of 3.00 in graduate work completed at Wittenberg. The candidate who is not restored to good academic standing by the end of two semesters will be declared ineligible to enroll.
2. While on academic probation, a graduate candidate must achieve a 3.00 semester grade point average in order to enroll in the ensuing semester.
3. A candidate who receives a grade of "C" for more than six (6) hours of credit must retake one of the courses in which the " $C$ " was received and receive a grade of at least " $B$ " on the course before being eligible to graduate.
4. In the case of ineligibility following academic probation, the graduate candidate may present a petition to the Director of Graduate Studies in Education to explain any extenuating circumstances affecting his or her performance. The petition will be reviewed by the Education Department faculty the semester in which it is received.

## Transfer Policy

Credits transferred for application toward the Master of Arts in Education degree are subject to the following conditions:

1. No more than eight semester hours of graduate transfer credit may be applied to a Wittenberg degree. All transfer credits must have the approval of the Director of Graduate Studies.
2. Credits to be transferred must be equivalent to Wittenberg University graduate courses or as appropriate electives. Credits cannot be transferred to apply to any of the core graduation requirements: Education 550, 560, 570, and 600.
3. Credits to be transferred must not have been used to fulfill requirements for an undergraduate degree.
4. The granting institution must be fully accredited for graduate studies.
5. To be acceptable for transfer for an institution other than Wittenberg University, grades for credits earned must be either "A" or "B". They must have been earned within a six year period immediately preceding the candidate's entry into the Master of Arts degree program at Wittenberg.
6. Wittenberg University courses using a satisfactory / failing grading system must be approved by the Director of Graduate Studies in Education if they are to count toward a degree. No more than four credit hours of such courses can apply for degree completion.

## Requirements for Degree

The candidate for the Master of Arts in Education degree:

1. Must successfully have completed the program as outlined with a minimum of 36 semester hours.
2. Must earn at least a 3.00 grade point average in course work attempted. (No more than 6 hours of " C " work or less than " C " work is permitted for a degree.
3. Shall complete all degree requirements within a 6 -year period from the date of admittance to the MA program.
4. Must have successfully completed a research thesis project as outlined in the program.

## Directed Research

Candidates must be enrolled in Education 600: Directed Research during the semester that they finish an approved thesis. Should a candidate not complete the research during the semester of enrollment, they will receive a " X " from the instructor. The candidate will be required to enroll in Education 600 for a minimum of 1 credit hour for each academic semester (Fall and Spring) following the initial enrollment in Education 600 until the thesis is completed. If the candidate does not continue to enroll in Education 600, the candidate will be dropped from the program and will need to reapply to the program paying application fee and if accepted, register for Education 600 for 4 semester credits.

## Leave of Absence

It is the expectation of the Education Department that degree-seeking students will, at a minimum, register for courses each fall and spring semester and make continual progress
toward a Master of Arts degree. However, if circumstances exist such that a candidate is temporarily unable to continue work (e.g., health or family issues) in the graduate program or with the thesis project during contiguous semesters, a Leave of Absence Form must be completed by the candidate and submitted to the Director of Graduate Studies within the first 4 weeks of the semester of absence or non-registration for a course. The Graduate Program Committee will review leave requests at the next scheduled meeting. Failure to file a Leave of Absence request will result in the candidate's need to re-apply to the graduate program in order to continue graduate courses and/or work on a thesis project and be responsible for all costs associated with reapplication. The Leave of Absence form is found at the end of Graduate Student Handbook.

## Extension of the Six Year Time Limit

Failure to complete degree requirements within the six-year maximum time limit will result in removal of degree candidacy. Any graduate candidate who wishes to extend the six-year limit may petition in writing to the Director of Graduate Studies. The Education Department faculty will act upon the petition.

The request should include the reasons for needing additional time and should cite a specific completion date not longer than one academic.

## Tuition and Fees

At the time of application to the program, candidates will be assessed a $\$ 40.00$ nonrefundable application. Please refer to the posted charges for tuition information.

