Our Mission

The College of Liberal Arts and Sciences at Alfred University fosters students’ intellectual, creative, and personal development. Our curriculum builds upon the University’s history of inclusiveness, commitment to global awareness, and enduring ties to the community. Through a breadth of programs and the depth offered in the majors, students explore and engage with the world, think critically about it, act creatively within it, reflect on their experiences, and share the knowledge they acquire with others. We educate life-long learners.

The Bachelor’s Degree

The undergraduate curriculum in Alfred University’s College of Liberal Arts and Sciences emphasizes those areas of study which form the basis for any truly liberal education. We use the term “liberal” here in its original sense, that of freeing the mind to explore various fields of interest.

Our curriculum provides students with opportunities to deepen their knowledge and develop skills so that they may better:

- explore human cultures, and the physical and natural world;
- communicate as readers, writers, speakers, listeners, and artists;
- respond to problems and/or opportunities creatively;
- practice personal and social awareness through engagement with local and global communities;
- and apply knowledge and skills across general and specialized studies.

We believe that liberally educated citizens perform complex intellectual tasks, tasks which have technical, moral, and political consequences. Our effort is to give our students the constructive skills to accomplish those tasks. These skills include conceptual analysis, disciplined writing, and a creative approach to problem solving. We put specialized knowledge and inquiry into values within living contexts, encouraging our students to meet real demands in real situations. We prepare our students not only for multiple careers, but for graduate and professional schools and for leadership in the world.

Our requirements for the bachelor’s degree combine breadth of study in a range of subjects and disciplines, represented by the general education program, with specialization in a major field of study. The College offers over 20 majors and numerous minors. In addition, students may take courses and complete minors in other colleges within the University, as long as prerequisites for these courses and minors are met.

Graduation Requirements

To qualify for a Bachelor of Arts (B.A.) or Bachelor of Science (B.S.), students must complete the following:

- a minimum of 124 credit hours with a cumulative grade point average of at least 2.00, of which at least 90 credits must be liberal arts course work (as defined by New York State Department of Education) for the B.A., and at least 60 liberal arts credits for the B.S.
- the requirements for the CLAS general education program (see below)
- the First-Year Experience (FYE) requirement or Transfer Student Seminar
- the requirements for a CLAS approved major
- the University Global Perspective requirement
- the University Physical Education requirement
at least 45 credits in residence at Alfred University
- the final 30 semester hours in residence (for exceptions see AU policy on “Transfer of Credit”)

Transfer Credits
The following criteria apply to the evaluation of transfer records:
- Decisions about whether a transfer course satisfies a specific general education requirement are made by the Dean, in consultation with the academic program with oversight for that particular general education area.
- Decisions about whether a transfer course satisfies a major or minor requirement are made by the Chair or Director of the specific academic program, in consultation with the faculty of that program.
- A three credit-hour course will satisfy a four-credit hour general education requirement; however, only 3 credits will be applied in transfer credit.
- See the University policy on transfer credit for more detailed information.

The College of Liberal Arts & Sciences believes that high quality academic advising is essential to the well-being of both the College and its students. Upon matriculation, each student is assigned a faculty advisor. When students declare their major, they also choose a faculty member within the major who serves as their primary advisor. Faculty advisors are available not only to assist in choosing courses and majors, but also to help students develop a well-rounded plan to reach individual personal and professional goals. Our faculty members are dedicated to both teaching and advising. They give the kind of personal attention that encourages students to find their direction and to succeed in their efforts.

Good advising is a collaboration. Students are ultimately responsible for making their own decisions and for meeting all requirements. Advisors encourage self-reliance, assist students in exploring opportunities at AU and beyond, and connect students to a community of resources at Alfred University.

General Education Requirements for All Students
The general education program, required of all students in the College of Liberal Arts and Sciences, is designed to help students achieve greater intellectual breadth and proficiency and to create common points of reference for students from different disciplines. The program introduces students to the tools they will need for advanced study and exposes them to different ways of thinking about their world. This curriculum allows students to develop the kind of intellectual flexibility they will need for meeting future challenges.

The program has two main features: (1) it emphasizes the importance of each student demonstrating basic competencies early in the college program, either through course work that teaches these competencies or proficiency; this is an important part of the curriculum since it provides tools essential for successful work in advanced courses, as well as promoting skills that are valuable after graduation. (2) It requires each student to have exposure to at least six areas of knowledge; this is intended to provide a broad foundation both for more advanced study and for a lasting intellectual engagement with scholarly and cultural issues.

The general education program is divided into two parts: basic competencies and areas of knowledge. Students are expected to complete the basic competencies during the first two years of study.
Students are encouraged, although not required, to complete the areas of knowledge during their first two years, as this provides an opportunity for intellectual exploration as students consider which academic area they would like to focus on for their major. These requirements are normally satisfied through course work; some may be met through proficiency examinations (which carry no academic credit).

Basic Competencies
The CLAS basic competency requirements are in the areas of written communication, quantitative reasoning, and foreign languages. The ability to write well, communicate in another language, and use quantitative reasoning to problem solve are important skills greatly valued in today’s world. Students continue to hone their skills in writing, quantitative reasoning, and languages beyond the basic general education requirements through intermediate and advanced level courses offered in the College.

I Written Communication
Each student must demonstrate writing competency through the successful completion of ENGL 102 or an equivalent (as approved by the English Division faculty). Depending on college entrance exam scores, students are placed in the appropriate level writing course. Normally students enroll in ENGL 101 and 102 in their first year in the College.

Students with the following scores must take both ENGL 101 and ENGL 102:
- SAT Writing 499 or lower
- SAT Verbal 539 or lower
- ACT-English 25 or lower

Students with the following scores should take ENGL 102:
- SAT Writing 500-699
- SAT Verbal 540-739
- ACT English 26-29

Students with the following scores are exempted from ENGL 101 and 102, having demonstrated sufficient college level writing competency:
- SAT Writing 700 or higher
- SAT Verbal 740 or higher
- ACT English 30 or higher

II Foreign Language
To demonstrate a basic competency in a language other than English, each student must successfully complete the equivalent of the second semester of the first year of a foreign language at the college level. Students may also demonstrate this proficiency through a language placement exam or a challenge exam, arranged through the Division of Modern Languages. Students are expected to begin undertaking language study no later than their sophomore year and continue each subsequent semester with the language until the requirement is fulfilled. All students are encouraged to go beyond our basic language requirement in order to deepen their knowledge of and fluency in the language.

Language Placement Exams
Language placement exams, offered at the beginning of each semester, help to determine the appropriate language course and level for students.
Students who have taken more than two years of a language in high school and who intend to take the same language at Alfred must take the placement exam. Students who are bilingual or native speakers or who have spoken the language at home must take the language placement test to determine level of competency. Students who want to demonstrate proficiency in a language not offered by Alfred should consult with the Chair of the Division of Modern Languages.

Students do not need to take the language placement exam if they plan to study a language they have not previously studied.

III Quantitative Reasoning
Students must demonstrate basic competency in quantitative reasoning. The quantitative reasoning requirement is fulfilled by one of the following:

- A score of 630 or higher on the SAT Math
- A score of 28 or higher on the ACT Math
- A score of 4 or higher on the Advanced Placement Exam in either Calculus AB or Calculus BC
- The successful completion of an AU designated quantitative reasoning (QR) course (Attribute 03). The following courses are currently designated as QR courses; the list is updated annually and posted on the Alfred University website.
  
  - BIOL 226 Biostatistics
  - ENVS 205 Environmental Data Analysis
  - MATH 101 Communicating with Numbers
  - MATH 104 Quantitative Methods for Business
  - MATH 107 Calculus Concepts for the Social Sciences
  - MATH 151 Calculus I
  - PHIL 282 Introduction to Logic
  - POLS/SOCI 230 Introduction to Data Analysis and Statistics
  - PSYC 220 Psychological Methods and Statistics
  - SCIE 127 Doing Science

Areas of Knowledge
General education requirements for different areas of knowledge provide students with an introduction to different ways of thinking, knowing, and seeing, laying the foundation for a lifetime of inquiry and learning. While many courses are offered in these different academic disciplines, only certain courses in the CLAS curriculum are designated as fulfilling the general education requirement. “Attribute” codes in the on-line course system (Banner) help students search for and identify appropriate courses that fill these specific area requirements.

Degree Requirement (Attribute) Code Field

A Literature (4 credits required)
B Philosophy or Religious Studies (4 credits required)
C The Arts (4 credits required)
D Historical Studies (4 credits required)
E Social Sciences (8 credits; 4 credits each from two of the following categories):
  - Psychology (E1)
  - Political Science or Economics (E2)
  - Sociology or Anthropology (E3)
F1 & F2 Natural Sciences (8 credits; at least one of the courses must include a lab)
First-Year Experience Program (FYE)
The College’s First-Year Experience program is designed to foster intellectual engagement so that students are able to succeed academically and find a meaningful role for themselves both in the Liberal Arts & Sciences community and as citizens of the world. Each FYE course is taught by a faculty member dedicated to the success of first-year students, who, along with the peer leader associated with the course, helps new students engage with the Alfred community and transition to college level learning.

The goals of the FYE program are to:
- Help students produce high-quality college-level work and develop a positive work ethic.
- Encourage students to form “learning communities” in which students share responsibilities and support one another in their academic endeavors.
- Provide first-year students with the opportunity to participate in a small, seminar-style class in which concentrated attention can be paid to each student and close working relationships between students and instructors can develop.
- Encourage students to become fully integrated into the University community by introducing students to and encouraging participation in a wide variety of extracurricular activities.

The FYE program also provides a foundation for the general education curriculum. To that end, all FYE courses, successfully completed, fulfill one of the general education or university requirements.

Transfer Seminar
The CLAS Transfer Seminar (LAS 101), required for transfer students in their first semester, is designed to help new transfers make the transition to Alfred University. The seminar provides an opportunity for students to get to know the intellectual community they have joined, while introducing them to campus resources that will help them succeed at Alfred. Throughout the seminar, students will further develop core skills that lead to academic and professional accomplishment.

Majors
In addition to the general education program, all CLAS students must fulfill the requirements for a major to qualify for a bachelor's degree. (Requirements for each major are found elsewhere in the catalog and on the AU website.) A major provides students with an opportunity to delve deeply into the study of a particular subject, developing expertise and critical thinking through sustained and advanced work. At least half of a student’s course work toward the major must be completed at Alfred University. Transfer credits toward the major are approved by the chair or director, in consultation with program faculty.

Selecting a Major
Students are expected to declare their major by the end of the sophomore year. We advise students to explore various options and become familiar with the requirements for a particular major before filing a major declaration. Students should also discuss their interests and objectives with their academic advisor before declaring a major.

In most cases, students have done some previous course work in the discipline before declaring the major. Faculty members are great resources for discussing possible majors.
Some majors require specific sequencing of courses and careful planning, with some prerequisite courses strongly recommended for the first year. Students preparing for secondary school teaching in an area related to their major should consult with an Education advisor as well as their major advisor to plan their course of study combining major requirements and education courses.

All courses required for a major must be completed with grades of “C” or better. Students may also be required to pass a comprehensive examination in the major.

The following majors are offered by the College of Liberal Arts and Sciences:

- Biology
- Chemistry
- Communication Studies
- Comparative Cultures
- Criminal Justice Studies
- English
- Environmental Studies
- Foreign Language and Culture Studies
- General Science
- Geology
- Gerontology
- Global Studies
- History
- Interdepartmental Major
- Interdisciplinary Art
- Mathematics
- Philosophy
- Physics
- Political Science
- Psychology
- Sociology
- Spanish
- Theatre

**Individually Structured Major (ISM)**

The Individually Structured Major offers students the opportunity to structure an independent, interdisciplinary major in cases where the student's plan of study cannot be accommodated by one of the existing majors within the College of Liberal Arts and Sciences. This major is for very motivated, self-directed and strong students, thus applicants for this major are normally expected to have a 3.0 grade point average at the time they apply for this major. Students must submit an application for this major by the end of their sophomore year.

For students willing to put the time, thought, and structure into creating an ISM, the process and learning experience can be very rewarding, especially as students work closely with a team of faculty advisors. The capstone to the ISM is a Baccalaureate Project undertaken in the senior year, which allows students to integrate or exemplify elements of their program in meaningful, creative, and productive ways. Students pursuing the ISM receive a Bachelor of Arts upon completion of their Alfred University degree requirements.

Each individually structured major requires a formal program proposal, designed by the student in consultation with a Faculty Advisory Board chosen by the student. Students interested in initiating the application process for an ISM should meet with the Assistant Dean of the College of Liberal Arts and Sciences no later than mid-semester of their sophomore year, as the application involves several steps and requires research and time. Proposals are reviewed by the ISM Faculty Steering Committee and the Dean and must be approved by the beginning of the student’s junior year.

Some of the academic programs designed by students under the auspices of the Individually Structured Major include Aesthetics of Communication through Video and Sound; Art History, Culture and Art Theory; Art: Museum Studies and Entrepreneurship; Biopsychology; Ecological Psychology; Feminist Studies; Historic Preservation; Individuation of Art and Culture; Integrated Media; International Environmental Relations; Media Politics; Religion and Ethnicity; Sustainable Agriculture; and Violence and Conflict Studies.
Minors

Students may elect to declare a minor to supplement the major field. A minor allows students the opportunity to broaden their educational experience and may enrich career possibilities. In addition to minors offered by the College of Liberal Arts and Sciences (listed below), many CLAS students pursue minors offered by Alfred University’s other colleges and schools. The minors in business, education, and art history, in particular, complement a number of CLAS programs.

Minors normally range from 14-24 credit hours. As with the major, all courses used to complete a minor must have grades of “C” or better and at least half of the requirements should be completed at Alfred University. The division Chair should be consulted about matters regarding transfer credits for the minor.

