



# COLLEGE OF ARTS AND SCIENCE

## Undergraduate Programs

- African Studies
- Anthropology
- Art
- Art Conservation
- Art History
- Biological Sciences
- Black American Studies
- Chemistry and Biochemistry
- Communication
- Comparative Literature
- Computer and Information Sciences
- Continental European Studies
- East Asian Studies
- Economics
- English
- Foreign Languages and Literatures
- Geography
- Geology
- History
- Irish Studies
- Jewish Studies
- Latin American Studies
- Legal Studies
- Liberal Studies
- Linguistics and Cognitive Science
- Mathematical Sciences
- Medical Humanities
- Medieval Studies
- Military Science
- Music
- Philosophy
- Physical Therapy
- Physics and Astronomy
- Political Science, International Relations, and Public Administration
- Psychology
- Religious Studies
- Sociology and Criminal Justice
- Theatre
- Women's Studies

The College of Arts and Science represents a range of academic disciplines and contributes to the general and professional education of all undergraduate students at the University. The College offers major programs leading to the Bachelor of Arts, Bachelor of Science, Bachelor of Arts in Liberal Studies, Bachelor of Fine Arts, and Bachelor of Music, as well as associate (two-year) degrees.

Undergraduate students enrolled in the College of Arts and Science may choose from a number of degree programs and options designed to permit flexibility in the pursuit of their educational goals, within guidelines or requirements established by the faculty. These formal requirements ensure that all students in the college complete courses representative of each of the major disciplinary groupings in the College: Arts and Humanities, Culture and Institutions Through Time, Behavioral and Social Sciences, and Natural Sciences and Mathematics.

The intent of these requirements is to provide students appreciation of the materials and methodologies of each area and to foster an awareness that the works of an artist, historian, novelist, sociologist, and physicist may all be equally valid representations of reality. In the process, students develop a heightened understanding of all

aspects of human environment, intellectual curiosity, respect for fact, perception of the complexity of truth, skill in reasoning, and concern for integrity and logical consistency and acquire perceptions, skills, and attitudes to assist them in achieving a full and satisfying life.

In addition to the requirements listed for the various degrees, students must fulfill the general University requirements for baccalaureate degrees listed in the all-campus Academic Regulations for Undergraduates section of this catalog.

For more information about the College of Arts and Science, please contact the Dean's Office at (302) 831-2351, or visit the college web site at <http://www.udel.edu/as/>

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### ADVISEMENT

Students who have declared majors will be assigned an advisor who is a faculty member in the appropriate department. Undeclared students are assigned a member of the professional staff of the College of Arts and Science Advisement Center located at 102 Elliott Hall.

All freshman students who have earned less than 28 credit hours are *required* to meet with their advisors during preregistration for the spring and fall semesters. All other students are strongly encouraged to meet at least once each semester with their academic advisors.

Preprofessional advisement committees are available to advise students who plan to study dentistry, law, medicine, social work, or veterinary medicine. Dean's Office personnel will be glad to direct students to appropriate faculty members.

## GENERAL DEGREE REQUIREMENTS INFORMATION

**Pass/Fail Grade Option.** Courses to fulfill degree requirements may not be taken pass/fail unless they are offered only on a pass/fail basis. Students may elect to take one course per semester pass/fail. A total of no more than 24 credits may be taken pass/fail for a Bachelor's degree and no more than 12 credits for an Associate's degree. For more detailed information on the pass/fail grade option, see the chapter on Academic Regulations.

**Physical Education.** A maximum of two credits of HESC 120 may be counted toward the required minimum credits of all degrees in the college.

**Duplicate Credits.** Credits may be counted only once toward a degree. Courses repeated to improve a passing grade may not be counted a second time toward the minimum total credit hours required. Certain courses offered in a sequence will not be counted toward a degree if taken in reverse order of difficulty, e.g., FREN 105 course would not be counted if taken after FREN 107; similarly, MATH 115 would not be acceptable if taken after MATH 221.

Certain other courses have sufficient overlap of content, although taught at different degrees of difficulty, that credit would not be offered for both courses regardless of the order taken. For instance, credit will be offered only once for the following pairs of courses: MATH 221 and MATH 241, MATH 222 and MATH 242.

## COURSE OF STUDY OPTIONS

**Single Major.** A departmental major consists of at least 30 credits with the specified and elective courses determined by the individual department. A grade of C- is required in all major courses.

Several departments, e.g., English and history, have a number of internal options or specializations. To round out the departmental major, students may be required to take a designated number of credits of related work determined in consultation with a faculty advisor.

The faculty of the college have ruled that for the Bachelor of Arts degree, a maximum of 45 credits with the same departmental prefix may be applied to the total number of credits required for the degree. A cross-listed course will be considered a part of the 45 credit total, regardless of which prefix a student used to register for the course.

Students who choose a single major will normally have a number of "free elective" credits. Considerable thought should be given to the best use of these elective credits.

**Double Major.** This involves fulfilling the major requirements of two Bachelor of Arts or two Bachelor of Science majors. The advantage of a double major is that the student is able to develop and demonstrate strength in each area covered in the undergraduate program. Admission to double major status requires the approval of both departments and the dean(s) of the college(s). The minimum grade necessary in all courses required for the double major is the same as that needed for a single major in that degree program.

**Interdepartmental Major.** Students whose goals and interests heavily involve materials from two departments but do not extend to all

aspects of each subject area may work out and submit for the approval of both departments and the dean of the college an interdepartmental proposal. More detailed instructions on the Interdepartmental Major are available in the Advisement Center and Dean's Office, but basically this major involves a minimum of 21 credits from each department with another nine credits that may be distributed in a number of ways. Examples of departments frequently combined in such programs are Communication and English or Political Science and Economics. With the approval of the other college or department, one area of the interdepartmental major may be from outside the College of Arts and Science.

A minimum grade of C- is normally required in all courses constituting the 21 credits of each area, and a C average is necessary for all the 51 credits in the interdepartmental major.

**Area Study.** Opportunity is provided for students interested in pursuing a broader field of study such as Comparative Literature, International Relations or Latin American Studies. Students majoring in International Relations are required to take 51 credits distributed among appropriate departments. Thirty of the 51 credits must be earned with at least a C-grade, and a C average is required for the total of the 51 credits.

**Minors.** In addition to the major, students may also elect to complete one or two minor programs. Departments offering a minor set their own requirements, but these always include at least 15 credits of course work. A minimum grade of C- is normally required in all courses for a minor. (See the list of minors in the front of this catalog.)

## BACHELOR OF ARTS

This degree, offered by all departments of the College of Arts and Science (see chart on p. vi), is awarded to those students who follow a broad course of study and is designed to provide a liberal education. For this degree, students must complete a minimum of 124 credits, composed of requirements for general education, required courses in a major, and elective courses. No more than 45 credits with the same departmental prefix (including cross-listed courses) may be counted toward the total required for the degree.

### CORE CURRICULUM

### CREDITS

### UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-) 3  
ENGL 110 will be taken by all students as freshmen, except by students who have otherwise demonstrated the skills taught in that course. A score of 710 or higher on the SATII Writing Test will be a satisfactory demonstration of basic writing skills. ENGL 110 must be completed by the time a student has earned 60 credits. Students who transfer into the College of Arts and Science with 45 credits or more must complete this requirement within two semesters.

MULTICULTURAL COURSE 3  
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).

### BACHELOR OF ARTS

### COLLEGE SKILL REQUIREMENTS

**Writing:** (minimum grade C-) 3  
A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Mathematics:** (one of the following) 0-4

MATH 113 Contemporary Mathematics  
(designed for students who do not intend to continue the study of mathematics)

MATH 114 or MATH 170 College Mathematics and Statistics  
(designed for students who do not intend to continue the study of mathematics)

MATH 115 or MATH 171 Pre-Calculus  
(designed for students who intend to continue the study of mathematics)

Successful completion of any mathematics course at or above the 200-level except MATH 251, MATH 252, or MATH 266.