Payment of tuition must be made prior to the first class of each semester, even if you are receiving benefits from your employer for which you may be reimbursed at a later date. Candidates applying for loans are responsible for payment by check or credit card prior to the first class of the semester.

## Financial Aid

Candidates may be eligible for designated loans, federal tax credits, and other benefits for college study. They should contact the Director of Financial Aid at 327-6406 for more information about these opportunities.

## Refund Policy

Candidates who withdraw from a course will receive a refund of their tuition payment in accordance with the following schedule. Exceptions to this refund policy may be published in the current course listing.

1. Withdraw through the Friday of the first week of class: $100 \%$
2. Withdraw after the Friday of the first week of class: no refund.
3. Official withdrawal requires submission of an official Course Change (Drop/Add) form. Mere failure to attend does not constitute official withdrawal.

## MASTER OF ARTS IN EDUCATION CURRICULUM

The Master of Arts degree totals 36 semester hours including 9 semester hours of core courses, 4 semester hours of research courses, 4 semester hours of Directed Research, 9-12 hours of focused inquiry courses, and 7-10 hours of professional studies courses. Education 550 is a prerequisite course to all other required courses. The focused inquiry and professional studies courses have prerequisites, but candidates are required to take at least 3 semester hours in each of three designated categories: topics in Human Development and Learning, Topics in Effective Pedagogical Practices, and Topics in Curriculum.

After successful completion of the required core and research courses and after completing at least 10 hours of focused inquiry and professional studies course, candidates can conclude their program by successfully completing 4 hours of Directed Research and by defending a research thesis.

## Required Courses

- Core Courses: EDUC 550, 560, 570
$\square$ Research Courses: EDUC 590, 595
$\square$ EDUC 600 Directed Research


## Cohorts

The Master of Arts degree program offers a cohort design for candidates interested in a specific focus of study (e. g., diverse learners, math and science, literacy). Groups of graduate students interested in the same area of study enter the program as a cohort. The focus and start dates for each new cohort are determined by the Graduate Committee and the Education Department faculty according to the resources of the department and the needs of the community determine cohorts. The planned sequence of courses in the cohort program is designed to guide candidates through degree completion in years. Cohort members take all core, research, and focused inquiry courses as a group. Professional studies are the candidates’ elective courses. Summer study is required for cohort members, as core, research, or focused inquiry courses are offered at that time. A typical cohort schedule would consist of approximately 6 hours each semester (fall, spring, and summer) for two years.

## Technology

All candidates will have access to university email accounts and access via Wittenberg's computer network to web resources and the libraries electronic resources. The research requirements of the program will require familiarity with these resources and their extensive use.

## Procedures for Successful Completion of Directed Research

To fulfill degree requirements candidates must complete Education 600 and an approved research thesis project following the steps below. Candidates should consult the "Thesis Project Preparation Guide" for information about preparing the thesis.

1. Establish a Thesis Committee which must include three members including the participant's advisor, one other member of the Education Department, and one other professional, working either at Wittenberg University or in P-12 schools. The committee serves as the primary source of evaluation for the candidate's thesis.
2. Prepare a preliminary thesis proposal following department guidelines. The proposal will be developed in consultation candidates thesis committee.
3. Conduct proposed project and prepare written results.
4. Defend the thesis successfully before the Thesis Committee.
5. Upon completion of the thesis, submit two bound copies of the thesis to the Director of Graduate Studies.

## Course Descriptions

## Focused Inquiry and Professional Studies Courses

EDUC 510: Topics in Human Development and Learning Theory
1-3 credits
Specified study in the field of human development and learning theory as it relates to classroom practice and the academic and social needs of P-12 students. Emphasis will be placed on the social, moral, and psychological development issues affecting instruction. All courses have a research and practice component, but specific prerequisites vary by section. Candidates enrolled in Wittenberg University's Master of Arts in Education program are required to take a minimum of four hours of course work from this area. No prerequisites.

EDUC 520: Topics in Effective Pedagogical Practices
1-3 credits
Designed to facilitate the application of theory to practice in instructional design. Emphasis will be placed on teacher decision-making, instructional effectiveness, candidate interaction, and evaluative processes. All courses have a research and practice component but specific prerequisites vary by section. Candidates enrolled in Wittenberg University's Master of Arts program are required to take a minimum of four hours of course work from this area. No prerequisites.