<table>
<thead>
<tr>
<th>Anthropology</th>
<th>Environmental Studies</th>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts Management</td>
<td>Equestrian Studies</td>
<td>Political Science</td>
</tr>
<tr>
<td>Astronomy</td>
<td>French</td>
<td>Psychology</td>
</tr>
<tr>
<td>Biological Anthropology</td>
<td>Geology</td>
<td>Public Law</td>
</tr>
<tr>
<td>Biology</td>
<td>Gerontology</td>
<td>Religious Studies</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Global Studies</td>
<td>Science Policy</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>History</td>
<td>Social Science Research</td>
</tr>
<tr>
<td>Criminal Justice Studies</td>
<td>Interdisciplinary Art</td>
<td></td>
</tr>
<tr>
<td>Cultural Anthropology</td>
<td>Mathematics</td>
<td>Sociology</td>
</tr>
<tr>
<td>Dance</td>
<td>Music</td>
<td>Spanish</td>
</tr>
<tr>
<td>Economics</td>
<td>Performance Design and Technology</td>
<td>Theatre</td>
</tr>
<tr>
<td>English: Literature</td>
<td>Philosophy</td>
<td>Women’s Studies</td>
</tr>
<tr>
<td>English: Writing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pre-Professional Advising

Art Therapy                  Business
Education                   Health Professions
Law                          

Pre-professional Advising in Art Therapy, Health Professions, and Law

Alfred University provides pre-professional advising programs for students who wish to prepare for the study of art therapy; law; or health professions, including medicine, dentistry, veterinary medicine, and other allied-health programs. Preparation for these graduate professional programs usually involves taking particular, prerequisite courses while an undergraduate. Students may choose to major in anything they wish while taking the prerequisites for these professional programs.

Students with interests in these professional programs should discuss their intentions with their academic advisor and attend workshops and advising hours offered by the faculty advisors for these pre-professional tracks. Depending on the pre-professional track chosen, students may need to start on relevant course work in their first or second year. It takes careful planning to see that both major and pre-professional requirements are completed on schedule. A current list of pre-professional advisors is available from the Dean’s Office and on the AU website. Students interested in pursuing graduate programs in one of the many healthcare fields should consult the Alfred University webpage focused on health professions for more specific information: http://www.alfred.edu/academics/pre-health/
Preprofessional Advising in Business

Students interested in business may take courses or pursue a minor offered by Alfred University’s School of Business. Completion of the minor allows students in the College of Liberal Arts & Sciences, who have successfully completed appropriate business courses while undergraduates, to be eligible to enter Alfred University’s Masters in Business Administration (MBA) and complete requirements for that degree within one year of receiving the bachelor’s degree. For more information about this option, contact the School of Business or the CLAS Dean’s Office.

Preprofessional Advising in Education

Students who have an interest in becoming teachers in PreK-12 schools have several options at Alfred University that will help prepare them for this goal. A major in Early Childhood/Childhood Education is offered through the College of Professional Studies. Students interested in teaching middle school or high school normally choose a major in the field they want to teach (e.g., History, Math, Spanish, Art), while simultaneously completing a minor in Education. For those who want to teach art, we recommend the major in Interdisciplinary Art with Art Education offered by the College of Liberal Arts & Sciences. As the combination of coursework to prepare for teacher certification requires careful planning and particular course-sequencing, leading to a semester of practice teaching, students should meet with an Education program faculty advisor early on to review options, requirements, and planning relevant to achieving their goals to become a teacher.

Internships

An internship is defined as field or work experience undertaken by a student for academic credit in a setting connecting a student’s academic interests to a career opportunity. The CLAS academic units work closely with the Career Development Center staff to support internships for our students.

Some internships involve participating in a formal program, while others are established through personal, informal or professional contacts between a supervising faculty member, career counselor or the student, and an institution or agency willing to take on the responsibility for supervising an intern in the field setting.

Internships may be paid or unpaid. Credit will not be given for work experience alone. Any internship experience must involve a formal writing assignment to integrate the student’s field experience with his or her academic interests. Student interns are supervised by an academic supervisor who is an Alfred University faculty member and by an on-site supervisor. The academic supervisor has ultimate responsibility for overseeing the internship. Evaluation of a student’s performance is made by the academic supervisor in consultation with the on-site supervisor.

To earn credit toward the degree, students must register for Internship credit during the semester in which they are undertaking the internship and complete the internship contract they have set in consultation with their faculty supervisor.

Students undertaking a summer internship may choose to register for credit during Summer Session or in the semester following the internship, during which the student will complete the formal writing assignment.
Major and Minor Requirements

Anthropology

The Anthropology minors in Cultural Anthropology and Biological Anthropology attract students who want to explore cultural diversity across the globe and through time. These minors are designed to complement student course work in related disciplines or in interdisciplinary programs. Anthropology courses emphasize the application of the anthropological perspective in understanding present-day social issues.

The minor in Cultural Anthropology grounds students in the broad perspectives, subject matter, and methods of the discipline. It gives students the option of core course work in two of the main fields of anthropology (cultural and physical) or allows students to focus more on cultural and linguistic anthropology, and related topics in two additional courses. The anthropological view on cultures, both large and small, modern and traditional, emphasizes comparative, holistic, historical, and multidisciplinary frames of analysis. Advanced study of a language and study abroad are always encouraged to add depth to these minors.

Biological Anthropology anchors humans in the natural world by emphasizing our evolutionary and genetic past as well as our relationships with other primates. Courses on human health, animal behavior, and comparative anatomy, as well as ecological and environmental perspectives on humans in Belize and southern Africa are among the varied dimensions of this broad minor.

Requirements for the Cultural Anthropology minor
I. Core Courses (8 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 110</td>
<td>Cultural Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 120</td>
<td>Human Origins</td>
<td>4</td>
</tr>
<tr>
<td>or ANTH 304</td>
<td>Language and Culture</td>
<td>4</td>
</tr>
</tbody>
</table>

II. Electives (8 credit hours)

Eight additional credit hours of course work in Anthropology and related areas to be chosen in consultation with the Anthropology minor advisor.

Total credit hours 16

Requirements for the Biological Anthropology minor
I. Core Courses (8 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 120</td>
<td>Human Origins</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 130</td>
<td>Introduction to Human Genetics</td>
<td>4</td>
</tr>
</tbody>
</table>

II. Electives (12 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 303</td>
<td>Health and Culture*</td>
<td>4</td>
</tr>
<tr>
<td>ANTH/BIOL 305</td>
<td>Belize and the Caribbean</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 348</td>
<td>Animal Behavior*</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 375</td>
<td>Comparative Vertebrate Biology*</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 415</td>
<td>Genetics and Evolution of Populations*</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 330</td>
<td>Neuropsychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 351</td>
<td>Human Sexuality</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 235</td>
<td>Socialization*</td>
<td>4</td>
</tr>
</tbody>
</table>

Total credit hours 20

*these courses have prerequisites; see course descriptions
College of Liberal Arts and Sciences

Arts Management

The Arts Management Minor provides an interdisciplinary approach to the business of art and management of arts organizations. Students have the opportunity to learn and explore the theoretical content and practical skills that engage arts professionals managing individual businesses, serving community arts organizations, and managing not-for-profit arts organizations in the visual, performing, and literary arts. The Arts Management minor is jointly offered by the School of Business in the College of Professional Studies, the School of Art and Design, and the College of Liberal Arts and Sciences and is open to all AU students. (See p. 146 for the Arts Management minor requirements.)

Astronomy

Students may take a variety of courses to become acquainted with modern astronomical thought and observational technique. One may prepare for graduate study in astronomy or astrophysics by completing a Physics major and electing additional Astronomy courses in the Astrophysics Concentration.

The John L. Stull Observatory is an unusually well-equipped facility devoted exclusively to the instruction of undergraduate students. Its six domes house a 9 inch refractor, reflectors of 16 (two of them), 20 and 32 inch apertures (one 16 inch and the 32 inch instruments are computer controlled), two solar telescopes and two commercial 8 inch telescopes. An adjoining classroom building houses a darkroom and auxiliary equipment including a set of CCD electronic cameras and a network of computers for displaying these images.

Requirements for the minor

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 107</td>
<td>Elementary Astronomy Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>ASTR 302*</td>
<td>Planetary Science</td>
<td>2</td>
</tr>
<tr>
<td>ASTR 303*</td>
<td>Stellar Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 304*</td>
<td>Galactic Astronomy and Cosmology</td>
<td>4</td>
</tr>
<tr>
<td>ASTR 307</td>
<td>Observational Astronomy</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total credit hours</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

*Note: These courses have prerequisites. See course descriptions.

Biology

The study of life is in an exceptionally exciting phase: discoveries in the life sciences are occurring faster than their implications can be absorbed by society. Biology majors gain a broad understanding of the field of biology and a solid, diverse education in the liberal arts. The Biology major provides a biological foundation for a variety of career interests and depth and specialization in areas of greatest interest to our students. Biology majors go on to post-graduate study in medicine, dentistry, veterinary medicine or other health-related professions, post-graduate study in a range of biological disciplines from biotechnology to ecology, as well as employment opportunities, including teaching and biological research. The curriculum facilitates double and co-majors with other disciplines and contributes to the overall natural science education serving as background for many career choices.
For instance, students interested in the molecular life sciences will find special opportunities in the Biomedical Materials Engineering Science program in the Inamori School of Engineering or cross-disciplinary Biological Chemistry courses linking our Biology and Chemistry programs. Those with concerns in global and human ecology may participate in the interdisciplinary Environmental Studies Program. Students in other disciplines can complete a minor in Biology or in Biological Anthropology.

Course objectives are met through lectures, laboratory, fieldwork, discussions, and seminars. Students are strongly encouraged to become involved in undergraduate research projects and to seek summer and semester internship and study abroad experiences.

**Requirements for the major**

Each student completes a core of courses and selects a prescribed number of courses from the distribution categories related to his/her personal and career interests. Additional courses in chemistry, mathematics, and physics are required or recommended. All courses taken as part of the Biology major must be passed with a grade of C or better.

**Summary of Requirements for the Biology Major:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Core</td>
<td>18</td>
</tr>
<tr>
<td>Major Electives</td>
<td>24</td>
</tr>
<tr>
<td>Required Chemistry Courses</td>
<td>11-16</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td><strong>53-58</strong></td>
</tr>
</tbody>
</table>

**Core: Take these six courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 201</td>
<td>Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 202</td>
<td>Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 226</td>
<td>Biostatistics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 365</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 390</td>
<td>Junior Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 490</td>
<td>Biology Research Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Core Credit Hours</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Major Distribution Electives:** Choose at least 24 additional credit hours of major electives with at least 4 credits from each of the three distribution categories: Cell and Molecular, Organisms, and Ecology and Evolution

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 106</td>
<td>Field Botany</td>
<td>Ecol/Evolution 4</td>
</tr>
<tr>
<td>BIOL 302</td>
<td>General Microbiology</td>
<td>Cell/Molecular 4</td>
</tr>
<tr>
<td>BIOL 305</td>
<td>Belize and the Caribbean</td>
<td>Ecol/Evolution 2</td>
</tr>
<tr>
<td>BIOL 307</td>
<td>Anatomy &amp; Physiology: NMS</td>
<td>Organisms 4</td>
</tr>
<tr>
<td>BIOL 308</td>
<td>Anatomy &amp; Physiology: Viscera</td>
<td>Organisms 4</td>
</tr>
<tr>
<td>BIOL 322</td>
<td>Botany</td>
<td>Organisms 4</td>
</tr>
<tr>
<td>BIOL 345</td>
<td>Vertebrate Biology</td>
<td>Ecol/Evolution 4</td>
</tr>
<tr>
<td>BIOL 346</td>
<td>Animal Nutrition</td>
<td>Organisms 4</td>
</tr>
<tr>
<td>BIOL 348</td>
<td>Animal Behavior</td>
<td>Ecol/Evolution 4</td>
</tr>
<tr>
<td>BIOL 354</td>
<td>Ecology</td>
<td>Ecol/Evolution 4</td>
</tr>
<tr>
<td>BIOL 357</td>
<td>Conservation Biology</td>
<td>Ecol/Evolution 4</td>
</tr>
<tr>
<td>BIOL 358</td>
<td>Biogeography</td>
<td>Ecol/Evolution 4</td>
</tr>
<tr>
<td>BIOL 362</td>
<td>Molecular Cell Biology</td>
<td>Cell/Molecular 4</td>
</tr>
<tr>
<td>BIOL 375</td>
<td>Comparative Vertebrate Anatomy</td>
<td>Organisms 4</td>
</tr>
<tr>
<td>BIOL 376</td>
<td>Animal Physiology</td>
<td>Organisms 4</td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Research Topics</td>
<td>Varies 4-5</td>
</tr>
</tbody>
</table>
College of Liberal Arts and Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 402</td>
<td>Immunology</td>
<td>Cell/Molecular</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 404</td>
<td>Mechanisms of Microbial Pathogenesis</td>
<td>Cell/Molecular</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 415</td>
<td>Genetics and Evolution of Populations</td>
<td>Ecol/Evolution</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 420</td>
<td>Biochemistry: Proteins and Metabolism</td>
<td>Cell/Molecular</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 422</td>
<td>Biochemistry: Nucleic Acids</td>
<td>Cell/Molecular</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 425</td>
<td>Physiological Plant Ecology</td>
<td>Ecol/Evolution</td>
<td>4</td>
</tr>
</tbody>
</table>

**Required related course work:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 105/106</td>
<td>General Chemistry I and II</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>CHEM 310</td>
<td>Basic Organic Chemistry</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>or 315/316</td>
<td>Organic Chemistry</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

**Recommended related course work:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS111/112</td>
<td>Introductory General Physics I and II</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus I</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Selection of these courses depends on the student’s postgraduate plans and is done in consultation with the faculty advisor.

**Preparation for Middle/Adolescent Education**

Future science teachers take Core courses (18 credits), distribution electives (24 credits), and required related course work (11-16 credits in chemistry). Students should consult faculty advisors in Biology and Education to select appropriate courses in biology and related disciplines.

**Requirements for the Biology minor**

A total of 24 credits are required for the minor in Biology: BIOL 201/202 (8 credits), CHEM105 (4) and at least 12 credits of Biology courses, selected in consultation with the Biology faculty advisor.

**Requirements for the Biological Anthropology minor**

The interdisciplinary minor in Biological Anthropology requires foundation courses in Biology and Anthropology. The minor is intended to complement a major in another discipline. (See “Anthropology” section, above, for the list of required courses.)

**Chemistry**

Chemistry attempts to describe and understand the transformations and structure of matter, the ways matter and light interact, and the physical properties of all substances. Essentially, chemists seek to relate macroscopic observable properties to the nature of matter on an atomic and molecular scale. Chemistry is a broad field and knowledge of chemistry is essential not only to the student of disciplines such as biology, environmental studies, engineering, ceramics, medicine, and forensics, to name a few, but also to the person who wishes to be liberally educated. With many scientifically-based issues facing today’s society, some knowledge of chemistry is essential.