Successful performance on a proficiency test in mathematics administered by the Department of Mathematical Sciences through the College of Arts and Science Advisement Center. (0 credits awarded)

The math requirement must be completed by the time a student has earned 60 credits. Students who transfer into the College of Arts and Science with 45 credits or more must complete this requirement within two semesters.

#### Foreign Language: 0-12

Completion of the intermediate-level course (107 or 112 or 214) in an ancient or modern language. The number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

### COLLEGE BREADTH REQUIREMENTS

These requirements apply to all College of Arts and Science Bachelor of Arts degrees, except for the Bachelor of Arts in Mathematics Education, for which the number of credits in each group is different than below. See page 122 for these requirements.

<b>GROUP A</b>	12
Analysis and appreciation of the creative arts and humanities. Twelve credits of courses representing at least two departments or appropriate instructional units.	
<b>GROUP B</b>	12
The study of culture and institutions over time. Twelve credits of courses representing at least two departments or appropriate instructional units.	
<b>GROUP C</b>	12
Empirically based study of human beings and their environment. Twelve credits of courses representing at least two departments or appropriate instructional units.	
<b>GROUP D</b>	13
The study of natural phenomena through experiment or analysis. Thirteen credits of courses representing at least two departments or appropriate instructional units and including a minimum of one course with an associated laboratory.	

A course may be applied toward more than one requirement (e.g., breadth and major requirements), but the credits are counted only once toward the total credits for graduation. If all but one course in a group has been taken in one department or program, a course cross-listed with that program will not satisfy the distribution requirement. For a complete list of the courses which fulfill breadth requirements, see pages 83-87.

### BACHELOR OF SCIENCE, BACHELOR OF FINE ARTS, BACHELOR OF MUSIC

Students whose goals indicate a high level of concentration or specialization may elect to fulfill requirements for the Bachelor of Science degree offered in a number of majors (see chart on p. vi). Similar degrees are the Bachelor of Fine Arts, with a heavy concentration on studio work, and the Bachelor of Music, with its own areas of specialization. Curricular details for all of these degree programs can be found in the sections devoted to the individual departments.

### BACHELOR OF ARTS IN LIBERAL STUDIES

An option that offers a great deal of flexibility is the Bachelor of Arts in Liberal Studies (B.A.L.S.). The degree is designed for students who have need and justification for developing their own undergraduate major program within the 124-credit minimum.

This degree differs from the regular Bachelor of Arts degree in that it requires 60 credits at the 300-level or higher. The most significant difference from the more conventional degree, however, is that,

instead of a major, students pursue a sequence of courses of their choice that are consistent with their stated educational goals.

Admission into the Bachelor of Arts in Liberal Studies is determined by the College Faculty Senate Committee on Special Academic Programs, which reviews student proposals and approves them or makes suggestions on improving or strengthening them. To be eligible to apply to the program, a student must have a cumulative grade index of 2.25 and must have completed *no more* than 75 credit hours at the time of the application. The committee looks for proposals that are cohesive and realistic, designed to afford the student knowledge in some broad, interdisciplinary field or focused more narrowly and in greater depth on one theme and, in general, involving course combinations that would not be feasible within one of the other degree options. A minimum of 39 credit hours must be related to the main theme of the B.A.L.S. project and a minimum grade of C- must be earned in these core courses.

Advisement and planning are essential in formulating such a proposal. Students are urged to seek advice from faculty members and the Dean's Office as they work on drawing up their programs. The screening committee requires the applications to carry the signature of at least two faculty members including the candidate's advisor. Proposals should be submitted to the Dean's Office by October 15 or by March 15.

### ASSOCIATE DEGREES

The nonterminal degrees of Associate in Arts (A.A.) and Associate in Science (A.S.) may be awarded upon application; students must apply before completing 75 credit hours. Information regarding admission requirements and eligibility for the associate degree programs may be found in the Undergraduate Admissions section of this catalog. Academic Advisement is available in the College of Arts and Science Advisement Center, 102 Elliott Hall.

The Associate in Arts represents completion of the first half of a Bachelor of Arts program; the Associate in Science, the first half of a Bachelor of Science program. Specific requirements follow:

#### ASSOCIATE IN ARTS REQUIREMENTS

If any of the course requirements are satisfied through proficiency tests or exams, elective credits must be substituted to make up 60 hours. Courses taken to fulfill specific group, math, or language proficiency requirements must be taken for a regular grade, not pass/fail.

CURRICULUM	CREDITS
<b>UNIVERSITY REQUIREMENTS</b>	
<b>Writing</b>	
ENGL 110 (minimum grade C-) .....	3
or	
Exemption .....	0
<b>Multicultural Course</b> (see p. 57) .....	3
<b>SKILL REQUIREMENTS</b>	
<b>Mathematics</b> (one of the following) .....	0-4
MATH 113	
or	
MATH 114	
or	
MATH 115	
or	
Successful completion of any mathematics course above the 100-level (except MATH 251 and MATH 252).	
or	
Proficiency Test	
<b>Foreign Language</b> .....	0-4
Elementary Level	
or	
Proficiency Test (0 credits awarded)	

**BREADTH REQUIREMENTS**

Courses in each of the groups A-D must be taken in at least two departments. If all but one course in a group has been taken in one department or program, a course cross-listed with that department or program will not satisfy the distribution requirement.

Group A. Creative Arts and Humanities .....	9
Group B. Culture and Institutions through Time .....	9
Group C. Humans and Their Environment .....	9
Group D. Natural Phenomena .....	10

At least one course in Group D must be a laboratory science.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree. Students may opt to take one free elective course per semester pass/fail, but the total number of credits taken on a pass/fail basis may not exceed 12, excluding courses that are graded pass/fail only. Courses numbered below 100-level do not count toward a degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 60**

**ASSOCIATE IN SCIENCE REQUIREMENTS**

If any of the course requirements are satisfied through proficiency tests or exams, elective credits must be substituted to make up 60 hours. Courses taken to fulfill specific group, math, or language proficiency requirements must be taken for a regular grade, not pass/fail.

CURRICULUM .....	CREDITS
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**UNIVERSITY REQUIREMENTS**

<b>Writing</b> (one of the following) .....	0-3
ENGL 110 (minimum grade C-)	
or	
Exemption (0 credits awarded)	

<b>Multicultural Course</b> (see p. 57) .....	3
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**SKILL REQUIREMENTS**

<b>Mathematics</b> (one of the following) .....	6-8
MATH 221-222	
or	
MATH 241-242	

<b>Foreign Language</b> .....	0-4
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Required if there is a language requirement for the corresponding Bachelor of Science degree. One of the following:  
Elementary Level  
or  
Proficiency Test (0 credits awarded)

**BREADTH REQUIREMENTS**

Courses in each of the groups A-D must be taken in at least two departments. If all but one course in a group has been taken in one department or program, a course cross-listed with that department or program will not satisfy the distribution requirement.

Group A. Creative Arts and Humanities .....	9
Group B. Culture and Institutions through Time .....	9
Group C. Humans and Their Environment .....	9
Group D. Natural Phenomena .....	12

At least one course in Group D must be a laboratory science.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree. Students may opt to take one free elective course per semester pass/fail, but the total number of credits taken on a pass/fail basis may not exceed 12, excluding courses that are graded pass/fail only. Courses numbered below 100-level do not count toward a degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 60**

**DEAN'S SCHOLAR PROGRAM**

Each year the College of Arts and Science considers upon application a number of highly motivated students who have clear educational goals and the ability to achieve those goals. These students may be appointed Dean's Scholars. These students are freed of all college general education requirements so that they can build their entire program with faculty advisors. They are generally selected after they have finished three semesters at the University. Additional information is available from the Dean's Office.

**LIBERAL ARTS/ENGINEERING**

These five-year programs combine work in liberal arts and engineering and lead to the simultaneous awarding of a bachelor's degree in Arts and Science and a bachelor's degree in the appropriate engineering field. For complete details on these programs, see the Arts and Science-Engineering Curricula section, p. 160.