EDUC 530: Topics in Curriculum
1-3 credits
Specified study in the development, organization, and assessment of curriculum
and materials. Emphasizes leadership skills as related to the responsibilities of teachers as curriculum planners. All courses have a research and practice component but specific prerequisites vary by section. Candidates enrolled in the Master of Arts in Education program are required to take a minimum of four hours of course work from this area. No prerequisites.

## Core Courses

EDUC 550: Professional and Ethical Issues in Education 3 credits

Designed to inform practice in P-12 classrooms, this course explores philosophical and pragmatic issues affecting teacher leadership. By the end of the course, participants will have the opportunity to analyze case histories, examine the philosophy and history of teacher professionalization efforts, critique and analyze research articles, develop basic strategies for research review, and formulate initial professional development plans. A major outcome of the course is personal assessment and planning of professional development goals. As the introductory course in the Master of Arts program, this course must be taken prior to any of the other required core courses $(560,570)$.

## Topics:

- Philosophy and Ethics in Teaching
- Professionalization History and Culture
- Professional Assessment and Advancement
- Research Review Analysis and Strategies


## EDUC 560: The Sociology of Educational Change and School Renewal 3 credits

This course provides participants with the sociological and historical background for examining school reform/renewal models. In analyzing these models, participants will consider current research about assessment, outcomes, and implementation processes. Connections will be made to personal and local circumstances and to the institutional cultures that support personal and building-wide educational change. The reading and construction of case studies will allow participants further opportunity to reflect more personally on teacher leadership roles in school change efforts. Prerequisite: Education 550.

Topics:

- Sociology and Politics of Educational Change
- School Renewal Approaches
- Building Supportive Institutional Cultures
- Teacher Leadership in School Renewal

EDUC 570: Approaches to Working with Diverse Communities 3 credits

This course will focus on examining diversity in personal and local contexts and on analyzing how diversity is reflected in curriculum and instruction. Diversity applies to teachers, students, administrators and staff within the school as well as the various populations in the larger school community. Teachers will develop plans and strategies about parental partnering, tolerance, conflict resolution, curriculum sequencing and presentation, assessment, and community building. Prerequisite: Education 550.

## Topics:

- Theory and Practice of Multicultural Education
- Practical Classroom Approaches to Curriculum, Instruction, and Community Building
- Working with Diverse Communities Outside the School


## Research Courses

EDUC 590: Reading and Writing for Action Research 2 credits

The major purpose of this course is to instruct participants as to how to identify research interests, determine strategies, and form designs to complete research projects. Participants will learn action research strategies that help them define questions and determine methods of gathering information and assessing it. Participants will also examine the process and practice of both quantitative and qualitative research. By the end of the course, students will clarify a research question and be able to write a research plan and preliminary review of the literature. Prerequisite: EDUC 550.

EDUC 595: Planning and Implementing Teacher Research 2 credits

The major purpose of this course is to help participants continue in the research process. The course will review components of the action research process and further inform students regarding data collection and analysis. Participants will learn how to select and create data collection instruments and to analyze qualitative and quantitative data. By the end of the course, students will have completed rough drafts of the first three chapters of the thesis and be prepared to implement their studies. Prerequisite: EDUC 590.

## EDUC 600: Directed Research 4 credits

Directed Research serves as the capstone experience in the Master of Arts in Education degree. Candidates will work with their Thesis Committee to craft and complete a substantial, high-quality research project. Although the completed projects will differ, all must include a written review of the literature pertaining to the candidate(s)'s research
topic. The candidate(s) must document the research process and address the project's relevance, value, and significance. See the Thesis Project Preparation Guide for details on the completion of the project. This course entails completion of the project proposal, successful completion of the research, and an oral defense before the Thesis Committee. Initial registration for EDUC 600 requires enrollment for 4 semester credits.
Prerequisites: 550, 560, 570, 590, and 595.