The division offers a core major and an American Chemical Society (ACS) approved degree. The core major provides a unique experience that links fundamental knowledge in the classroom with hands-on exploration in the laboratory, and integrates interdisciplinary exercises and a variety of methods for sharing results whenever possible. We value independent research experiences for our students on and off campus and strive to offer a variety of interesting and timely topics courses for all students on campus.
Students with a chemistry degree from Alfred University graduate with a firm background for entry into the job market as a chemist, for advanced study in the discipline, for advanced study in a related discipline or a foundation for various professional schools such as medicine, dentistry, veterinary medicine, law or library science. The ACS approved degree requires the core major plus six additional semester credit hours.

A minor in chemistry is also offered and integrates well with several majors on campus. The minor not only provides breadth of knowledge, but also permits the student to tailor his/her studies to complement a major in other fields. For example, a biology major might emphasize organic chemistry whereas a person in ceramic science might focus on physical, inorganic or analytical chemistry.

**Requirements for the major**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 105/106</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 315/316</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 321</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 343/346*</td>
<td>7</td>
</tr>
<tr>
<td>CHEM 345</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 372</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 374</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 390</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 423</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 461</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 490</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total credit hours</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

*Ceramic Engineering and Materials Science majors who also major in Chemistry may take CEMS 214, 235 and 344 for equivalent content.

**Requirements for the ACS approved major**

Above, plus six additional credit hours. These six credits must include BIOL 420 (Biochemistry: Proteins and Metabolism) and at least two credit hours from CHEM 400, CHEM 414, CHEM 450, CHEM 457, CHEM 462, CHEM 485, CHEM 495, CEMS 334, CEMS 342, CEMS 344, CEMS 349, and CEMS 434. These two credits must also include at least 24 clock hours of laboratory time.

**Related Study Required for the Major**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 151/152</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 111 or 125</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 112 or 126</td>
<td>4</td>
</tr>
</tbody>
</table>

For those students who wish to earn the ACS certified degree, BIOL 202 (4 credits) is also required as a prerequisite for BIOL 420.

**Requirements for the Chemistry minor**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 105/106</td>
<td>8</td>
</tr>
</tbody>
</table>

*Plus at least 12 additional credits from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 310</td>
<td></td>
</tr>
</tbody>
</table>

*Ceramic Engineering and Materials Science majors who minor in Chemistry may substitute CEMS 235 for CHEM 343; both CEMS 214 and CEMS 344 for CHEM 346; and both CEMS 347 and CEMS 349 for CHEM 423. No more than 8 credit hours total may be taken outside of the Chemistry Division.

**Total credit hours**

<table>
<thead>
<tr>
<th>Credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
</tr>
</tbody>
</table>
Communication Studies

We use communication to craft ideas, connect ourselves with others, and to create personal identities and shared cultures. The methods and practices involved in communicative processes are gleaned from a long interdisciplinary tradition that values diversity in both knowledge and practice. The mission of the Communication Studies program at AU is to help students prepare for their futures by providing a foundation that teaches them to construct, evaluate, and distribute messages within and for an increasingly interconnected and globalized society.

The core courses examine elements of the process of communication in a program which is grounded in the humanistic tradition and contemporary social science. This plan of study is designed not only for students planning to pursue careers as leaders in fields such as public relations, g, journalism, advertising,, but also for those who wish to acquire an awareness of general communication principles applicable to many careers. Moreover, since many Communication Studies courses investigate the impact of communication upon society, the major also provides a solid foundation for graduate study in Communication and related disciplines including Law, Business, and the Social Sciences.

As a supplement to their classroom work, students are encouraged to work with the University’s FM stereo radio station, WALF, the student newspaper, Fiat Lux, or the campus television station, AUTV, as well as complete an internship.

Requirements for the major
All students must complete a 24 credit hour core consisting of the following courses:

COMM 101  Introduction to Communication Studies   4
COMM 110  Mass Media and American Life    4
COMM 205  Introductory Newswriting and Reporting   4
COMM 301  Broadcasters, Advertisers, and Audiences   4
COMM 309  Persuasion: Reception and Responsibility   4
COMM 410  Communication Ethics     4

Additional Requirements
Take 20 credit hours of elective courses in Communication, Social Sciences (such as Psychology or Political Science), Business (such as Management or Marketing), and Humanities (such as English), chosen in consultation with an advisor. At least 12 of these elective hours must be at the 300-400 level.

Total credit hours  44

Requirements for the minor in Communication Studies
COMM 101  Introduction to Communication Studies   4
COMM 110  Mass Media and American Life    4
COMM 205  Introductory Newswriting and Reporting   4
COMM 301  Broadcasters, Advertisers, and Audiences   4
COMM 309  Persuasion: Reception and Responsibility   4
COMM 410  Communication Ethics     4

Total credit hours  24
Comparative Cultures

The Comparative Cultures major attracts students who want to better understand themselves and the world around them. The major makes it possible for students to gain an appreciation of cultural pluralism by studying various cultures and elements of culture while acquiring the tools of analysis and interpretation. Students achieve an understanding of the general nature of human culture and religion as well as more specific knowledge of particular societies and/or religious traditions. The major emphasizes the analytical methodologies of the complementary disciplines of Cultural Anthropology and Religious Studies, fostering the cross-cultural and/or comparative study of such aspects of culture as myth, social organization, adaptive strategies, gender relations, kinship and descent, religious ritual, oral poetry, and visual and performing arts.

The curriculum includes core components (which should be completed early), elective courses and advanced study of a foreign language. It culminates in a major fieldwork project. Students are strongly encouraged to study for one or two semesters in a foreign culture.

Requirements for Comparative Cultures Major

I. Core (16 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 110</td>
<td>Cultural Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 304</td>
<td>Language and Culture</td>
<td>4</td>
</tr>
<tr>
<td>GLBS 495</td>
<td>Global Issues Seminar</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 105</td>
<td>Introduction to World Religions</td>
<td>4</td>
</tr>
</tbody>
</table>

II. Elective Courses (22 credit hours)

Courses from Anthropology, Religious Studies and Art History of non-Eurocentric traditions. 16 credits must be above 300 level. Up to 8 credits from other disciplines may be substituted (with advisor’s approval).

Note: RLGS 105, ANTH 110 and two semesters of foreign language (16 credits in all) also fulfill current CLAS General Education requirements.

Elective Courses in Core Disciplines

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 302</td>
<td>The Nacirema</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 303</td>
<td>Health and Culture</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 309</td>
<td>Magic and Religion</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 312</td>
<td>Violence and Culture</td>
<td>4</td>
</tr>
<tr>
<td>ARTH 301</td>
<td>African Art I</td>
<td>4</td>
</tr>
<tr>
<td>ARTH 302</td>
<td>African Art II</td>
<td>4</td>
</tr>
<tr>
<td>ARTH 411</td>
<td>Pre-Columbian Art</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 240</td>
<td>Religion in America</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 252</td>
<td>Judaism and Islam</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 254</td>
<td>Birth of the Christian Tradition</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 369</td>
<td>Buddhism</td>
<td>4</td>
</tr>
</tbody>
</table>

III. Language Study (up to 12 credit hours)

Minimum requirement is proficiency equal to university study through the second year.

Total credit hours 38-50
Criminal Justice Studies

The interdisciplinary Criminal Justice Studies major attracts students who want to study the criminal justice system and key criminal justice actors, processes, and institutions. Courses in the major examine such topics as criminal behavior, social and governmental efforts at control, and practices developed to rehabilitate offenders. In general, students learn the application of social science findings in an effort to evaluate and analyze contemporary criminal justice issues. Courses in the major draw on a number of different disciplines in the social sciences, including Sociology and Political Science. The major also provides for practical experience through coursework that encourages students to apply classroom knowledge to actual situations in the field.

Requirements for Criminal Justice Studies major

I. Core courses (24 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 340</td>
<td>Concepts of Penology</td>
<td>4</td>
</tr>
<tr>
<td>CRIM 351</td>
<td>Seminar in Criminal Behavior</td>
<td>4</td>
</tr>
<tr>
<td>POLS 232</td>
<td>Judicial Processes</td>
<td>2</td>
</tr>
<tr>
<td>POLS 417</td>
<td>American Civil Liberties</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 342</td>
<td>Abnormal Psychology</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 245</td>
<td>Crime and Society</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 344</td>
<td>Deviance and Society</td>
<td>4</td>
</tr>
</tbody>
</table>

II. Electives (20 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 312</td>
<td>Violence and Culture</td>
<td>4</td>
</tr>
<tr>
<td>CRIM 322</td>
<td>Juvenile Justice</td>
<td>2</td>
</tr>
<tr>
<td>CRIM 332</td>
<td>Focusing on Police</td>
<td>2</td>
</tr>
<tr>
<td>CRIM 400</td>
<td>Special Topics in Criminal Justice</td>
<td>2-4</td>
</tr>
<tr>
<td>CRIM 450</td>
<td>Independent Study</td>
<td>1-4</td>
</tr>
<tr>
<td>CRIM 470</td>
<td>Field Work in Criminal Justice</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 220</td>
<td>Introduction to Geographic Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 281</td>
<td>Ethics</td>
<td>4</td>
</tr>
<tr>
<td>POLS/SOCI 230</td>
<td>Introduction to Data Analysis and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 242</td>
<td>Approaches to Law</td>
<td>4</td>
</tr>
<tr>
<td>POLS 273</td>
<td>Terrorism and International Security</td>
<td>4</td>
</tr>
<tr>
<td>POLS 313</td>
<td>State and Local Politics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 316</td>
<td>American Constitutional Law and Politics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 355</td>
<td>Public Policy</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 282</td>
<td>Social Psychology</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 235</td>
<td>Socialization</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 242</td>
<td>Social Problems</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 253</td>
<td>Social Welfare Institutions</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 343</td>
<td>Race and Ethnicity</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 431</td>
<td>Research Design and Strategies</td>
<td>4</td>
</tr>
</tbody>
</table>

III. Institutes

In addition to completing the foregoing courses, the Criminal Justice Studies major is required to attend at least two institutes. These are normally offered once a year for a day to a day and a half. They deal with specific issues facing professionals in the criminal justice area.

Total credit hours 44

Note: Students may find that knowledge of Spanish is useful in the criminal justice field.
Requirements for Criminal Justice Studies minor

I. Core Courses (22 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRIM 340</td>
<td>Concepts in Penology</td>
<td>4</td>
</tr>
<tr>
<td>POLS 110</td>
<td>American Politics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 232</td>
<td>Judicial Process</td>
<td>2</td>
</tr>
<tr>
<td>SOCI 110</td>
<td>Introduction to Sociology</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 245</td>
<td>Crime and Society</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 344</td>
<td>Deviance and Society</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total credit hours** 22

Dance

Alfred University’s Division of Performing Arts Dance Department offers students a rich and rewarding experience in the art of dancing and dance making. It is open to students of all levels, regardless of experience or past training who want to include a dance practice in their academic experience. The Program encourages cross-disciplinary work in collaboration with visual art, sound design, music, performance art, and theatre – drawing from strengths unique and specific to Alfred University.

Those students who want to pursue deeper studies in dance can minor in dance. The dance minor is a composition and performance based program that develops artistry in contemporary dance, site specific performance, and dance theater. Students can take classes in composition, improvisation, site specific composition, site specific performance, modern dance, ballet, jazz, dance history, repertory, and contact improvisation, as well as special topics classes.

The Marlin and Ginger Miller Dance Residency Program brings nationally acclaimed dance companies, choreographers, and artists to AU, offering phenomenal opportunities for students to work and learn with artists of the highest caliber.

Beyond the classroom, AU has a thriving student dance culture with a variety of dance clubs such as Middle Eastern Dance, Alfred to Asia, Swing Dance, and Alfred Steppas. Auditions for all productions and performance groups are open to all students, regardless of academic major or experience.

Requirements for the Dance minor:

**Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 120</td>
<td>Fundamentals of Dance</td>
<td>2</td>
</tr>
<tr>
<td>DANC 222</td>
<td>Modern I</td>
<td>2</td>
</tr>
<tr>
<td>DANC 230</td>
<td>Improvisation/Composition I</td>
<td>3</td>
</tr>
<tr>
<td>DANC 211</td>
<td>Dance History</td>
<td>4</td>
</tr>
<tr>
<td>DANC 270</td>
<td>Alfred University Dance Theatre (taken twice)</td>
<td>4</td>
</tr>
<tr>
<td>DANC 330</td>
<td>Improvisation/Composition II</td>
<td>3</td>
</tr>
</tbody>
</table>

*or* DANC 331 Site Specific Composition (can be an elective)

**Electives in Dance (select 6 credit hours)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 200</td>
<td>Special Topics</td>
<td>1-4</td>
</tr>
<tr>
<td>DANC 221/321</td>
<td>Ballet I and II</td>
<td>2</td>
</tr>
<tr>
<td>DANC 223/323</td>
<td>Jazz Dance I and II</td>
<td>2</td>
</tr>
<tr>
<td>DANC 224</td>
<td>Contact Improvisation</td>
<td>2</td>
</tr>
<tr>
<td>DANC 322</td>
<td>Modern Dance II</td>
<td>2</td>
</tr>
<tr>
<td>DANC 340</td>
<td>New and Existing Repertory</td>
<td>3</td>
</tr>
<tr>
<td>DANC 450</td>
<td>Independent Study</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Total credit hours** 24

Note: If DANC 120 is waived because of an equivalent background in dance, the minor requires 22 credit hours.
Economics

The primary objective of the economics minor is to study economic problems, theories, and policies within the context of the liberal arts educational tradition.

Requirements for a minor in Economics:
- ECON 201 Principles of Microeconomics 4
- ECON 202 Principles of Macroeconomics 3
- ECON 460 Seminar in Economics 3
- Two additional upper division economics courses (ECON 300 and above) 6
- **Total credit hours** 16

English

The study of English fosters critical thought and imaginative insight. It also heightens an awareness and appreciation of the power, beauty, and passion of the written word. Class discussions increase students’ opportunity, in Thoreau’s words, to “live deliberately.”