**TEACHER EDUCATION PROGRAMS**

The College of Arts and Science offers teacher education programs for students who wish to prepare themselves to be certified teachers in Delaware or in other states and the overseas dependency schools. For secondary certification (high school, junior high school, middle school), programs are offered in biology, chemistry, earth sciences, English, foreign languages (French, German, Italian, Latin, Russian, Spanish), mathematics, physics, and social studies (anthropology, economics, geography, history, political science, psychology, and sociology). For K-12 certification, teacher education programs are offered in music (instrumental, keyboard, voice) and Foreign Languages.

Each degree program in teacher education requires a certain minimum G.P.A. for enrollment in EDUC 400, Student Teaching, a course required for the degree. The appropriate teacher education program advisor (see list on p. 176) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

See Teacher Education Programs in the College of Human Resources, Education and Public Policy section of this catalog for more information, including a list of program advisors.

**PRE-LAW**

Students interested in admission to law school are free to major in any subject they choose. Because no single major is preferred for entry to law school, the University provides advisement and information about law school admissions through the Pre-Law Advisory Committee. The Committee's members come from different disciplines across campus, so students have a choice of advisors. The Committee is a member of the Northeast Association of Pre-Law Advisors and regularly receives and circulates information from the American Association of Law Schools. UD students enjoy a rate of acceptance into law school that is higher than the national average, according to figures released by the Law School Admission Council.

The Career Services Office provides information on internships, summer job opportunities, and volunteer opportunities in the legal profession, and sponsors an annual Law School Fair, usually held in September. There is also an active Pre-Law Student Association, which sponsors field trips and guest speakers.

For more information, consult the Advisement Committee's bulletin board on the third floor of Smith Hall or the Pre-Law web site at <http://copland.udel.edu/stu-org/prelaw/>. Questions may be addressed to Committee Chair Professor Leslie Goldstein, 458 Smith Hall, telephone (302) 831-1931, or by e-mail to committee advisors listed at the pre-law web site.

## PREMEDICINE AND PREDENTISTRY

Preparation for admission to professional schools in medicine, dentistry, and related fields must include specific course work in biology, chemistry, physics and mathematics. Although many preprofessional students major in biology or chemistry, because these disciplines include the science training required, nonscience majors are acceptable and, in fact, encouraged by many professional schools.

Preprofessional students usually begin their career-related course work in the first semester of the freshman year in order to complete the relevant courses before taking professional aptitude tests as juniors. Early academic advisement is essential to ensure that the preprofessional curriculum requirements are met. The Health Sciences Advisory and Evaluation Committee (Room 118 Wolf Hall) coordinates advisory services for all students preparing for admission to health-related professional schools. Call 831-2282 for information.

The University participates in a cooperative medical education program with the Medical Center of Delaware and the Jefferson Medical College of Philadelphia, sponsored by the Delaware Institute for Medical Education and Research. Under the terms of this program, up to twenty students who are Delaware residents will be accepted for admission to Jefferson Medical College. A portion of the clinical training of these students takes place in the Medical Center of Delaware. Information on application to this program may be obtained from the office of the Associate Chair of the Department of Biological Sciences.

The University of Delaware also participates with Jefferson Medical College in the Medical Scholars Program which permits selected students to begin their medical education while undergraduates at the University (see below).

## MEDICAL SCHOLARS PROGRAM

Designed and jointly sponsored by the University of Delaware and Jefferson Medical College in Philadelphia to educate men and women to deal with society's changing health care needs, this unique pre-professional program coordinates college, medical school, and residency years by integrating liberal arts, sciences, and professional studies across both institutions. Utilizing faculty and courses at the University of Delaware and Jefferson Medical College, the curriculum includes traditional studies in the life and health sciences, as well as courses in the humanities, ethics, social sciences, economics, political science, and health policy. Group discussion, problem-based instruction, practicums in clinical settings, hands-on science, computer and video disc technology are part of the program. Under this program, students receive a Bachelor of Arts in Liberal Studies degree and conditional acceptance to Jefferson Medical College as early as their sophomore year at Delaware, after successfully completing at least a year in an interest group. For more information, contact Senior Associate Dean Heyward Brock at (302) 831-8195.

## FIELD STUDIES OPTION

Many students may benefit from a semester devoted to a carefully planned field studies program away from the campus. Opportunity is available under this option to develop an academic program involving field research and data collection or involving associated work in a government organization or private company. Such an academic option must be developed in detail with an academic advisor. More information is available from the Dean's Office, to which proposals should be submitted by October 15 or by March 15.

## COURSES APPROVED FOR SECOND WRITING REQUIREMENT

NOTE: Only the sections designated in the Registration Booklet as satisfying the Arts and Science Second Writing Course apply. Only a limited number of courses, when transferred from another institution, will satisfy the second writing requirement. Please contact the Arts and Science Advisement Center and Dean's Office for further information.

### Anthropology (ANTH)

- ANTH 486 Tutorial in Social and Cultural Anthropology
- ANTH 487 Tutorial in Archaeology
- ANTH 488 Tutorial in Physical Anthropology

### Art History (ARTH)

- ARTH 213 Art of the Northern Renaissance
- ARTH 250 Rulers' Images: Augustus to Washington
- ARTH 301 Research and Methodology in Art History
- ARTH 302 Prints and Society
- ARTH 310 The Role of the Artist in Society
- ARTH 402 Undergraduate Seminar: History of Art
- ARTH 405 Seminar in Greek and Roman Art
- ARTH 406 Seminar in Medieval Art
- ARTH 408 Seminar in Northern Renaissance Art
- ARTH 413 Seminar in Italian Renaissance Art
- ARTH 417 Seminar in Northern Baroque Art
- ARTH 423 Seminar in Twentieth Century Art
- ARTH 429 Seminar in Modern Architecture
- ARTH 431 Seminar in American Architecture
- ARTH 435 Seminar in American Art

### Arts and Science (ARSC)

- ARSC 316 Honors: Peer Tutoring/Advanced Composition (cross-listed with ENGL 316)

### Biology (BISC)

- BISC 330 Biology of Vision
- BISC 450 Proseminar in Environmental Science (cross-listed with GEOG 450 and GEOL 450)
- BISC 498 Topics in Biology (cross-listed with CSCI 498)

### Black American Studies (BAMS)

- BAMS 415 Race, Class and Gender (cross-listed with SOCI 415 and WOMS 415)
- BAMS 432 Psychological Perspectives on the Black American (cross-listed with PSYC 416)

### Science and Culture (CSCC)

- CSCC 355 Computers, Ethics and Society (cross-listed with SOCI 355)
- CSCC 368 Literature and Science (cross-listed with ENGL 368)
- CSCC 385 History of Biological Ideas (cross-listed with HIST 385)
- CSCC 411 Seminar in American History (cross-listed with HIST 411)
- CSCC 444 Medical Ethics (cross-listed with PHIL 444)
- CSCC 498 Topics in Biology (cross-listed with BISC 498)

### Chemistry (CHEM)

- CHEM 610 History of Chemistry

### Communication (COMM)

- COMM 311 Communication Techniques
- COMM 418 Topics in Mass Communication: Broadcast Television History
- COMM 438 Speech, Language and Communication
- COMM 452 Communication and Persuasion
- COMM 485 Analysis of Face-to-Face Communication

### Comparative Literature (CMLT)

- CMLT 311 Twentieth-Century Literature I (cross-listed with FLIT 311)
- CMLT 312 Twentieth-Century Literature II (cross-listed with FLIT 312)
- CMLT 341 Theatre/Drama: Classic/Medieval (cross-listed with THEA 341)
- CMLT 342 Theatre/Drama: Renaissance to 1700 (cross-listed with THEA 342)
- CMLT 343 Theatre/Drama: 1700 to 1900 (cross-listed with THEA 343)
- CMLT 344 Theatre/Drama: 1900 to Present (cross-listed with THEA 344)
- CMLT 480 Seminar (cross-listed with ENGL 480, and WOMS 480)