The mission of the Division of English is to offer instruction in the western canon and non-canonical and world literatures, integrating these studies with creative writing courses in poetry, fiction, nonfiction and playwriting. The Division of English is dedicated to the teaching of analysis, critical reflection and creative thought, problem solving, and communication within the context of a liberal arts education in order to meet the complex needs of a diverse university community.

We encourage students to recognize the intellectual, social, and historical contexts of human experience, demonstrating how we might question and articulate the values, ideologies, and assumptions inherent in any human enterprise. We are also committed to teaching all university students the analytic writing skills they need in order to articulate a cultural literacy in an ever-shrinking, diverse world.

Requirements for the major

The major serves both the student who regards the study of English as a vital component of a liberal arts education and the future critic and writer. English majors graduate to pursue careers in teaching, writing, advertising, public relations, publishing, college administration, business, and related fields, or they go on to graduate schools in literature, writing, communications, journalism, library science, law, and business.

English majors are encouraged to assume responsibility for the direction of their education by developing a course of study based on their goals. From the numerous courses offered (see listings in the back of catalog), a total of 40 semester hours in English is required.

Students must complete 14 hours of study at the 300 level, as follows: ENGL 328, The Language of Literary Art; ENGL 325, Survey of British Literature I; ENGL 326, Survey of British Literature II; ENGL 327, Survey of American Literature. A minimum of 26 additional credit hours must be drawn from literature and writing courses at the 400 level.

Of the 40 required hours, up to half (20 hours) may be taken in creative writing. ENGL 496, English Honors Thesis, is required only for those students seeking Honors in English and may be counted toward the minimum of 40 hours required for
the major. ENGL 450, Independent Study, may not be counted toward the minimum of 40 hours required for the major.

ENGL 102, Writing II, is strongly recommended as a foundation course for all English majors. The Division of English also strongly recommends that English majors complete the intermediate level of a foreign language. Students may count one literature course (300 level or above) taken in a foreign language towards the English major.

Prerequisites: ENGL 328, The Language of Literary Art, for advanced writing courses, or a 200 level creative writing course; either ENGL 325 & 326, Surveys of British Literature I&II, or ENGL 327, Survey of American Literature, for advanced literature courses.

**Total Credit Hours:** 40

Note: Students who are not majors or minors in English but who wish to take English courses must fulfill the prerequisite of a 200 level literature course before taking an advanced literature course, or a 200 level creative writing course before taking an advanced creative writing course.

**Minors**

The English Division offers minors in Literature and in Writing. ENGL 102, Writing II, is strongly recommended as a foundation course for both minors. ENGL 325 & 326, Surveys of British Literature I&II, or ENGL 327, Survey of American Literature, is also strongly recommended for writing minors.

**Requirements for a minor in Literature:**

20 credits of course work, 8 of which must include ENGL 325 & 326, Surveys of British Literature I&II, or ENGL 327, Survey of American Literature, and one other 200 level literature course. 10-12 additional credits must be selected from 400 level courses in literature.

**Prerequisites:** One 200 level literature course must be completed before beginning 300-level courses.

**Total Credit Hours:** 20

Note: ENGL 450, Independent Study, cannot be counted toward the minor in Literature.

**Requirements for a minor in Writing:**

20 credits of course work, 8 of which must include ENGL 328, The Language of Literary Art, and a 200 level writing course. 12 additional credits must be selected from 400-level courses in writing.

**Prerequisites:** A 200 level creative writing course is a prerequisite for all advanced creative writing courses. Majors and Minors must also take ENGL 328, The Language of Literary Art.

**Total Credit Hours:** 20

Note: ENGL 450, Independent Study, cannot be counted toward the minor in Writing.

**Environmental Studies**

Since technological advances in our society have been accompanied by many life-threatening effects upon our physical surroundings, it has become a good citizen’s responsibility to understand major environmental concepts. Some of us will pursue careers on behalf of the environment, trying to determine our species’ suitable place within it.
The Environmental Studies major offers a multidisciplinary background and encourages looking at environmental problems from several points of view. Environmental projects and field experiences augment classroom learning. Faculty members are drawn from biology, geology, geography, mathematics, psychology, chemistry, political science, economics, and sociology.

Students have the option of choosing an Environmental Studies major with either a natural science, social science, or environmental science emphasis. Environmental Studies majors strongly interested in environmental careers or graduate training are encouraged to also complete requirements for a full major or minor in a traditional academic discipline. Many of the same courses will meet the requirements of both majors.

The primary missions of the Division of Environmental Studies at Alfred University are to educate our students and to engage in research that furthers our understanding of the natural environment. These two activities are mutually supportive.

We are a Division of Environmental Studies, so our approach toward teaching and research is to integrate the several disciplines in the natural and social sciences and humanities that make up the field. We practice the team approach taken in modern environmental problem solving in both teaching and research. Our students learn to tackle environmental problems as a team of experts, each contributing his/her own specialty to the group effort.

We use contemporary methods of “learning by doing” and team-teaching to provide our students with a multi-faceted, practical foundation that they can build on with advanced study or work experience. We strive to provide the latest technologies for our students, and orient our curriculum in such a way as to give them experience using contemporary procedures, approaches, techniques, and instruments. We expect our students to graduate with a good understanding of theoretical aspects of our field and the ability to apply that understanding to practical situations. Our goal is to prepare students for rigorous graduate programs and/or to be successful in a competitive job market.

Our faculty engage in scholarly activities that lead to a better understanding of the environment and the effects that humans have on the environment. We often work on research projects in teams and expect our students to be involved in research with us whenever possible, depending on the nature of specific research projects. When appropriate, we use our expertise to benefit the local community and undertake research projects with our students that will have a positive impact on the local environment.

**Requirements for the major – Natural Science Emphasis**

**A. Core requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 101</td>
<td>Environmental Studies I – Natural Science</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 102</td>
<td>Environmental Studies II – Social Science</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 205</td>
<td>Environmental Data Analysis</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 240</td>
<td>Environmental Research Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 241</td>
<td>Environmental Research Procedures II</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 360</td>
<td>Junior Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENVS 440</td>
<td>Environmental Research Planning</td>
<td>2</td>
</tr>
<tr>
<td>ENVS 490</td>
<td>Senior Seminar</td>
<td>2</td>
</tr>
<tr>
<td>ENVS 499</td>
<td>Senior Year Project</td>
<td>2-4</td>
</tr>
<tr>
<td>ENVS 415</td>
<td>Natural Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>POLS 214</td>
<td>Politics and Environment</td>
<td>2</td>
</tr>
</tbody>
</table>
B. Breadth requirements

Two courses from among the following:

- BIOL 201 Biology I 4
- CHEM 105 General Chemistry I 4
- ENVS 220 Introduction to Geographic Information Systems 4
- GEOL 101 This Dynamic Earth 4
- PHYS 111 Introductory General Physics I 4
  or PHYS 125 Physics I 4

Two courses from among the following:

- ANTH 110 Cultural Anthropology 4
- ECON 201 Principles of Microeconomics 4
- ECON 312 Environmental Economics 3
- ENGL 293 Writers Gone Wild: Literature and the Environment 4
- ENVS 201 Environmentalism 2
- ENVS 204 Environmental History 2
- ENVS 245 Spirituality and the Environment 2-4
- HIST 308 Americans and Their Environment 4
- PHIL 281 Ethics 4
- POLS 345 International Environmental Politics 4
- POLS 411 Bureaucracy 4

C. Natural Science emphasis electives

Three courses (at least 11 credits) from among those listed, with no more than two 100-level courses.

- BIOL 202 Biology II 4
- BIOL 311 Invertebrate Zoology 4
- BIOL 322 Botany 4
- BIOL 345 Vertebrate Natural History 4
- BIOL 354 Ecology 4
- BIOL 356 Aquatic Ecology 4
- CHEM 106 General Chemistry II 4
- CHEM 310 Basic Organic Chemistry 3
  or CHEM 315 Organic Chemistry I 4
- CHEM 316 Organic Chemistry II 4
- CHEM 321 Introduction to Analytical Chemistry 4
- ENVS 320 Advanced GIS Applications 4
- ENVS 351 Environmental Biogeochemistry 4
- GEOL 201 Surficial Geology 4
- GEOL 301 Structural Geology 4
- GEOL 307 Stratigraphy and Sedimentation 4
- GEOL 464 Hydrogeology 4
- PHYS 112 Introductory General Physics II 4
  or PHYS 126 Physics II 4

Requirements for the major – Social Science Emphasis

A. Core requirements

- ENVS 101 Environmental Studies I – Natural Science 4
- ENVS 102 Environmental Studies II – Social Science 4
- ENVS 205 Environmental Data Analysis 4
  or POLS/SCI 230 Introductory Data Analysis and Statistics 4
  or PSYC 220 Psychological Methods & Statistics 4
  or BUSI 113 Business Statistics 4
- ENVS 240 Environmental Research Procedures I 3
- ENVS 241 Environmental Research Procedures II 3
- ENVS 360 Junior Seminar 1
- ENVS 440 Environmental Research Planning 2
ENVS 490 Senior Seminar 2
ENVS 499 Senior Year Project 2
ENVS 415 Natural Resources Management 3
POLS 214 Politics and Environment 2

B. Breadth requirements
Two courses from among the following:
Biol 201 Biology I 4
Chem 105 General Chemistry I 4
ENVS 220 Introduction to Geographic Information Systems 4
Geol 101 This Dynamic Earth 4
Phys 111 Introductory General Physics I 4
or Phys 125 Physics I 4

C. Social Science emphasis electives
16 credits from among the following:
Anth 110 Cultural Anthropology 4
Econ 201 Principles of Microeconomics 4
Econ 202 Principles of Macroeconomics 3
Econ 312 Environmental Economics 3
Engr 293 Writers Gone Wild: Literature and the Environment 4
ENVS 201 Environmentalism 2
ENVS 204 Environmental History 2
ENVS 245 Spirituality and the Environment 2-4
ENVS 320 Advanced GIS Applications 4
Hist 308 Americans and Their Environment 4
Phil 281 Ethics 4
Pols 313 State and Local Politics 4
Pols 411 Bureaucracy 4
Psych 282 Social Psychology 4

Requirements for the major – Environmental Science Track
A. Core requirements
ENVS 101 Environmental Studies I – Natural Science 4
ENVS 102 Environmental Studies II – Social Science 4
ENVS 205 Environmental Data Analysis 4
ENVS 240 Environmental Research Procedures I 3
ENVS 241 Environmental Research Procedures II 3
ENVS 360 Junior Seminar 1
ENVS 440 Environmental Research Planning 2
ENVS 490 Senior Seminar 2
ENVS 499 Senior Year Project 2
Math 151 Calculus I 4

B. Breadth requirements
Twenty credit hours from the following:
Biol 201 Biology I 4
Chem 105 General Chemistry I 4
Chem 106 General Chemistry II 4
ENVS 220 Introduction to Geographic Information Systems 4
Geol 101 This Dynamic Earth 4
Math 152 Calculus II 4
Phys 111 Introductory General Physics I 4
or Phys 125 Physics I 4
Phys 112 Introductory General Physics II 4
or Phys 126 Physics II 4
C. Depth requirements

*Three Courses (totaling at least 11 credit hours) from the following:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 322</td>
<td>Botany</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 354</td>
<td>Ecology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 356</td>
<td>Aquatic Ecology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 310</td>
<td>Basic Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 315</td>
<td>Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Introduction to Analytical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 320</td>
<td>Advanced GIS Applications</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 351</td>
<td>Environmental Biogeochemistry</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 201</td>
<td>Surficial Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 464</td>
<td>Hydrogeology</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 415</td>
<td>Natural Resources Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Requirements for the Environmental Studies minor

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 101</td>
<td>Environmental Studies I – Natural Science</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 102</td>
<td>Environmental Studies II – Social Science</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 240</td>
<td>Environmental Research Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 241</td>
<td>Environmental Research Procedures II</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus, 8 credits of electives, selected by the student and minor advisor, chosen from the lists of natural science and social science electives (see above) and integrated to meet the student’s objectives in environmental study.

**Total credit hours 22**

*Note: Nearby Alfred State College offers a number of applied courses in a variety of environmental areas. With permission, selections from among these offerings may be taken for transfer credit at Alfred University. Advisors can assist in such course selections; in some cases these may substitute for courses listed above.*

Equestrian Studies

Students can combine a major from any division of the University with a minor in Equestrian Studies in order to meet their own personal goals and vision. For example combining Equestrian Studies with Business Administration enables a student to run a training operation, open a tack shop or other small equine-related business, or be able to handle accounting, marketing or sales for a large breeding operation. Students who choose to combine Psychology and Equestrian Studies can work towards certification in equine-assisted therapy. The Alfred University Equestrian Program is designed to offer students the opportunity to define their own needs and goals, and then create a career plan that assists them in achieving it.

Requirements for the minor in Equestrian Studies

The minor requires a total of 16 credit hours. Choose at least 8 credits of theory courses and 4 credits of practical (activity) courses. The remaining 4 credits may be selected from either category.

**Theory Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQU 201</td>
<td>The Art and Theory of Equitation</td>
</tr>
<tr>
<td>EQU 205</td>
<td>Introduction to Equine Science</td>
</tr>
<tr>
<td>EQU 210</td>
<td>Methods of Teaching English Riding</td>
</tr>
<tr>
<td>EQU 211</td>
<td>Methods of Teaching Western Riding</td>
</tr>
<tr>
<td>EQU 215</td>
<td>Equine Management</td>
</tr>
<tr>
<td>EQU 216</td>
<td>Horse Show Management</td>
</tr>
<tr>
<td>EQU 218</td>
<td>Judging Horse Shows</td>
</tr>
<tr>
<td>EQU 220</td>
<td>History of the Horse</td>
</tr>
</tbody>
</table>
College of Liberal Arts and Sciences

EQUS 223  Hunter and Jumper Course Design
EQUS 225  Equine Nutrition
EQUS 200  Special Topics (theory/classroom topics)

Activity Courses (2 credit hours each)
EQUS 100  Special Topics (activity courses for PE credit)
EQUS 101-104  English Riding, Levels I, II, III, and IV
EQUS 105  Introduction to Dressage
EQUS 107  Combined Training
EQUS 110-113  Western Riding, Levels I, II, III, and IV
EQUS 115  Dressage II
EQUS 118  Introduction to Reining
EQUS 120-121  Draft Horse Driving I and II
EQUS 125  Introduction to Show Jumping

General Science

Requirements for the major
I. Breadth
Take all of these courses:
BIOL 201  Biology I 4
BIOL 202  Biology II 4
CHEM 105  General Chemistry I 4
CHEM 106  General Chemistry II 4
ENVS 101 Environmental Studies I - Natural Science 4
MATH 151  Calculus I 4
MATH 152  Calculus II 4
Take two of the following:
GEOL 101  This Dynamic Earth 4
GEOL 104  Earth and Life Through Time 4
GEOL 105  Energy, Minerals, Water Resources and the Environment 4
GEOL 201  Surficial Geology 4
Take one of the following sequences of courses
PHYS 111/112  Introductory General Physics I and II (4 each) 8

or
PHYS 125/126  Physics I and II (4 each) 8

II. Depth
A minimum of 10 credits at the 300 level or above from the one of the disciplines represented above.

Geology

Studying geology helps students to gain an appreciation for their planet, its history, and the processes which operate within it. Students may select courses for enjoyment, choose courses in conjunction with other studies, or take courses in preparation for careers in geology. The major provides a background useful for employment or further studies in geology or a related field such as environmental studies, physical geography, planning, engineering, law or business. A geology major includes an introductory level course; required courses in structural geology, mineralogy and petrology; advanced studies; and field experience.
The Department of Geology’s mission is to provide students in all geoscience courses (major or non-major) with an appreciation and understanding of the earth’s physical environment (geosphere, hydrosphere, atmosphere) and the interconnectedness between these systems. Because there are many aspects of the earth and its history that cannot be directly observed, part of our mission is to instill in our students an understanding of how the present models explaining the structure, composition, and history of the earth were derived.

Students in geology courses will gain basic knowledge and skills that will allow them to pursue professions in a variety of areas of geoscience, including teaching, graduate school, industry, government, and private consulting.

**Requirements for the major**

**Choose one introductory course from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101</td>
<td>This Dynamic Earth</td>
</tr>
<tr>
<td>GEOL 103</td>
<td>Earthquakes and Volcanoes</td>
</tr>
<tr>
<td>GEOL 106</td>
<td>Elementary Oceanography</td>
</tr>
<tr>
<td>GEOL 109</td>
<td>The Physical World</td>
</tr>
</tbody>
</table>

**and take the following four courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 201</td>
<td>Surficial Geology</td>
</tr>
<tr>
<td>GEOL 301</td>
<td>Structural Geology</td>
</tr>
<tr>
<td>GEOL 302</td>
<td>Mineralogy and Petrology</td>
</tr>
<tr>
<td>GEOL 464</td>
<td>Hydrogeology</td>
</tr>
</tbody>
</table>

*or* ENVS 351  Environmental Biogeochemistry  4

**Total Credit Hours**  20

**General Geology Track:**

In addition to the above 20 credit hours required for all tracks, take:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 205</td>
<td>Environmental Data Analysis</td>
</tr>
<tr>
<td>GEOL 304</td>
<td>Field Methods (or other approved field camp)*</td>
</tr>
</tbody>
</table>

*and 8 credits selected from the following:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 220</td>
<td>Introduction to Geographic Information Systems</td>
</tr>
<tr>
<td>ENVS 320</td>
<td>Advanced GIS Applications</td>
</tr>
<tr>
<td>ENVS 351</td>
<td>Environmental Biogeochemistry (if not used above)</td>
</tr>
<tr>
<td>GEOL 307</td>
<td>Stratigraphy and Sedimentation</td>
</tr>
<tr>
<td>GEOL 408</td>
<td>Tectonics</td>
</tr>
<tr>
<td>GEOL 414</td>
<td>Geophysics</td>
</tr>
<tr>
<td>GEOL 440</td>
<td>Glacial Geology</td>
</tr>
<tr>
<td>GEOL 464</td>
<td>Hydrogeology (if not used above)</td>
</tr>
</tbody>
</table>

**Total Credit Hours for General Track Geology Major**  34

**Planetary Science Track**

In addition to the above 20 credit hours required for all tracks, take:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 302</td>
<td>Planetary Science</td>
</tr>
<tr>
<td>CHEM 105</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 106</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>MATH 151</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Calculus II</td>
</tr>
</tbody>
</table>

*and 8 credits selected from the following:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEMS 235</td>
<td>Thermodynamics of Materials</td>
</tr>
<tr>
<td>CEMS 251</td>
<td>Mechanics of Materials</td>
</tr>
<tr>
<td>CHEM 343</td>
<td>Physical Chemistry I</td>
</tr>
<tr>
<td>CHEM 346</td>
<td>Physical Chemistry II</td>
</tr>
<tr>
<td>GEOL 408</td>
<td>Tectonics</td>
</tr>
</tbody>
</table>

**Total Credit Hours for Planetary Science Track Geology Major**  42
College of Liberal Arts and Sciences

GEOL 414  Geophysics                  4
GEOL 464  Hydrogeology (if not used above)  4
**Total Credit Hours for Planetary Science Track Geology Major**  46

**Earth Science Education Track**
In addition to the above 20 credit hours required for all tracks, take:
MATH 102  Mathematics for Early Childhood/Childhood Teachers  4
GEOL 304  Field Methods (or other approved field camp)*  2
and 8 credits selected from the following:
ASTR 103  Introductory Astronomy  4
ASTR 107  Elementary Astronomy Lab  2
ENVS 220  Introduction to Geographic Information Systems  4
ENVS 320  Advanced GIS Applications  4
ENVS 351  Environmental Biogeochemistry (if not used above)  4
GEOL 307  Stratigraphy and Sedimentation  4
GEOL 408  Tectonics  4
GEOL 414  Geophysics  4
GEOL 464  Hydrogeology (if not used above)  4
SCIE 110  Weather Elements  2
**Total Credit Hours for Earth Science Education Track Geology Major**  34

*Other field activities may be used to fulfill this requirement. Arrangements should be made prior to the end of the junior year.

**Requirements for the minor in Geology**
A Geology minor may be obtained by completing (with grades of “C” or better), one 100-level geology course and 16 credit hours of upper level geology courses. These may include CEMS 214 or CEMS 215. Total credit hours required: 20.

**Gerontology**

Our nation is “graying” at an alarming rate. In 2004, seniors aged 65+ comprised about 12% of the U.S. population, estimated to be around 36.3 million people. By 2050, this number will jump to about 21% or 87 million individuals, so that 1 out of every 5 Americans will be 65 years old or older! As these generations retire, there will be an increased demand for professionals in a wide variety of fields who understand issues related to the aging process. Service for the aging is already one of the fastest growing job markets.

Gerontology is the study of aging, including the biological, psychological, and sociological aspects of the aging process. It includes the study of changes in adults as they age, the ways that society changes with an aging population, and the ways we apply this information to programs and policies for older adults.

The Gerontology major at AU will help provide you with the skills and background needed in today’s job market. In our program, you will study aging from the psychological, sociological, biological, and political perspectives, and learn about current “hot” topics facing our country, such as health care, Social Security, and the impact of an aging population. Our multiple community connections will provide you with opportunities to gain hands-on experience through supervised internships.
Requirements for the major
Complete all of the following:
GERO 118  Introduction to Adult Development and Aging  4
BIOL 119  Physiology of Aging  4
PSYC 210  Communication and Counseling Skills  2
PSYC 371  The Psychology of Death and Dying  4
GERO 429  Cognition and Aging  2
GERO 485  Gerontology Internship  4
SOCI 348  Sociology of Families  4
Select one course from each of the following three groups:
PSYC 220  Psychological Methods and Statistics  4
SOCI 230  Intro to Data Analysis and Statistics  4
SOCI 253  Social Welfare Institutions  4
POLS 355  Public Policy  4
PSYC 322  Health Psychology  2-4
GERO 300  Special Topics in Gerontology  2
GERO 450  Independent Study  2-4
GERO 497  Senior Seminar in Gerontology  2
Total credit hours  36

Requirements for the minor
Complete all of the following:
GERO 118  Introduction to Adult Development and Aging  4
GERO 429  Cognition and Aging  2
GERO 485  Gerontology Internship  4
Complete one course from each of the following four groups:
BIOL 119  Physiology of Aging
PSYC 322  Health Psychology
PSYC 210  Communication and Counseling Skills
PSYC 371  The Psychology of Death and Dying
SOCI 253  Social Welfare Institutions
SOCI 348  Sociology of Families
POLS 355  Public Policy
GERO 450  Independent Study
GERO 300  Special Topics in Gerontology
GERO 497  Senior Seminar in Gerontology
Total credit hours  20

Global Studies
The interdisciplinary Global Studies major fosters international awareness of the variety, complexity, and interconnectedness of modern populations ranging from ethnic groups to nation-states by exposing students to diverse disciplinary perspectives and encouraging international study abroad experience. The major includes a required Introduction to Global Studies, a broad selection of core courses in contemporary global issues across the curriculum, advanced study in foreign language and a capstone global issues seminar emphasizing original research based on study abroad experience. Students have a choice of three tracks: General Global Studies; International Relations; or International Business.
Requirements for Global Studies major

I. Foundation Courses (Required)

Modern Languages: second year competency (up to 8 hours)

Study Abroad: one or two semesters recommended

OCST 301 Study Abroad Preparation and Review 2
ANTH 110 Cultural Anthropology 4
ECON 201 Principles of Microeconomics 4
or ECON 202 Principles of Macroeconomics 3
GLBS 101 Introduction to Global Studies 4
GLBS 495 Global Issues Seminar 4
HIST 107 The World in the 20th Century 4
POLS 271 World Politics 4

II. Tracks and Electives

Complete one of three tracks:

1. General Global Studies Track: Choose 16 elective credits from at least two of the Categories 1-6, including at least 2 courses at the 300 or 400 level.

2. International Relations Track: Choose 16 elective credits from the Categories 1, 2, 3, and 4, including at least 2 courses at the 300 or 400 level.

3. International Business Track: Choose 15 elective credits from Category 3, including at least 2 courses at the 300 or 400 level.

Categories of Electives

1. History

HIST 111 Modern Western History 4
HIST 151 The Rise and Fall of Iberia, 1450-1950 4
HIST 300 Topics in History (upon approval by Director) 1-4
HIST 301 America in War during the 20th Century 4
HIST 302 The Vietnam War 4
HIST 316 Twentieth-Century Europe 4
HIST 322 Churchill, Stalin, Roosevelt, Hitler 2
HIST 371 American Diplomacy, 1763-1898 2
HIST 372 America as a World Power, 1898-Present 4
HIST 383 The Nazi Holocaust 2
HIST 387 Modern France 4

2. Political Science

POLS 251 European Politics 4
POLS 253 Dictatorship and Democracy 4
POLS 273 Terrorism and International Security 4
POLS 282 Latin American Politics 4
POLS 200/300/400 Special Topics (upon approval) 1-4

3. Economics and Business

ECON 201 Principles of Microeconomics 4
ECON 202 Principles of Macroeconomics 3
FIN 458 International Financial Management 3
BUSI 457 International Business 3
MKTG 489 International Marketing 3
ECON/BUSI/ FIN 200/300/400 Special Topics (upon approval) 3

4. Cultural Anthropology/Interdisciplinary Studies

ANTH 303 Health and Culture 4
ANTH 304 Language and Culture 4
ANTH 309 Magic and Religion 4
ANTH 312 Violence and Culture 4
ANTH 320 The Islamic World 4
ANTH 470 Field Work 2-4
ANTH 200/300/400 Special Topics in Anthropology 1-4
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 210</td>
<td>Global Perspective: Paris</td>
<td>2</td>
</tr>
<tr>
<td>FREN 313</td>
<td>French-Speaking Africa</td>
<td>4</td>
</tr>
<tr>
<td>FREN 316</td>
<td>Contemporary French Culture</td>
<td>4</td>
</tr>
<tr>
<td>GRMN 316</td>
<td>German History and Culture</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 210</td>
<td>Pilgrims and Tourists Santiago</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 212</td>
<td>Buenos Aires: Literature and the Arts</td>
<td>2</td>
</tr>
<tr>
<td>WMST 200/300/400</td>
<td>Special Topics (upon approval)</td>
<td>1-4</td>
</tr>
</tbody>
</table>

5. Art/Literature/Communications

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 121</td>
<td>Wild Spirits and Divine Kings</td>
<td>2</td>
</tr>
<tr>
<td>ARTH 123</td>
<td>Art of China</td>
<td>2</td>
</tr>
<tr>
<td>ARTH 124</td>
<td>Native American Arts: Spirited Materials and Tech.</td>
<td>2</td>
</tr>
<tr>
<td>ARTH 300-400</td>
<td>Topics Art History (upon approval)</td>
<td>2-4</td>
</tr>
<tr>
<td>ARTH 301</td>
<td>African Art I</td>
<td>4</td>
</tr>
<tr>
<td>ARTH 302</td>
<td>African Art II</td>
<td>4</td>
</tr>
<tr>
<td>ARTH 363</td>
<td>Ceramics and Cultural Identity: Global Traditions &amp; Innovations</td>
<td>4</td>
</tr>
<tr>
<td>COMM 400</td>
<td>Topics in Communication</td>
<td>1-4</td>
</tr>
<tr>
<td>ENGL 251</td>
<td>World Literature I</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 252</td>
<td>Contemporary World Literature</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 381</td>
<td>International Women Writers</td>
<td>4</td>
</tr>
<tr>
<td>FREN 310</td>
<td>Reading French Texts</td>
<td>4</td>
</tr>
<tr>
<td>FREN 312</td>
<td>French Literature II</td>
<td>4</td>
</tr>
<tr>
<td>GRMN 313</td>
<td>German Literature II</td>
<td>4</td>
</tr>
<tr>
<td>IART 300</td>
<td>Studio Topics in Interdisciplinary Art</td>
<td>1-4</td>
</tr>
<tr>
<td>IART 300</td>
<td>Special Topics in Interdisciplinary Art</td>
<td>1-4</td>
</tr>
<tr>
<td>MUSC 211</td>
<td>World Music</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 312</td>
<td>Peninsular Culture and Literature II: 19th - 20th Century</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 316</td>
<td>Latin American Culture and Literature II</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 400</td>
<td>Topics in Hispanic Literature</td>
<td>1-4</td>
</tr>
<tr>
<td>SPAN 402</td>
<td>Readings in Modern Latin American Literature</td>
<td>4</td>
</tr>
<tr>
<td>THEA 210</td>
<td>The Performing Arts: A Global Perspective</td>
<td>4</td>
</tr>
</tbody>
</table>

6. Philosophy and Religion

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLGS 105</td>
<td>Introduction to World Religions</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 252</td>
<td>Judaism and Islam</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 265</td>
<td>Asian Religions: India, China, Japan</td>
<td>4</td>
</tr>
<tr>
<td>RLGS 305</td>
<td>Comparative Mythology</td>
<td>4</td>
</tr>
</tbody>
</table>

Total credit hours 48-50

Requirements for Global Studies minor

I. Foundation Courses (required)

Modern Languages: second year competency required
Study Abroad: at least one semester recommended
GLBS 101 Intro to Global Studies 4

II. Electives

After consultation with the Global Studies advisor/program director, choose 2 of these Global Studies core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 110</td>
<td>Cultural Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>HIST 107</td>
<td>The World in the 20th Century</td>
<td>4</td>
</tr>
<tr>
<td>POLS 271</td>
<td>World Politics</td>
<td>4</td>
</tr>
</tbody>
</table>

Eight additional credits at the 300 or 400 level from the Global Studies electives

Total credit hours 20
“Bunk,” Henry Ford called history. “A pack of tricks we play on the dead,” said the French writer Voltaire. And yet we all know that a society understands what it is and what it wants to be based on an understanding of what it has been. Our history shapes our identity.