### Criminal Justice (CRJU)

- CRJU 312 Crime and Punishment in American History (cross-listed with HIST 312)
- CRJU 428 Corporate Crime (cross-listed with SOCI 428)
- CRJU 456 Lawyers and Society (cross-listed with SOCI 456)
- CRJU 460 Criminal Justice Policy

### English (ENGL)

- ENGL 200 Approaches to Literature
- ENGL 301 Expository Writing

- ENGL 302 Advanced Composition  
 ENGL 307 News Writing and Editing  
 ENGL 309 Feature and Magazine Writing  
 ENGL 312 Written Communications in Business  
 ENGL 316 Honors: Peer Tutoring/Advanced Composition  
 (cross-listed with ARSC 316)  
 ENGL 368 Literature and Science (cross-listed with CSCC 368)  
 ENGL 409 Topics in Journalism  
 ENGL 410 Technical Writing  
 ENGL 415 Writing in the Professions  
 ENGL 480 Seminar (cross-listed with CMLT 480 and WOMS 480)

**Foreign Languages and Literatures (FLLT)**

- FLLT 311 Twentieth-Century Literature I (cross-listed with CMLT 311)  
 FLLT 312 Twentieth-Century Literature II (cross-listed with CMLT 312)  
 FLLT 328 Topics in Japanese Literature in Translation  
 (cross-listed with WOMS 328)  
 FLLT 329 Topics in Italian Literature in Translation  
 (cross-listed with WOMS 329)  
 FLLT 338 Light and Shadow – Japanese Films  
 FLLT 380 Topics in Japanese Culture in Translation

**Geography (GEOG)**

- GEOG 346 Urban Cultural Geography  
 GEOG 445 Method and Theory in Geography  
 GEOG 450 Proseminar in Environmental Science  
 (cross-listed with BISC 450 and GEOL 450)

**Geology (GEOL)**

- GEOL 450 Proseminar in Environmental Science  
 (cross-listed with BISC 450 and GEOG 450)

**History (HIST)**

- HIST 130 Islamic Near East: 600-1500  
 HIST 131 Islamic Near East: 1500 to the Present  
 HIST 250 Roots of Contemporary Culture  
 HIST 300 Women in American History (cross-listed with WOMS 300)  
 HIST 301 The Worker in American Life  
 HIST 303 American Intellectual History  
 HIST 304 American Intellectual History  
 HIST 305 Images of Race and Ethnicity in American Culture  
 HIST 307 The U.S. in the Early National Period  
 HIST 308 The U.S. in the Antebellum Period  
 HIST 309 U.S. Business and Political Economy  
 HIST 312 Crime and Punishment in American History (cross-listed with CRJU 312)  
 HIST 313 Early Twentieth-Century America  
 HIST 314 Twentieth-Century America  
 HIST 318 Colonial America  
 HIST 319 Revolutionary America  
 HIST 323 The Old South  
 HIST 328 American Industrial Society: 1815 to Present  
 HIST 330 Peasants and Revolution in Africa  
 HIST 334 History of Mexico  
 HIST 335 History of Colonial Latin America  
 HIST 341 Ancient Rome  
 HIST 344 Renaissance Europe  
 HIST 345 Europe in the Reformation Era: 1517 to 1648  
 HIST 346 Age of Louis XIV  
 HIST 347 The French Revolution and Napoleon  
 HIST 348 History of Spain: 1479 to Present  
 HIST 349 Hispanic Societies: 1492 to Present  
 HIST 352 Contemporary European Society  
 HIST 353 Modern Germany: 1770 to 1919  
 HIST 354 Germany in 20th Century: 1914 to Present  
 HIST 355 Early Modern Intellectual History  
 HIST 356 Modern European Intellectual History  
 HIST 359 Soviet Russia: 1917 to 1990  
 HIST 361 European Business History: 1850 to Present  
 HIST 368 Modern China: 1600-1920s  
 HIST 369 China Since 1900  
 HIST 370 History of Modern Japan  
 HIST 373 Modern Ireland: 1534 to Present  
 HIST 377 Radicalism and Revolution: Islamic Movements in the  
 Modern Middle East  
 HIST 378 Nationalism in the Modern Middle East  
 HIST 380 History of the Arab-Israeli Conflict  
 HIST 385 History of Biological Ideas (cross-listed with CSCC 385)  
 HIST 397 History of South Africa  
 HIST 409 Varieties of Modern Feminism (cross-listed with WOMS 409)  
 HIST 411 Seminar in American History  
 (cross-listed with CSCC 411)

- HIST 430 Seminar in Twentieth-Century Latin American Revolutions  
 HIST 439 Women and Revolution in Africa (cross-listed with WOMS 439)  
 HIST 440 Seminar in Africa Under Colonial Rule  
 HIST 459 Seminar in United States Urban History  
 HIST 471 Seminar in Medieval History (cross-listed with WOMS 472)  
 HIST 473 Seminar in Early Modern European History  
 (cross-listed with WOMS 473)  
 HIST 474 Seminar in English History  
 HIST 475 Seminar in Modern European History  
 HIST 477 Seminar in Latin American History  
 HIST 479 Seminar in Asian History

**Music (MUSC)**

- MUSC 302 Women in Music: An Alternate Survey (cross-listed with WOMS 302)  
 MUSC 311 Music History: 400 through 1600  
 MUSC 312 Music History: 1600 through 1827  
 MUSC 313 Music History: 1825 to the Present  
 MUSC 345 History of Theatre: American Musical Theatre  
 (cross-listed with THEA 345)

**Philosophy (PHIL)**

- PHIL 444 Medical Ethics (cross-listed with CSCC 444)  
 PHIL 463 Ethical Theory  
 PHIL 465 Senior Seminar

**Political Science (POSC)**

- POSC 334 Liberalism and Conservatism  
 POSC 380 Introduction to Law  
 POSC 408 International Organizations  
 POSC 433 African Politics  
 POSC 434 Political Thought I  
 POSC 435 Political Thought II  
 POSC 445 Human Rights and World Politics  
 POSC 448 Theories of International Relations

**Psychology (PSYC)**

- PSYC 405 Advanced Social Psychology  
 PSYC 414 Drugs and the Brain  
 PSYC 415 History and Systems of Psychology  
 PSYC 416 Psychological Perspectives on the Black American  
 (cross-listed with BAMS 432)  
 PSYC 425 Topics in Child Psychology  
 PSYC 445 Topics in Adolescent Psychology

**Sociology (SOCI)**

- SOCI 305 Social Class and Inequality  
 SOCI 355 Computers, Ethics and Society (cross-listed with CSCC 355)  
 SOCI 415 Race, Class and Gender  
 (cross-listed with BAMS 415 and WOMS 415)  
 SOCI 428 Corporate Crime (cross-listed with CRJU 428)  
 SOCI 456 Lawyers and Society (cross-listed with CRJU 456)

**Theatre (THEA)**

- THEA 341 Theatre/Drama: Classic/Medieval (cross-listed with CMLT 341)  
 THEA 342 Theatre/Drama: Renaissance to 1700 (cross-listed with CMLT 342)  
 THEA 343 Theatre/Drama: 1700 to 1900 (cross-listed with CMLT 343)  
 THEA 344 Theatre/Drama: 1900 to Present (cross-listed with CMLT 344)  
 THEA 345 History of Theatre: American Musical Theatre  
 (cross-listed with MUSC 345)  
 THEA 346 History of Theatre: The American Theatre  
 THEA 410 Fundamentals of Dramaturgy

**University (UNIV)**

- UNIV 490 Honors Tutorial: Humanities  
 UNIV 491 Honors Tutorial: Natural/Social Science

**Women's Studies (WOMS)**

- WOMS 300 Women in American History (cross-listed with HIST 300)  
 WOMS 302 Women in Music: An Alternate Survey (cross-listed with MUSC 302)  
 WOMS 328 Topics in Japanese Literature in Translation (cross-listed with FLIT 328)  
 WOMS 329 Topics in Italian Literature in Translation (cross-listed with FLIT 329)  
 WOMS 409 Varieties of Modern Feminism (cross-listed with HIST 409)  
 WOMS 415 Race, Class and Gender  
 (cross-listed with BAMS 415 and SOCI 415)  
 WOMS 439 Women and Revolution in Africa (cross-listed with HIST 439)  
 WOMS 472 Studies in Medieval History (cross-listed with HIST 471)  
 WOMS 473 Studies in Early Modern European History  
 (cross-listed with HIST 473)  
 WOMS 480 Seminar (cross-listed with CMLT 480 and ENGL 480)

## COURSES APPROVED FOR BREADTH REQUIREMENTS

The College of Arts and Science publishes a handbook of further information regarding the specific courses that are applicable and a detailed description of the objectives of each group. The handbook is available from the Advisement Center and Dean's Office. Questions on the application of courses to group requirements may be directed to the Advisement Center and Dean's Office.