Alfred University’s history program offers a thorough grounding in not only American society, but European and some non-Western societies as well. It covers eras of war and peace, and reform and revolution. It approaches the past by analyzing political, cultural, social, intellectual and military developments.

The program addresses the needs of both the student who regards historical study as a vital component of a general liberal arts education and the student who plans to become a professional historian. Recent graduates have gone into law, business, teaching, government service, professional sports, and advertising. We open doors for our history majors.

**Requirements for the major**

From the numerous courses offered (see listing and course descriptions on p. 224) a total of 34 credit hours in history is required. Of these hours, 26 must be drawn from the 300 or 400 level, and the student must complete eight hours in American and 8 hours in non-American history at the 300 or 400 level.

Total credit hours 34

**Requirements for the minor**

The minor in history requires completion of two General Education history courses, plus 12 credits of history at the 300 or 400 level.

Total credit hours 20

**Interdepartmental Major**

The Interdepartmental Major offers students flexibility in arranging a program to suit their individual interests, aspirations, and abilities.

The program is especially appropriate for a student with definite academic objectives which do not fit into other regular programs, or when a student’s objectives can be met through a broad, general course of studies. Students selecting this program need to work closely with their faculty advisors to be sure their appropriate professional and career goals are met.

In addition to the other college degree requirements, students in this major select an additional 40 credit hours from those disciplines covered by the General Education Program’s Areas of Knowledge (see p. 90), including at least four credit hours from each of the six areas. In selecting this total of 40 credit hours, students are not limited to the 100 - 200 level courses. Students are also required to complete 24 credit hours of academic course work at the 300 level or above. All courses to be counted in the major must have a grade of C or better.
Interdisciplinary Art

The major in Interdisciplinary Art, leading to the BA degree in the College of Liberal Arts and Sciences, combines studio work in the arts with studies in art history, art theory and criticism, and cultural studies. The program draws faculty from the College of Liberal Arts & Sciences and from the School of Art & Design in the NYS College of Ceramics.

Interdisciplinary Art majors develop technical and conceptual skills in the visual arts through studio work, while also learning how philosophical and historical perspectives can deepen and enrich the process and purposes of artmaking. The BA program is distinguished from the BFA program in the School of Art and Design by its emphasis on the cultural setting of the arts, its stress on questions of interpretation, its broad grounding in the general education program of the College of Liberal Arts and Sciences, and its interdisciplinary ties to the Divisions of Human Studies and Performing Arts. There is no portfolio requirement for admission to the Interdisciplinary Art program.

The student who wishes to prepare for a career in art therapy or in art education should consult an Advisor in the Interdisciplinary Art major for a proper selection of courses in Psychology or in Education. Recent graduates have opened their own studios, are working in museums and galleries, teaching art in secondary schools, and have entered graduate programs in the areas of art, art therapy and art conservation.

Requirements for the major:
Core requirements
IART 101-104 Interdisciplinary Art I-IV  16
PHIL 283 Philosophy of the Arts I       4
ARTH 100-level Art History            6
IART 460 Interdisciplinary Art Seminar 4
Total core requirements              30

In addition to the core requirements, students must complete one of the three concentrations below:

I Visual Arts Concentration
Visual studio electives (12 must be 300 level) 24
Theory elective                                      4
Art History elective                                4

II Art History and Theory Concentration
Art History electives                                16
Theory electives                                     8
Additional Art History/Theory electives              8
or 8 studio credits, with permission of advisor

III Performance Concentration
1. Studio Electives in THEA, DANC, MUSC, ART*        24
2. Theory Elective*                                  7-8
Total credit hours for the Major                   61-62

*Studio and Theory Elective: Should be chosen in consultation with advisor to form a unified curriculum in Performance. In Music, only 100 level courses count toward requirement.

Requirements for the Interdisciplinary Art minor
The Interdisciplinary Art minor consists of 20 credit hours. Students must complete the 8-credit core and one 12-credit concentration.
### Core:
The following courses are required:

- **IART 101** Interdisciplinary Art I    4
- **IART 102** Interdisciplinary Art II    4

### Visual Arts Concentration:

- **IART 103** Interdisciplinary Art III*    4
- **IART 104** Interdisciplinary Art IV*    4
- **Art History**
- **or PHIL 283** Philosophy of the Arts    4

*with permission of advisor, other art studios may be substituted.

### Performing Arts Concentration

- **IART 103** Interdisciplinary Art III*    4
- **IART 104** Interdisciplinary Art IV*    4
- **Art History**
- **or DANC 211** Dance History    4
- **or PHIL 283** Philosophy of the Arts    4

*with permission of advisor, courses in Lighting/Costume/Scenic Design, Directing/Acting/Improv Theatre, Dance or Music may be substituted.

### Art Theory/History Concentration

Courses in Art Theory and/or Art History 12

Total credit hours 20

## Mathematics

The mathematics program serves a variety of purposes:
- maintaining a vigorous and flexible program for mathematics majors
- providing the necessary mathematical foundations for engineering and science students
- offering an introduction to modern quantitative methods for students of management, economics, and the social sciences

The mathematics major gives the student a sound foundation in modern mathematics and its applications. The major is quite flexible, allowing for emphasis on pure or applied mathematics. In recent years mathematics majors have found excellent placement in a number of fields, including actuarial, computer applications and Ph.D. study.

### Requirements for the major

- **MATH 151** Calculus I    4
- **MATH 152** Calculus II    4
- **MATH 253** Calculus III    4
- **MATH 281** Problem Solving through Problems    4
- **MATH 271** Differential Equations    3
- **MATH 371** Linear Algebra    4
- **MATH 481** Modern Algebra    4
- **MATH 491** Advanced Calculus    4

*plus 6 credit hours in mathematics courses numbered above 240*

Total credit hours 37

Most students follow one of these three options:

### Business Option

The Business Option is for students preparing for a mathematics-oriented career in the business world. This option emphasizes statistical and decision-making techniques. Students are encouraged to take various business courses as electives, along with the following mathematics courses:
MATH 351  Introduction to Operations Research  
MATH 381  Mathematical Statistics  
MATH 421  Numerical Mathematics  

**Scientific Option**
The Scientific Option emphasizes the application of mathematics to the physical sciences. Interested students are advised to take science courses, such as physics, as electives, as well as the following mathematics courses:

- MATH 381  Mathematical Statistics  
- MATH 401  Advanced Engineering Mathematics  
- MATH 421  Numerical Mathematics  

**Middle Childhood/Adolescence Education Option**
This option is for students who plan a middle school or high school teaching career. In addition to the required Education program, students must take:

- MATH 381  Mathematical Statistics  
- MATH 461  Geometry  

**Requirements for the minor**
The minor in mathematics requires 22 credit hours of mathematics courses numbered 151 and above. It must include MATH 253 and at least one of these courses: MATH 351, MATH 371, MATH 401, MATH 481, MATH 491, MATH 421 and at least one other MATH course numbered 300 or above. Courses should be selected in consultation with the mathematics minor advisor.

| Total credit hours | 22 |

**Modern Languages**

An increasing number of careers demand proficiency in a second language. More students are choosing to study modern languages for professional enhancement every year. Others select foreign language study to broaden their intellectual horizons, to enjoy the literature of other countries and times, or to be able to travel with greater independence. Students in the College of Liberal Arts and Sciences are required to successfully complete the second semester of the first year of a foreign language or pass the placement exam. Students who plan to seek certification as foreign language teachers should consult the chair of the Education Division.

The Modern Languages Division offers majors in Foreign Language and Culture Studies (concentration in French) and in Spanish as well as minors in French and Spanish.

**Foreign Language and Culture Studies with a Concentration in French**
Foreign Language and Culture Studies with a concentration in French is an interdisciplinary major that requires 16 credits of upper-level French courses, an intermediate level in a second foreign language, and selection of courses in related fields such as French and Francophone history, art history, global studies or linguistics.

**Requirements for the major**
Students must take at least 20 credits taught in French. At least 20 credits for the major must be taken on the Alfred University campus.

<table>
<thead>
<tr>
<th>Core course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 302</td>
<td>Advanced French Grammar and Composition I</td>
</tr>
</tbody>
</table>
College of Liberal Arts and Sciences

Major level French courses
(FREN 202 or above or prior-approval by advisor) 16

Second Foreign Language
(Minimum of 8 credits at the 200-level or above) 8

Elective courses in related fields 12

Total Credit Hours 40

Note: All courses taken abroad or in affiliated fields (e.g. history, art history, or linguistics) must be pre-approved by the major advisor. Additional courses in French or another foreign language may count as electives.

Students majoring in Foreign Language and Culture Studies are encouraged to pursue some independent study and to spend at least a semester in a French language Study Abroad program.

Spanish
The Modern Languages Program offers a Spanish major giving students a proficiency in speaking, listening, reading, and writing. Through a core or requirements, Spanish majors acquire basic knowledge in three areas: Hispanic language, culture, and literature. Beyond this core, students are offered a series of elective courses allowing them to expand their knowledge in all three of the areas or to specialize in one.

Majors in Spanish decide to use their language proficiency in business, government service, teaching, or community services. Study abroad is strongly recommended for both majors and minors. The Study Abroad Office on campus will help students find a suitable program.

Requirements for the major in Spanish
(Prerequisites: SPAN 101, 102, 201, 202 or equivalent)

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 301</td>
<td>Advanced Conversation and Composition</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 311</td>
<td>Peninsular Culture and Literature I</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 312</td>
<td>Peninsular Culture and Literature II</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 315</td>
<td>Latin American Culture and Literature I</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 316</td>
<td>Latin American Culture and Literature II</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 360</td>
<td>Literary Theory Seminar</td>
<td>4</td>
</tr>
</tbody>
</table>

Elective Courses (choose 12 credit hours):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 400</td>
<td>Topics in Hispanic Literature</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 402</td>
<td>Readings in Modern Latin American Literature</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 404</td>
<td>Latinos/as in the United States</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 450</td>
<td>Independent Study</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Total credit hours 36

Plus, Spanish majors must complete a capstone exam given by the division.

It is expected that Spanish majors will pursue some independent study. Although not strictly required.

Requirements for the minor in French
(Prerequisites: FREN 101, 102, 201, 202 or equivalent)

Students wishing to minor in French take three required courses (FREN 301, FREN 302, FREN 310) for a total of 12 credit hours. They then select a minimum of 8 credit hours from the major level elective courses.

Total credit hours 20
Requirements for the minor in Spanish
(Prerequisites: SPAN 101, 102, 201, or equivalent)
SPAN 301 Advanced Conversation and Composition  4
SPAN 311 Peninsular Culture and Literature I  4
_or_ SPAN 312 Peninsular Culture and Literature II
SPAN 315 Latin American Culture and Literature I  4
_or_ SPAN 316 Latin American Culture and Literature II
SPAN 360 Literary Theory Seminar  4
Choose 4 credit hours from:  4
LING 120 Introduction to Linguistics
SPAN 202 Spanish IV
Or any of the Elective Courses listed above (SPAN 400, 402, 404, or 450)
Total credit hours 20

Music

Through the Division of Performing Arts Music Department, all AU students have many opportunities for musical study and performance, regardless of degree, major, or minor. In addition to introductory music theory and appreciation, students can take classes in piano and voice or study privately in voice or a variety of instruments including carillon. Students have unlimited access to fine pianos and practice rooms. String, woodwind and brass instruments are available for a modest rental fee.

Students can choose to participate in a variety of vocal and instrumental ensembles, both large and small. Most ensembles are open to all students. Select groups require auditions. Students also may choose to participate in smaller chamber groups.

The Division of Performing Arts offers a Music Minor.

Requirements for the Music minor
MUSC 110 Music Appreciation  4
MUSC 120 Music Theory I  4
MUSC 130 Class Piano I  2
MUSC 131 Class Piano II  2
MUSC 271-279 Music Ensembles  4
MUSC 101-108; 301-308 Private Lessons (on primary instrument or voice)  4
Note: Technique classes such as Beginning Voice, MUSC 132, may be substituted for one semester of private lesson.

Select 4 credit hours from:
MUSC 200 Special Topics  1-4
MUSC 211 World Music  4
MUSC 212 American Music  4
MUSC 213 Introduction to Jazz  2
MUSC 214 Reel Music in America  4
MUSC 220 Music Theory II  4
Total credit hours 24

Philosophy

Does the scientific view of the world mean that free will is an illusion? Can you ever really know anything for certain? What's the difference between knowing something and just believing it?
College of Liberal Arts and Sciences

Does reality in any way resemble the way it appears to us through our senses? Is religious belief rational? Why do we expect the future to resemble the past? What makes one society better or more just than another society? What makes life meaningful? These are a sample of the important and compelling questions that philosophy students engage.