### GROUP A

#### Anthropology (ANTH)

- ANTH 205 Anthropology and Human Nature
- ANTH 216 Introduction to Material Culture Studies (cross-listed with HIST 216)
- ANTH 227 American Culture
- ANTH 231 Personality and Culture
- ANTH 239 Arts and Crafts of Native North America
- ANTH 251 Introduction to the Ethnic Arts
- ANTH 338 Arts and Crafts of Native South America
- ANTH 360 Humanities Colloquium
- ANTH 457 Survey of African Art (cross-listed with ARTH 457)

#### Art (ART)

- ART 315 Issues in Contemporary Art

#### Art History (ARTH)

- ARTH 150 Monuments and Methods in the History of Art
- ARTH 151 Myth, Religion, and Art
- ARTH 152 Design and Expression in the Visual Arts
- ARTH 161 Art in East and West
- ARTH 162 History of Architecture
- ARTH 237 Art of Tibet
- ARTH 457 Survey of African Art (cross-listed with ANTH 457)

#### Science and Culture (CSCC)

- CSCC 241 Ethical Issues in Health Care (cross-listed with PHIL 241)
- CSCC 246 Philosophical Perspectives of Medicine (cross-listed with PHIL 246)
- CSCC 368 Literature and Science (cross-listed with ENGL 368)
- CSCC 369 Literature and Medicine (cross-listed with ENGL 369)
- CSCC 444 Medical Ethics (cross-listed with PHIL 444)

#### Comparative Literature (CMLT)

- CMLT 202 Biblical and Classical Literature  
(cross-listed with ENGL 202 and FLIT 202)
- CMLT 217 Introduction to Film (cross-listed with ENGL 217)
- CMLT 218 Introduction to Drama  
(cross-listed with ENGL 208 and WOMS 208)
- CMLT 219 Introduction to the Novel  
(cross-listed with ENGL 209 and WOMS 209)
- CMLT 314 Introduction to Folklore and Folklife (cross-listed with ENGL 314)
- CMLT 316 Classical Mythology (cross-listed with FLIT 316)
- CMLT 320 Varying Authors and Genres  
(cross-listed with FLIT 320 and WOMS 320)
- CMLT 322 Topics: Classical Literature in Translation (cross-listed with FLIT 322)

#### English (ENGL)

- ENGL 200 Approaches to Literature
- ENGL 202 Biblical and Classical Literature  
(cross-listed with CMLT 202 and FLIT 202)
- ENGL 204 American Literature
- ENGL 207 Introduction to Poetry
- ENGL 208 Introduction to Drama (cross-listed with CMLT 218 and WOMS 208)
- ENGL 209 Introduction to the Novel  
(cross-listed with CMLT 219 and WOMS 209)
- ENGL 210 Short Story
- ENGL 217 Introduction to Film (cross-listed with CMLT 217)
- ENGL 314 Introduction to Folklore and Folklife (cross-listed with CMLT 314)
- ENGL 315 Ballad and Folksong
- ENGL 320 The Bible as Literature
- ENGL 324 Shakespeare
- ENGL 368 Literature and Science (cross-listed with CSCC 368)
- ENGL 369 Literature and Medicine (cross-listed with CSCC 369)
- ENGL 380 Women Writers (cross-listed with JWST 380 and WOMS 380)

#### Foreign Languages and Literatures (FLIT)

- FLIT 202 Biblical and Classical Literature  
(cross-listed with CMLT 202 and ENGL 202)
- FLIT 316 Classical Mythology (cross-listed with CMLT 316)

- FLIT 320 Varying Authors and Genres  
(cross-listed with CMLT 320 and WOMS 320)
- FLIT 322 Topics: Classical Literature in Translation (cross-listed with CMLT 322)
- FLIT 324 Topics: French Literature in Translation (cross-listed with WOMS 324)
- FLIT 325 Topics: German Literature in Translation (cross-listed with WOMS 325)
- FLIT 326 Topics: Hispanic Literature in Translation (cross-listed with WOMS 326)
- FLIT 327 Topics: Russian Literature in Translation
- FLIT 328 Topics: Japanese Literature in Translation (cross-listed with WOMS 328)
- FLIT 329 Topics: Italian Literature in Translation

#### French (FREN)

- FREN 456 French Theater Workshop

#### Geography (GEOG)

- GEOG 203 Introduction to Cultural Geography
- GEOG 345 Cultural Geography
- GEOG 346 Urban Cultural Geography

#### German (GRMN)

- GRMN 211 German Reading and Composition: Short Fiction  
(to be taught in German)

#### History (HIST)

- HIST 216 Introduction to Material Culture Studies (cross-listed with ANTH 216)

#### Jewish Studies (JWST)

- JWST 380 Women Writers (cross-listed with ENGL 380 and WOMS 380)

#### Linguistics (LING)

- LING 301 Dictionaries

#### Music (MUSC)

- MUSC 101 Appreciation of Music
- MUSC 102 Appreciation of Music
- MUSC 103 Introduction to Opera
- MUSC 104 Introduction to Opera II
- MUSC 105 Fundamentals of Music I
- MUSC 106 Fundamentals of Music II
- MUSC 195 Harmony I
- MUSC 196 Harmony II
- MUSC 197 Jazz Harmony
- MUSC 209 History of Spanish Music

#### Philosophy (PHIL)

- PHIL 100 Philosophies of Life (cross-listed with WOMS 100)
- PHIL 101 Great Western Philosophers
- PHIL 102 Introduction to Philosophy
- PHIL 201 Social and Political Philosophy
- PHIL 202 Contemporary Moral Problems (cross-listed with WOMS 203)
- PHIL 204 World Religions
- PHIL 210 Women and Religion (cross-listed with WOMS 210)
- PHIL 216 Introduction to Feminist Theory (cross-listed with WOMS 216)
- PHIL 241 Ethical Issues in Health Care (cross-listed with CSCC 241)
- PHIL 244 Philosophy of Art
- PHIL 246 Philosophical Perspectives of Medicine (cross-listed with CSCC 246)
- PHIL 317 American Philosophy
- PHIL 444 Medical Ethics (cross-listed with CSCC 444)

#### Political Science (POSC)

- POSC 285 Currents in Political Theory
- POSC 333 Communism, Fascism, and Democracy

#### Theatre (THEA)

- THEA 102 Introduction to Performance
- THEA 104 Introduction to Theatre and Drama
- THEA 106 The Theatrical Experience Abroad
- THEA 200 Introduction to Theatre Production
- THEA 202 Introduction to Theatre Design
- THEA 203 Introduction to Costuming
- THEA 206 Introduction to Dance
- THEA 410 Fundamentals of Dramaturgy

#### University (UNIV)

- UNIV 490 Honors Tutorial: Humanities

#### Women's Studies (WOMS)

- WOMS 100 Philosophies of Life (cross-listed with PHIL 100)
- WOMS 203 Contemporary Moral Problems (cross-listed with PHIL 202)
- WOMS 204 Gender and Knowledge
- WOMS 205 Women in the Arts and Humanities
- WOMS 208 Introduction to Drama (cross-listed with CMLT 218 and ENGL 208)
- WOMS 209 Introduction to the Novel (cross-listed with CMLT 219 and ENGL 209)
- WOMS 210 Women and Religion (cross-listed with PHIL 210)
- WOMS 216 Introduction to Feminist Theory (cross-listed with PHIL 216)

- WOMS 320 Varying Authors and Genres (cross-listed with CMLT 320 and FLIT 320)  
 WOMS 324 French Literature in Translation (cross-listed with FLIT 324)  
 WOMS 325 German Literature in Translation (cross-listed with FLIT 325)  
 WOMS 326 Hispanic Literature in Translation (cross-listed with FLIT 326)  
 WOMS 328 Topics: Japanese Literature in Translation (cross-listed with FLIT 328)  
 WOMS 380 Women Writers (cross-listed with ENGL 380 and JWST 380)

**GROUP B****Anthropology (ANTH)**

- ANTH 101 Introduction to Social and Cultural Anthropology  
 ANTH 105 Introduction to Historical Archaeology  
 ANTH 228 Peoples and Cultures of the Southwest  
 ANTH 260 Sociocultural History of Africa  
 ANTH 261 Peoples and Cultures of the Middle East  
 ANTH 265 High Civilizations of the Americas  
 ANTH 278 Historic Cultures of the Mid-Atlantic Region (cross-listed with HIST 278)  
 ANTH 322 The City in American Culture (cross-listed with HIST 322)  
 ANTH 323 Prehistory of South America  
 ANTH 327 Peoples of the Caribbean  
 ANTH 375 Peoples and Cultures of Modern Latin America

**Art History (ARTH)**

- ARTH 153 Introduction to Art History I  
 ARTH 154 Introduction to Art History II  
 ARTH 155 Asian Art  
 ARTH 207 Origins of Art  
 ARTH 208 Greek and Roman Art  
 ARTH 209 Early Medieval Art 200-1000 A.D.  
 ARTH 210 Later Medieval Art 1000-1400 A.D.  
 ARTH 217 Early Renaissance Art  
 ARTH 218 High Renaissance and Mannerist Art  
 ARTH 220 Italian Renaissance Architecture  
 ARTH 222 Baroque Art  
 ARTH 223 Baroque and Rococo Architecture and Urbanism  
 ARTH 225 Eighteenth Century Art  
 ARTH 227 Modern Art I  
 ARTH 228 Modern Art II  
 ARTH 230 American Art: 1607-1865  
 ARTH 231 American Art: 1865-Present  
 ARTH 233 Art of China  
 ARTH 234 Art of Japan  
 ARTH 235 Art of India  
 ARTH 236 The Arts of Islam  
 ARTH 245 The American Home  
 ARTH 250 Rulers' Images from Augustus to George Washington  
 ARTH 302 Prints and Society  
 ARTH 304 Northern Baroque Art  
 ARTH 305 Italian Baroque: Metaphor and Marvel  
 ARTH 308 Modern Architecture I: 1750-1900  
 ARTH 309 Modern Architecture II: 20th Century  
 ARTH 310 Role of the Artist in Society  
 ARTH 318 History of Photography

**Black American Studies (BAMS)**

- BAMS 134 History of Africa (cross-listed with HIST 134)  
 BAMS 220 The American Civil Rights Movement (cross-listed with HIST 220)  
 BAMS 304 History of Black America to the Civil War (cross-listed with HIST 325)  
 BAMS 306 History of Black America Since the Civil War (cross-listed with HIST 326)  
 BAMS 313 African American Literature I (cross-listed with ENGL 344)

**Science and Culture (CSCC)**

- CSCC 330 Varying Authors, Themes and Movements  
 (cross-listed with CMLT 330, FLIT 330 and WOMS 330)  
 CSCC 382 History of Western Medicine (cross-listed with HIST 382)

**Comparative Literature (CMLT)**

- CMLT 207 Great Writers of the Western World I (cross-listed with ENGL 211)  
 CMLT 208 Great Writers of the Western World II (cross-listed with ENGL 212)  
 CMLT 317 Film History (cross-listed with ENGL 317)  
 CMLT 321 Medieval Literature and Culture (cross-listed with ENGL 321)  
 CMLT 330 Varying Authors, Themes, and Movements  
 (cross-listed with CSCC 330, FLIT 330 and WOMS 330)  
 CMLT 341 Theatre/Drama: Classic/Medieval (cross-listed with THEA 341)  
 CMLT 342 Theatre/Drama: Renaissance to 1700 (cross-listed with THEA 342)  
 CMLT 343 Theatre/Drama: 1700 to 1900 (cross-listed with THEA 343)  
 CMLT 344 Theatre/Drama: 1900 to Present (cross-listed with THEA 344)

**Consumer Studies (CNST)**

- CNST 214 Costume History Before 1700  
 CNST 224 Costume Design and Production Since 1700  
 CNST 319 Dress and Culture

**Economics (ECON)**

- ECON 315 Economic History of Colonial America  
 ECON 316 Economic History of the U.S.  
 ECON 318 Economic History of France

**English (ENGL)**

- ENGL 205 British Literature I  
 ENGL 206 British Literature II  
 ENGL 211 Great Writers of the Western World I (cross-listed with CMLT 207)  
 ENGL 212 Great Writers of the Western World II (cross-listed with CMLT 208)  
 ENGL 317 Film History (cross-listed with CMLT 317)  
 ENGL 321 Medieval Literature and Culture (cross-listed with CMLT 321)  
 ENGL 340 American Literature to the Civil War  
 ENGL 341 American Literature: Civil War to World War II  
 ENGL 344 African American Literature I (cross-listed with BAMS 313)  
 ENGL 345 African American Literature II

**Foreign Languages and Literatures (FLIT)**

- FLIT 330 Varying Authors, Themes, and Movements  
 (cross-listed with CMLT 330, CSCC 330 and WOMS 330)  
 FLIT 375 Topics: Russian and Soviet Culture in Translation  
 FLIT 380 Topics: Japanese Culture in Translation

**French (FREN)**

- FREN 301 Introduction to French Literature: Prose (to be taught in French)  
 FREN 302 Introduction to French Literature: Poetry and Theatre  
 (to be taught in French)  
 FREN 325 French Civilization I (to be taught in French)  
 FREN 326 French Civilization II (to be taught in French)

**Geography (GEOG)**

- GEOG 225 Historical Geography of the United States

**German (GRMN)**

- GRMN 311 Introduction to German Literature I (to be taught in German)  
 GRMN 312 Introduction to German Literature II (to be taught in German)  
 GRMN 325 German Civilization and Culture (to be taught in German)