The philosophy program acquaints students with the history of ideas, with classical and contemporary philosophical debates, and with methods of philosophical analysis. A student who graduates with a major in philosophy should be knowledgeable about the history of Western thought, have some acquaintance with non-Western thinking, be skilled in the analysis of arguments and texts, and be able to understand contemporary issues in their broader historical, intellectual, and cultural contexts. Philosophy asks questions that are foundational to other disciplines and philosophy students are encouraged to take interdisciplinary work.

Philosophy majors can pursue careers in any field requiring well-developed analytical and communication skills, including government, business and service professions. Philosophy is also excellent preparation for further studies in graduate and professional schools. Our recent philosophy graduates are pursuing careers in medicine, law, philosophy, teaching, politics and policy, and performance art.

Requirements for the major

Students choose one of two tracks:

**General Philosophy Track**

**Required Courses: 12 credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 282</td>
<td>Introduction to Logic</td>
<td>4</td>
</tr>
<tr>
<td>Choose 8 credits from the following courses:</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>PHIL 311</td>
<td>Greek Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 312</td>
<td>Modern Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 313</td>
<td>19th Century Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 314</td>
<td>20th Century Philosophy</td>
<td></td>
</tr>
</tbody>
</table>

(4 credits in “Topics” courses may be substituted with permission of the advisor.)

**Elective Courses: 20 credits (12 credits must be above 300-level)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL</td>
<td>Philosophy Electives</td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours 32

**Philosophy of Religions Track**

**Required Courses: 12 credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 281</td>
<td>Ethics</td>
<td>4</td>
</tr>
<tr>
<td>or PHIL 382</td>
<td>Philosophy of Religion</td>
<td></td>
</tr>
<tr>
<td>Choose 8 credits from the following courses:</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>PHIL 311</td>
<td>Greek Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 312</td>
<td>Modern Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 313</td>
<td>19th Century Philosophy</td>
<td></td>
</tr>
<tr>
<td>PHIL 314</td>
<td>20th Century Philosophy</td>
<td></td>
</tr>
</tbody>
</table>

(4 credits from “Topics” courses may be substituted with permission of the advisor.)

**Elective Courses: 24 credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL</td>
<td>Philosophy Electives (4 cr. must be 300-400 level)</td>
<td>8</td>
</tr>
<tr>
<td>RLGS</td>
<td>Religious Studies Electives (8 cr. must be 300-400 level)</td>
<td>16</td>
</tr>
</tbody>
</table>

Total credit hours 36
Requirements for the minor
The philosophy minor consists of 20 credits in philosophy. A minimum of 12 credit
hours must be at the 300 level or above. With permission of the minor advisor, a
student may substitute up to 4 credits of the 20 from a related discipline.

Physics

The physics major is for students who enjoy investigating the world around them by
applying quantitative methods and fundamental physical principles.

Appropriate preparation includes, if possible, high school physics and four years of
high school mathematics. The major is an intensive and individualized program in
both theoretical and experimental physics, designed to give each student sound
preparation for continuing exploration of pure or applied physics in either industry
or graduate school.

To ensure maximum flexibility in meeting student goals, four concentrations have
been devised, well-suited to the mix of experiences available at Alfred University.
All four make use of the core of courses outlined below but differ in the course
choices in the physics electives portion of the major. While allowing students to
concentrate in one area of physics, this plan makes it easier for them to complete a
major in physics while also majoring in one of several engineering curricula.

Concentrations are as follows:
General Physics – The concentration that allows maximum breadth in students’
physics preparation.
Astrophysics – This concentration makes use of the University’s considerable
astronomy resources through the Stull Observatory and our astronomy minor.
Solid State Physics – A concentration taking advantage of the materials-related
offerings of the Inamori School of Engineering in the NYS College of Ceramics.

Students interested in earning two degrees: a BA in Physics and a BS in Materials
Science and Engineering will find this option most attractive. (See special
requirements for “Double Degrees on p. 58.)
Mechanical Systems – This concentration includes the offerings in fluid mechanics,
thermodynamics, heat transfer, and vibrating systems of AU’s Mechanical
Engineering program. It is particularly appropriate for students seeking two degrees:
a BA in physics and a BS in Mechanical Engineering. (See special requirements for
“Double Degrees on p. 57.)

In addition to these concentrations, we encourage students interested in other
physics-related disciplines to discuss the possibilities of combining those interests
with our major program.

Core Requirements for the major
First and Second Years:
PHYS 125  Physics I       4
PHYS 126  Physics II      4
PHYS 325  Elementary Optics      2
PHYS 326  Elementary Modern Physics     2

Third and Fourth years:
PHYS 341  Advanced Physics Laboratory 2
PHYS 401  Quantum Physics 4
PHYS 421  Statistical and Thermal Physics 4
### College of Liberal Arts and Sciences

**PHYS 423**  
Advanced Mechanics  
4

**PHYS 424**  
Advanced Electricity and Magnetism  
4

*Plus a minimum of eight credit hours from one of the four concentrations:*

### General Physics concentration – 8 credits from among:
Any of the courses outlined in the other concentrations, with no more than four credits from any one concentration.

### Astrophysics concentration – 8 credits from among:
- **ASTR 302**  Planetary Science  2
- **ASTR 303**  Stellar Astronomy  3
- **ASTR 304**  Galactic Astronomy and Cosmology  4
- **ASTR 307**  Observational Astronomy  2

### Solid State Physics concentration – 8 credits from among:
- **CEMS 344**  Properties II: Electrical, Magnetic, and Optical  4
- **CEMS 347**  Spectroscopy  2
- **CEMS 349**  X-ray Characterization  2
- **CEMS 501**  Solid State Physics*  3
  *Seniors in good standing may, with permission of instructor, take a 500-level graduate course

### Mechanical Systems concentration – 8 credits from among:
- **MECH 321**  Thermodynamics II  3
- **MECH 324**  Fluid Mechanics I  3
- **MECH 415**  Mechanical Vibrations I  3
- **MECH 424**  Fluid Mechanics II  3

**Total credit hours**  38

### Requirements for the minor in Physics

Physics courses: PHYS 125 Physics I, PHYS 126 Physics II, PHYS 325 Elementary Optics, PHYS 326 Elementary Modern Physics and 8 hours of 300 and/or 400 level courses in physics (4 hours may be taken in astronomy).

*Note: Since 300 and 400 level physics courses are only offered in alternate years, careful scheduling is necessary. PHYS 125, 126, 325 and 326 should be completed by the end of the sophomore year.*

### Planetary Science

The minor in Planetary Science is offered by the Division of Environmental Studies/Geology and the Division of Physics/Astronomy. A student will have met the requirements for the minor after completing ASTR 302 and 12 credit hours of electives chosen from the courses below with a grade of C or better in each course. At least six credit hours must be 200-level or above.

- **ASTR 302***  Planetary Science  2

*Select 12 credit hours from the following
- **ASTR 103**  Introductory Astronomy  4
- **ASTR 107**  Elementary Astronomy Lab  2
- **ASTR 307**  Observational Astronomy  2
- **GEOL 101**  This Dynamic Earth  4
- **GEOL 110**  Lunar Geology  2
- **GEOL 201**  Surficial Geology  4
- **GEOL 210**  The Geology of Venus  2
- **GEOL 408**  Tectonics  4

**Total Credit Hours**  14
Political Science

The Political Science major attracts students who want to achieve a better understanding of the political environments that shape human interaction. Majors are introduced to the dynamics of politics both domestically and globally. Along with an understanding of political processes, they acquire a theoretical background for the study of political dynamics and the basic quantitative and qualitative tools for analyzing them. In addition to helping students prepare for graduate study, the major helps to prepare students for the world of work in government service, legal study, business, journalism, or teaching.

I. Core Courses for Political Science Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 110</td>
<td>American Politics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 220</td>
<td>Perspectives on Political Science</td>
<td>2</td>
</tr>
<tr>
<td>POLS 230</td>
<td>Introduction to Data Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>

II. Electives for Political Science Major

At least one course from each of the following three groups:

**American Politics:**
- POLS 313 State and Local Politics 4
- POLS 318 The Presidency 4
- POLS 331 Parties and Elections 4
- POLS 411 Bureaucracy 4

**Political Thought:**
- POLS 120 Great Issues in Politics 4
- POLS 340 Classical Political Theory 4
- POLS 341 Modern Political Theory 4
- POLS 346 American Political Thought 4

**Comparative and International Politics:**
- POLS 251 European Politics 4
- POLS 253 Dictatorship and Democracy 4
- POLS 271 World Politics 4
- POLS 282 Latin American Politics 4
- POLS 361 Political Development in the 3rd World 4

Fourteen additional credit hours in Political Science

**Total credit hours** 36

Political Science Major – Education Track

Students seeking to major in Political Science in preparation for a career in middle/adolescent education (grades 7-12) can combine a Political Science Education Track academic major with a minor in Education. The requirements for a Political Science Education Track major are listed below.

I. Core Courses for Political Science Major

<table>
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<tr>
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<tbody>
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<td>American Politics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 220</td>
<td>Perspectives on Political Science</td>
<td>2</td>
</tr>
<tr>
<td>POLS 230</td>
<td>Introduction to Data Analysis and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 271</td>
<td>World Politics</td>
<td>4</td>
</tr>
</tbody>
</table>

II. Electives for Political Science Major

At least one course from each of the following two groups:

**American Politics:**
- POLS 313 State and Local Politics 4
- POLS 318 The Presidency 4
- POLS 331 Parties and Elections 4
- POLS 411 Bureaucracy 4
Political Thought:
POLS 120  Great Issues in Politics  4
POLS 340  Classical Political Theory  4
POLS 341  Modern Political Theory  4
POLS 346  American Political Thought  4
Eight additional credit hours in Political Science

III. Two courses in related social sciences and geography
ECON 201  Principles of Microeconomics  4
GEOL 101  This Dynamic Earth  4
or GEOL 109  The Physical World  4

IV. Four Courses in History
HIST 110  The Making of Europe  4
HIST 111  Modern Western History  4
HIST 211  US History I  4
HIST 212  US History II  4
Total credit hours  54

Requirements for the minor in Political Science
POLS 110  American Politics  4
POLS 120  Great Issues in Politics  4
or POLS 271  World Politics  4
POLS 220  Perspectives on Political Science  2
Plus ten additional hours in Political Science
Total credit hours  20

Requirements for the minor in Public Law
POLS 110  American Politics  4
POLS 232  Judicial Processes  2
POLS 316  American Constitutional Law and Politics  4
POLS 417  American Civil Liberties  2
plus one course from the following:
POLS 242  Approaches to Law  4
POLS 313  State and Local Politics  4
SOCI 245  Crime and Society*  4
Total credit hours  16
*Four additional prerequisite credit hours if the student chooses SOCI 245

Psychology

The Psychology Program exposes students to the current theories and research in the field, emphasizing the importance of the scientific approach to the study of human behavior and mental states. The curriculum fosters communication skills and critical, scientific thinking about psychological issues. Students in the Psychology program have the opportunity to gain applied experience through supervised counseling skills training, directed research, independent study, and internships. Students in the program will be prepared for graduate education or entry into occupations which utilize knowledge of human behavior, such as counseling, education, law, medicine, and business.

Students who decide to major in Psychology will have comprehensive exposure to the discipline as well as the option to gain additional knowledge and skills related to specific areas of psychology. There are four program options for Psychology majors:
The *General Psychology Option* encourages breadth of study and allows flexibility in course selection that provides a general knowledge of human behavior and psychological functioning that is useful in many types of careers.

The *Clinical/Counseling Psychology Option* is for students who wish to have a career in the human services. This option offers basic counseling and clinical theory, supervised applied skills training and internship experience and prepares students for employment with various agencies or for graduate study in any of the clinical or counseling fields.

The *Experimental Psychology Option* emphasizes the scientific aspects of psychology, including theory, research methodology, statistical and laboratory skills. This option prepares students for Ph.D. study, and/or careers in primary or applied research (e.g., government or industrial research labs).

The *Child Psychology Option* is for students interested in the social and cognitive development of children from infancy through adolescence. The program includes a supervised experience working with children, either conducting research or applying counseling skills. This option prepares students for graduate study or employment in child-related fields.

**Requirements for the major**

**Option 1: General Psychology**

**Required courses:**
- PSYC 101  Introduction to Psychology     4
- PSYC 220  Psychological Methods and Statistics    4
- PSYC 230  Psychological Research and Design 1   2
- PSYC 330  Neuropsychology      4
- PSYC 497  Senior Seminar      2

*One course from the following:*
- PSYC 251  Principles of Learning and Behavior Modification  4
- PSYC 311  Sensation and Perception     4
- PSYC 332  Cognitive Processes      4

*Two courses from the following (limit – one Developmental course):*
- PSYC 118  Introduction to Adult Development and Aging   4
- PSYC 261  Cognitive Development     4
- PSYC 262  Social Development     4
- PSYC 282  Social Psychology      4
- PSYC 341  Theories of Personality  4

*plus electives in Psychology to equal a total of 38 credit hours*

**Total credit hours** 38

**Option 2: Clinical/Counseling Psychology**

**Required courses:**
- PSYC 101  Introduction to Psychology     4
- PSYC 210  Communication and Counseling Skills  2
- PSYC 220  Psychological Methods and Statistics    4
- PSYC 230  Psychological Research and Design 1   2
- PSYC 330  Neuropsychology      4
- PSYC 341  Theories of Personality      4
- PSYC 342  Abnormal Psychology     4
- PSYC 491  Clinical Procedures      4
- PSYC 492  Clinical Practicum      4
- PSYC 497  Senior Seminar      2
One course from the following:
PSYC 118 Introduction to Adult Development and Aging 4
PSYC 261 Cognitive Development 4
PSYC 262 Social Development 4

One course from the following:
PSYC 251 Principles of Learning and Behavior Modification 4
PSYC 311 Sensation and Perception 4
PSYC 332 Cognitive Processes 4

Total credit hours 42

Option 3: Scientific Experimental Psychology

Required Courses:
PSYC 101 Introduction to Psychology 4
PSYC 220 Psychological Methods and Statistics 4
PSYC 230 Psychological Research and Design I 2
PSYC 330 Neuropsychology 4
PSYC 411 Psychological Research and Design II 4
PSYC 497 Senior Seminar 2

Two courses from the following:
PSYC 251 Principles of Learning and Behavior Modification 4
PSYC 311 Sensation and Perception 4
PSYC 332 Cognitive Processes 4