**History (HIST)**

- HIST 101 Western Civilization to 1648  
 HIST 102 Western Civilization: 1648 to Present  
 HIST 103 World History to 1648  
 HIST 104 World History: 1648 to Present  
 HIST 130 Islamic Near East: 600-1500  
 HIST 131 Islamic Near East: 1500 to Present  
 HIST 134 History of Africa (cross-listed with BAMS 134)  
 HIST 135 Introduction to Latin American History  
 HIST 137 East Asian Civilization: China  
 HIST 138 East Asian Civilization: Japan  
 HIST 205 United States History  
 HIST 206 United States History  
 HIST 210 War and Society  
 HIST 220 The American Civil Rights Movement (cross-listed with BAMS 220)  
 HIST 270 History of Modern Asia  
 HIST 278 Historic Cultures of the Mid-Atlantic Region  
 (cross-listed with ANTH 278)  
 HIST 280 Science and Civilization  
 HIST 300 Women in American History (cross-listed with WOMS 300)  
 HIST 303 American Intellectual History  
 HIST 304 American Intellectual History  
 HIST 306 History of American Foreign Policy  
 HIST 315 Postwar America: The United States Since 1945  
 HIST 318 Colonial America  
 HIST 319 Revolutionary America  
 HIST 322 The City in American Culture (cross-listed with ANTH 322)  
 HIST 325 History of Black America to the Civil War  
 (cross-listed with BAMS 304)  
 HIST 326 History of Black America Since the Civil War  
 (cross-listed with BAMS 306)  
 HIST 330 Peasants and Revolution in Africa  
 HIST 340 Ancient Near East and Greece  
 HIST 341 Ancient Rome  
 HIST 344 Renaissance Europe  
 HIST 345 Europe in the Reformation Era: 1517 to 1648  
 HIST 348 History of Spain: 1479 to Present  
 HIST 349 Hispanic Societies: 1492 to Present  
 HIST 353 Modern Germany: 1770 to 1919  
 HIST 354 Germany in 20th Century: 1914 to Present  
 HIST 355 Early Modern Intellectual History  
 HIST 356 Modern European Intellectual History  
 HIST 359 Soviet Russia: 1917 to 1990  
 HIST 368 Modern China: 1600-1920s  
 HIST 369 China Since 1900



HIST 370	History of Modern Japan
HIST 371	Postwar Japan
HIST 372	Popular Culture in Urban Japan
HIST 373	Modern Ireland: 1534-Present
HIST 374	History of England to 1715
HIST 375	History of England: 1715 to Present
HIST 377	Radicalism and Revolution: Islamic Movements in the Modern Middle East
HIST 378	Nationalism in the Modern Middle East
HIST 380	History of the Arab-Israeli Conflict
HIST 382	History of Western Medicine (cross-listed with CSCC 382)
HIST 383	History of Science and Medicine I
HIST 384	History of Science and Medicine II
HIST 387	Technology in Western Civilization I
HIST 388	Technology in Western Civilization II
HIST 393	History of Modern Vietnam
HIST 397	History of South Africa
HIST 439	Women and Revolution in Africa (cross-listed with WOMS 439)
HIST 474	Seminar in English History
HIST 479	Seminar in Asian History

**Italian (ITAL)**

ITAL 310	Survey of Italian Literature (to be taught in Italian)
ITAL 311	Survey of Italian Literature (to be taught in Italian)
ITAL 325	Italian Civilization and Culture

**Music (MUSC)**

MUSC 107	History of Rock
MUSC 205	Music of the Non-Western World
MUSC 206	Music of China, Korea and Japan
MUSC 207	History of Jazz
MUSC 210	Music of Britain
MUSC 212	History of Liturgy and Hymns
MUSC 302	Women in Music: An Alternate Survey (cross-listed with WOMS 302)
MUSC 311	Music History: to 1600
MUSC 312	Music History: 1600 through 1827
MUSC 313	Music History: 1825 to the Present
MUSC 345	History of Theatre: American Musical Theatre (cross-listed with THEA 345)

**Philosophy (PHIL)**

PHIL 301	Ancient Philosophy
PHIL 302	Medieval Philosophy
PHIL 303	Modern Philosophy
PHIL 309	Indian Religion and Philosophy
PHIL 310	Chinese Religion and Philosophy

**Political Science (POSC)**

POSC 211	Politics in Developing Nations
POSC 311	Politics of Developing Nations
POSC 387	American Political Thought

**Russian (RUSS)**

RUSS 310	Introduction to Russian Literature I (to be taught in Russian)
RUSS 312	Introduction to Russian Literature II (to be taught in Russian)
RUSS 325	Russian Civilization and Culture (to be taught in Russian)

**Spanish (SPAN)**

SPAN 301	Survey of Spanish Literature (to be taught in Spanish)
SPAN 302	Survey of Spanish Literature (to be taught in Spanish)
SPAN 303	Survey of Spanish-American Literature (to be taught in Spanish)
SPAN 304	Survey of Spanish-American Literature (to be taught in Spanish)
SPAN 325	Spanish Civilization and Culture (to be taught in Spanish)
SPAN 326	Latin American Civilization and Culture (to be taught in Spanish)

**Theatre (THEA)**

THEA 341	Theatre/Drama: Classic/Medieval (cross-listed with CMLT 341)
THEA 342	Theatre/Drama: Renaissance to 1700 (cross-listed with CMLT 342)
THEA 343	Theatre/Drama: 1700 to 1900 (cross-listed with CMLT 343)
THEA 344	Theatre/Drama: 1900 to Present (cross-listed with CMLT 344)
THEA 345	History of Theatre: American Musical Theatre (cross-listed with MUSC 345)
THEA 346	History of Theatre: The American Theatre

**Women's Studies (WOMS)**

WOMS 300	Women in American History (cross-listed with HIST 300)
WOMS 302	Women in Music: An Alternate Survey (cross-listed with MUSC 302)
WOMS 330	Varying Authors, Themes, and Movements (cross-listed with CMLT 330, CSCC 330 and FLIT 330)
WOMS 439	Women and Revolution in Africa (cross-listed with HIST 439)

**GROUP C****Anthropology (ANTH)**

ANTH 103	Introduction to Prehistoric Archaeology (duplicate credit with ANTH 104 in Group D)
ANTH 222	Technology and Culture
ANTH 225	Peasant Societies
ANTH 229	Indians of North America
ANTH 230	Peoples of the World
ANTH 255	Applied Anthropology
ANTH 259	Hunting Societies
ANTH 320	Prehistory of North America
ANTH 337	South American Indians
ANTH 370	Culture of Food Production and Economic Development
ANTH 377	Ecological Anthropology
ANTH 380	Peoples and Cultures of Mexico and Central America

**Arts and Science (ARSC)**

ARSC 127	Shaping of the Modern World
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**Black American Studies (BAMS)**

BAMS 110	Introduction to Black American Studies
BAMS 204	Urban Communities (cross-listed with SOCI 204)
BAMS 205	Contemporary Afro-American Issues
BAMS 212	Afro-Caribbean Life and Culture
BAMS 361	Race, Power, and Social Conflict (cross-listed with SOCI 361)

**Science and Culture (CSCC)**

CSCC 271	Comparative Medical Systems
CSCC 310	Sociology of Health Care (cross-listed with SOCI 310)
CSCC 311	Hospitals (cross-listed with SOCI 311)

**Cognitive Science (CGSC)**

CGSC 270	Introduction to Cognitive Science
CGSC 330	Philosophy of the Mind (cross-listed with PHIL 330)

**Communication (COMM)**

COMM 200	Introduction to Human Communication Systems
COMM 245	Mass Communication and Culture
COMM 251	The Development of Verbal Communication
COMM 330	Communication and Interpersonal Behavior

**Consumer Studies (CNST)**

CNST 200	Consumer Economics
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**Criminal Justice (CRJU)**

CRJU 110	Introduction to Criminal Justice
CRJU 120	Illicit Drug Use in America
CRJU 201	Problems of Law Enforcement
CRJU 202	Problems of Criminal Judiciary
CRJU 203	Problems of Corrections
CRJU 345	Sociology of the Law (cross-listed with SOCI 345)

**Economics (ECON)**

ECON 100	Economic Issues and Policies
ECON 151	Introductory Microeconomics: Prices and Markets
ECON 152	Introductory Macroeconomics: National Economy
ECON 305	Comparative Economic Systems
ECON 306	Economic Theory of Politics (cross-listed with POSC 306)
ECON 311	Economics of Developing Countries
ECON 332	Economics of Government Spending and Taxation
ECON 340	International Economics
ECON 348	Industrial Policies of France
ECON 360	Government Regulation of Business
ECON 381	Economics of Human Resources
ECON 393	Urban Economics

**English (ENGL)**

ENGL 390	English Linguistics (cross-listed with LING 390)
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**Geography (GEOG)**

GEOG 102	Human Geography
GEOG 120	World Regional Geography
GEOG 210	Economic Geography
GEOG 230	Humans and the Earth Ecosystem
GEOG 235	Conservation of Natural Resources
GEOG 240	Environment and Behavior
GEOG 320	Water and Society