Two courses from the following (limited to one Developmental course)
PSYC 118 Introduction to Adult Development and Aging 4
PSYC 261 Cognitive Development 4
PSYC 262 Social Development 4
PSYC 282 Social Psychology 4
PSYC 341 Theories of Personality 4

Six credit hours from the following:
PSYC 352 Research Techniques 2-4
PSYC 450 Independent Study 2-6

Total credit hours 42

Option 4: Child Psychology

Required Courses:
PSYC 101 Introduction to Psychology 4
PSYC 220 Psychological Methods and Statistics 4
PSYC 230 Psychological Research and Design I 2
PSYC 261 Cognitive Development 4
PSYC 262 Social Development 4
PSYC 320 Parenting Seminar 2
PSYC 330 Neuropsychology 4
PSYC 497 Senior Seminar 2

One course from the following:
PSYC 282 Social Psychology 4
PSYC 341 Theories of Personality 4

One course from the following:
PSYC 251 Principles of Learning and Behavior Modification 4
PSYC 311 Sensation and Perception 4
PSYC 332 Cognitive Processes 4

One course from the following:
PSYC 471 Child Psychopathology 3
PSYC 472 Child Interventions 3
Four credits from the following:
PSYC 352  Research Techniques in Child Psychology   2-4
PSYC 485  Practicum    2-4
PSYC 492  Clinical Practicum (at an appropriate site)  4
Total credit hours  41

Requirements for the minor in Psychology

Required Core:
PSYC 101  Introduction to Psychology     4
PSYC 220  Psychological Methods and Statistics   4

Content Group I (one course)
PSYC 251  Principles of Learning & Behavior Modification   4
PSYC 311  Sensation and Perception    4
PSYC 330  Neuropsychology     4
PSYC 332  Cognitive Processes   4

Content Group II (one course)
PSYC 118  Introduction to Adult Development and Aging   4
PSYC 261  Cognitive Development     4
PSYC 262  Social Development    4
PSYC 282  Social Psychology   4
PSYC 341  Theories of Personality     4
PSYC 342  Abnormal Psychology   4

Electives in Psychology (eight credits required)

Total credit hours  24*
*Note: eight hours must be at the 300 or 400 level

Religious Studies

The Religious Studies minor helps students to gain new intellectual perspectives on their own religions and those of other people. It encourages students to see what the world’s great religions have in common and how they differ. Courses explore both Asian traditions (Hinduism, Buddhism, Jainism, Sikhism, Confucianism, Taoism, and Shinto) and Western monotheistic traditions (Judaism, Christianity, Islam). We explore the many ways that human beings have asked and answered some of the Big Questions such as: What is the nature of Ultimate Reality? Why do we experience suffering and death? How should we live in this life? What is our ultimate purpose?

The study of religions is inherently interdisciplinary. We consider the great religious stories of each tradition as well as important teachings, texts, teachers, ethics, rituals, and other practices. We examine related material objects including art, architecture, music, food, clothing, and body modification. We explore the emotional dimensions of religious experience, the social functions of religion, historical developments, and debates within each tradition and between traditions.

Because religious beliefs, rituals and values bear upon all aspects of human life, the study of religion complements majors in many areas, such as literature, history, philosophy, the arts, education, and the social sciences. The study of religion also contributes a great deal to careers in the humanities and social sciences, and also enhances career opportunities in such areas as education, journalism, communications, international affairs, business, social work, counseling, the health professions, and, of course, the religious professions.
Requirements for the minor in Religious Studies
The minor consists of 20 credit hours, distributed as follows:
One course in the Western religious traditions, one course in the non-Western religious traditions, and 12 additional credits.

Students may substitute up to four elective credit hours in Philosophy, History, Anthropology, English, Psychology, or Sociology courses closely related to Religious Studies in content or methodology. Substitutions must be approved by the advisor.

Science Policy

The minor in Science Policy provides a policy component for students majoring in engineering or science. This is especially important today given the role government plays in terms of both supporting and regulating business. Science policy minors must be majors in either an engineering field or in chemistry, biology, physics, or environmental studies.

Required courses for Science Policy minor:
POLS 110 American Politics 4
POLS 355 Public Policy 4
POLS 411 Bureaucracy 4
Experiential Capstone Project* 2-4
Total Credit Hours 14-16

*S to be determined under advisement

Sociology

The Sociology major attracts students who want to better understand themselves, others, and the social, cultural, political, and economic environments within which social interaction occurs. The sociological method makes possible the systematic comparison of data from various types of groups, societies, cultures, and social institutions. Sociology majors take coursework in both theory and methods, allowing them to formulate generalizations about the nature and causes of human social behavior. Majors also participate, when feasible, in experiential learning opportunities. In addition to helping students prepare for graduate study, the major helps prepare students for careers in such areas as social work, law, public health, business, and social research.

Requirements for Sociology major
I. Core Area (16 credit hours)
SOCI 110 Introduction to Sociology 4
SOCI 230 Introduction to Data Analysis and Statistics 4
SOCI 420 Social Theory: A Survey 4
SOCI 431 Research Design and Strategies 4

II. Electives (20 credit hours) Additional credit required at grade C or better in major subject: five full courses or equivalent.
SOCI 200 Special Topics 1-4
SOCI 235 Socialization 4
SOCI 236 Cults, Sects, and the Main Line 4
SOCI 242 Social Problems 4
SOCI 245 Crime and Society 4
SOCI/WMST 253 Social Welfare Institutions 4
SOCI 343 Race and Ethnicity 4
SOCI 344 Deviance and Society 4
SOCI/WMST 346 Sociology of Sex and Gender 4
SOCI/POLS 347 Contemporary America 4
SOCI/WMST 348 Sociology of Families 4
SOCI 349 Medical Sociology 4
SOCI 400 Special Topics 1-4
SOCI 450 Independent Study 1-4
SOCI 470 Application of Sociology Field Work 2-4
SOCI/GLBS 495 Global Issues Seminar 4
ANTH 302 The Nacirema 4
ANTH 303 Health and Culture 4
ANTH 304 Language and Culture 4
ANTH 309 Magic and Religion: An Anthropological Perspective 4
ANTH 312 Violence and Culture 4

Total credit hours 36

Requirements for the minor in Sociology
SOCI 110 Introduction to Sociology 4
SOCI 420 Social Theory: A Survey 4
SOCI 431 Research Design and Strategies 4

Eight additional credit hours
Total credit hours 20

Theatre

The Division of Performing Arts Theatre Department at Alfred University provides students with balanced and inspired learning experiences anchored in well-rounded knowledge acquired through courses and production experiences. Our goal is to educate the “whole theatre artist” by producing high quality work that focuses on close collaboration between directors, designers and actors. Open to all students, majors and non-majors alike, the Alfred Theatre learning experience integrates theory with practical development of skills, techniques, and artful expression. Students acquire in-depth understanding of theatre’s many components and how they work together. Areas of concentration include acting, design, directing, costume/set construction, scenic painting, technical theatre, stage management and arts administration. Theatre students also actively participate in music and dance events and the visual arts.

The Theatre Department is an active member of the American College Theatre Festival and the United State Institute of Theatre Technology which provides students with opportunities to be involved with theatre at a national and international level. We aim to provide students with a solid foundation in order to succeed in graduate school or as professionals and to be life-long artists, technicians and learners.

Requirements for the Theatre major
Core Requirements: (29-31 credits)
THEA 110 Introduction to Theatre 4
PDAT 120 Technical Theatre 4
or PDAT 220 Principles of Theatrical and Performance Design 4
THEA 212 From Page to Stage: Script Analysis 4
THEA 240 Acting I 4
THEA 311 Theatre History I 4
THEA 312 Theatre History II 4
THEA 430 Directing I 3
THEA 431 Directing II 3
or THEA 495 Senior Project 2-4

**Electives in Theatre: (12 credits)**
PDAT 221 Costume Construction 3
PDAT 222 Stage Makeup 2
PDAT 320 Scene Design 3
PDAT 321 Lighting Design 3
PDAT 322 Stage Costume Design 3
PDAT 323 Stage Sound 2
PDAT 470 Advanced Projects in Theatrical Design and Technology 1-4
THEA 200/300/400 Special Topics 1-4
THEA/ENGL 205 The Play’s the Thing!-Playwriting 4
THEA 210 The Performing Arts: A Global Perspective 4
THEA/WMST 211 Women in Theatre 3
THEA 230 Stage Management Fundamentals 2
THEA 242 Performance Lab 3
THEA/PDAT 270 Play Production 1-4
THEA 340 Acting II 3
THEA 350 Independent Study 1-4
THEA/PDAT 370 Advanced Play Production 1-4
THEA/PDAT 385 Internship 2-4
THEA 431 Directing II 3
THEA 440 Acting III 3
THEA 490 Senior Seminar 1
THEA 495 Senior Project 2-4

**Related Fields: (6 Credits)**
ART 111 Introduction to Drawing 4
ART 121 Introduction to Sculpture 4
ARTH 100-level (Introductory Art History) 4
DANC 120 Fundamentals of Dance 2
DANC-technique (DANC 221, 222, 223, 321, 322, 323) 2
DANC 230, 330 Improvisation/Composition I, II 3
DANC 270 Alfred University Dance Theatre 2
DANC 311 Dance History 4
ENGL 225 Shakespeare in Cinema 2 or 4
ENGL 311 Shakespeare’s Comedies and Histories 4
ENGL 312 Shakespeare’s Tragedies 4
ENGL 372 Dramatis Personae 4
MUSC 100-108 Private Lessons 1
MUSC 110 Music Appreciation 4
MUSC 120 Music Theory I 4
MUSC 130-139 Voice, Piano, Strings Classes 2
MUSC 270-279 Music Ensembles 2
MUSC 301-308 Private Lessons, Advanced 2
PHIL 283 Philosophy of the Arts I 4
RLGS 307 Myth, Ritual and the Creative Process 4
RLGS 308 Artists, Shamans and Cosmology 4

(Other courses may be considered; must be approved by the Division Chair)

**Total credit hours required for major** 47-49
A Theatre minor is also available for those students who wish to major in another field, yet pursue their passion and development as theatre artists.

Requirements for the Theatre minor
Core requirements (15-16 credit hours)
THEA 110  Introduction to Theatre
or THEA 210 The Performing Arts-A Global Perspective  
THEA 130  From Page to Stage: Script Analysis
THEA 270/370 Play Production

Choose one of the following:
THEA 311 Theatre History I
THEA 312 Theatre History II
THEA 430 Directing I

Additional requirements (11 credit hours)
Choose one of the following:
PDAT 120 Technical Theatre
PDAT 220 Principles of Theatrical and Performance Design
PDAT 221 Costume Construction
THEA 240 Acting I
THEA 230 Stage Management Fundamentals
THEA 242 Performance Lab

Choose one of the following: (some courses may have pre-requisites)
PDAT 320 Scene Design
PDAT 321 Lighting Design
PDAT 322 Costume Design
PDAT 470 Advanced Projects in Theatrical Design and Technology
THEA 340 Acting II
THEA 430 Directing I
THEA 431 Directing II
THEA 311 Theatre History I
THEA 312 Theatre History II

Choose additional theatre courses to satisfy minimum credit hours required

Total credit hours required for minor (minimum) 26

Requirements for the Performance Design and Technology minor
The Division of Performing Arts offers a minor in Performance Design/Tech for students who wish to major in another field, yet pursue their interests in performance design and production. This program explores and supports artistic and production endeavors throughout the Division of Performing Arts and other outlets within the University.

Foundation (14 to 16 credit hours)
PDAT 120 Technical Theatre 3-4
or PDAT 221 Costume Construction
PDAT 220 Principles of Theatrical and Performance Design 4
PDAT 270 Play Production 2
One Performance Class 2
(Studio Dance course, Music Ensemble, participation in Performing Arts or IART-produced performance)
One History Class 3-4
(Theatre, Dance, Music, Art (IART) History class)
College of Liberal Arts and Sciences

Design/Tech Requirements
Choose 2-4 credit hours from the following:
PDAT 200 Special Topics 1-4
PDAT 222 Stage Makeup 2
THEA 212 From Page to Stage: Script Analysis 4
Choose 3 credit hours from the following:
PDAT 320 Scene Design 3
PDAT 321 Lighting Design 3
PDAT 322 Stage Costume Design 3
PDAT 323 Stage Sound 3
PDAT 370 Advanced Play Production 1-4

Capstone:
Choose 3 credit hours from the following:
PDAT 385 Internship 2-4
PDAT 470 Advanced Projects in Theatrical Design and Technology 1-4
PDAT 495 Senior Project 2-4

Total Credit Hours required for the minor (Minimum) 22

Women's Studies

The interdisciplinary Women's Studies minor examines scholarship and research relating to women and to their special contributions.

The objectives of the minor are to provide a theoretical and practical structure within which to study issues of concern for women; to promote an understanding of the historical and biosocial contexts which shape our awareness of womanhood; and to encourage independent reading and study.

The Women’s Studies minor is supportive of various majors. Students are invited to complete a minor in Women’s Studies or to select courses of particular interest. All program courses can be used as electives and many count toward a major in traditional disciplines. Participating faculty are drawn from throughout the entire university.

Requirements for the minor

Required Core
WMST 101 Women in Society 4
WMST 450 Independent Study 2

Elective Courses
Choose 12 or more credits from at least two groups (I, II, III, IV)

I: Humanities
English
WMST 218 Autobiography 2 or 4
WMST 254 Women Writers 2 or 4
WMST 256 Multicultural Literature 2 or 4
WMST 308 Women Writers in the Middle Ages 4
WMST 381 International Women Writers 4

History
WMST 324 Queer American History 4

Philosophy
WMST 303 Women, Knowledge, and Reality 2-4
### II: Social Sciences

#### Political Science
- WMST 246  Sex and the Body Politic  4

#### Psychology
- WMST 372  Psychology of Gender  4

#### Sociology
- WMST 253  Social Welfare Institutions  2
- WMST 346  Sociology of Sex and Gender  4
- WMST 348  Sociology of Families  4

### III: Fine and Performing Arts

#### Fine Arts
- WMST 382  Women in Art  4

#### Performing Arts
- WMST 211  Women in Theatre  3

### IV: Women’s Studies

- WMST 450  Independent Study  1-4
- WMST 470  Alphadelphian - Women’s Studies Service  2
- WMST 485  Internship  1-4