**History (HIST)**

HIST 327	American Labor before Industrialization
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**Linguistics (LING)**

- LING 101 Introduction to Linguistics I  
 LING 102 Language, Mind and Society  
 LING 203 Languages of the World  
 LING 222 Language and Gender (cross-listed with WOMS 222)  
 LING 265 Studies in Language  
 LING 390 English Linguistics (cross-listed with ENGL 390)

**Music (MUSC)**

- MUSC 309 Patterns of Patronage

**Philosophy (PHIL)**

- PHIL 330 Philosophy of the Mind (cross-listed with CGSC 330)

**Political Science (POSC)**

- POSC 105 The American Political System  
 POSC 106 Introduction to Political Science: Issues  
 POSC 220 Introduction to Public Policy  
 POSC 240 Introduction to International Relations  
 POSC 270 Comparative Politics  
 POSC 306 Economic Theory of Politics (cross-listed with ECON 306)  
 POSC 343 Society, Politics, and Health Care (cross-listed with SOCI 343)

**Psychology (PSYC)**

- PSYC 201 General Psychology  
 PSYC 301 Personality  
 PSYC 303 Introduction to Social Psychology  
 PSYC 325 Child Psychology  
 PSYC 333 Psychology of Women (cross-listed with WOMS 333)

**Sociology (SOCI)**

- SOCI 201 Introduction to Sociology  
 SOCI 202 Social Deviance  
 SOCI 203 The Individual and Society  
 SOCI 204 Urban Communities (cross-listed with BAMS 204)  
 SOCI 206 Women and Work (cross-listed with WOMS 206)  
 SOCI 209 Social Problems  
 SOCI 210 Population Problems  
 SOCI 211 Men, Conflict, and Social Change (cross-listed with WOMS 211)  
 SOCI 308 The Family  
 SOCI 310 Sociology of Health Care (cross-listed with CSCI 310)  
 SOCI 311 Hospitals (cross-listed with CSCI 311)  
 SOCI 322 Crowds, Cults, and Revolutions  
 SOCI 343 Society, Politics, and Health Care (cross-listed with POSC 343)  
 SOCI 345 Sociology of Law (cross-listed with CRJU 345)  
 SOCI 361 Race, Power, and Social Conflict (cross-listed with BAMS 361)  
 SOCI 362 Sociology of Mass Communication  
 SOCI 407 Sociology of Sex and Gender (cross-listed with WOMS 407)

**Women's Studies (WOMS)**

- WOMS 201 Introduction to Women's Studies  
 WOMS 202 Introduction to International Women's Studies  
 WOMS 206 Women and Work (cross-listed with SOCI 206)  
 WOMS 211 Men, Conflict, and Social Change (cross-listed with SOCI 211)  
 WOMS 222 Language and Gender (cross-listed with LING 222)  
 WOMS 333 Psychology of Women (cross-listed with PSYC 333)  
 WOMS 407 Sociology of Sex and Gender (cross-listed with SOCI 407)

**GROUP D****Anthropology (ANTH)**

- ANTH 102 Introduction to Biological Anthropology  
 (duplicate credit with ANTH 104)  
 ANTH 104 Introduction to Archaeology and Biological Anthropology (duplicate credit with ANTH 102, and with ANTH 103 in Group C)  
 ANTH 202 Human Evolution and the Fossil Record

**Art History (ARTH)**

- ARTH 205 Science and the Detection of Art Forgeries (cross-listed with MSST 205)

**Biology (BISC)**

- BISC 103 General Biology (Both BISC 103 and BISC 207 cannot be used to fulfill Group D. Duplicate credit if taken after BISC 207)  
 BISC 113 General Biology Laboratory  
 BISC 104 Neurobiology of the Brain  
 BISC 105 Human Heredity and Development  
 BISC 115 Human Heredity and Development Laboratory  
 BISC 106 Elementary Human Physiology  
 BISC 116 Elementary Human Physiology Laboratory  
 BISC 107 Elementary Evolutionary Ecology  
 BISC 117 Elementary Evolutionary Ecology Laboratory  
 BISC 110 Viruses, Genes, and Cancer  
 BISC 152 Biology of Human Sexuality

- BISC 171 Microbiology in Modern Society  
 BISC 195 Biological Evolution  
 BISC 207 Introductory Biology I (Both BISC 103 and BISC 207 cannot be used to fulfill Group D)  
 BISC 208 Introductory Biology II

**Chemistry (CHEM)**

- CHEM 100 Chemistry and the Human Environment  
 CHEM 101 General Chemistry (duplicate credit with CHEM 103, 105, 111)  
 CHEM 102 General Chemistry (duplicate credit with CHEM 104, 112)  
 CHEM 103 General Chemistry (duplicate credit with CHEM 101, 105, 111)  
 CHEM 104 General Chemistry (duplicate credit with CHEM 102, 112)  
 CHEM 105 General Chemistry (duplicate credit with CHEM 101, 103, 111)  
 CHEM 111 General Chemistry (duplicate credit with CHEM 101, 103, 105)  
 CHEM 112 General Chemistry (duplicate credit with CHEM 102, 104)

**Cognitive Science (CGSC)**

- CGSC 314 Brain and Behavior (cross-listed with PSYC 314)

**Computer and Information Sciences (CISC)**

- CISC 101 Computers and Information Systems  
 CISC 105 General Computer Science  
 CISC 106 General Computer Science for Engineers

**Entomology (ENTO)**

- ENTO 201 Wildlife Conservation and Ecology  
 ENTO 205 Elements of Entomology  
 ENTO 305 Entomology Laboratory

**Geography (GEOG)**

- GEOG 101 Physical Geography: Climatic Processes  
 GEOG 106 Physical Geography: Land Surface  
 GEOG 152 Climate and Life  
 GEOG 220 Meteorology  
 GEOG 250 Computer Methods in Geography

**Geology (GEOL)**

- GEOL 105 General Geology (duplicate credit with GEOL 107)  
 GEOL 115 General Geology Laboratory (duplicate credit with GEOL 107)  
 GEOL 106 General Geology  
 GEOL 116 General Geology Laboratory  
 GEOL 107 General Geology I (duplicate credit with GEOL 105/115)  
 GEOL 109 Planets, Asteroids and Impacts  
 GEOL 110 Evolution and Extinction (duplicate credit with GEOL 144)  
 GEOL 144 Evolution and Earth History (duplicate credit with GEOL 110)  
 GEOL 233 The Ice Ages and Human Chronology  
 GEOL 234 Earth Resources and Ecology  
 GEOL 243 Rocks and Minerals  
 GEOL 245 Volcanoes and Earthquakes

**Linguistics (LING)**

- LING 253 Laboratory Phonetics

**Marine Studies (MAST)**

- MAST 200 The Oceans

**Mathematical Sciences (MATH)**

- MATH 210 Discrete Mathematics I (duplicate credit with MATH 230)  
 MATH 221 Calculus I (duplicate credit with MATH 241)  
 MATH 230 Finite Mathematics with Applications (duplicate credit with MATH 210)  
 MATH 241 Analytic Geometry and Calculus A (duplicate credit with MATH 221)

**Museum Studies (MSST)**

- MSST 205 Science and the Detection of Art Forgeries (cross-listed with ARTH 205)

**Nutrition and Dietetics (NTDT)**

- NTDT 200 Nutrition Concepts

**Philosophy (PHIL)**

- PHIL 205 Logic (PHIL 351 alternate Duplicate credit if taken after PHIL 351)  
 PHIL 207 Inductive Logic and Scientific Method  
 PHIL 211 Basic Decision Theory  
 PHIL 351 Advanced logic (alternate to PHIL 205)

**Physics (PHYS)**

- PHYS 104 Elementary Physics  
 (duplicate credit with PHYS 201, PHYS 207, and SCEN 101)  
 PHYS 133 Introduction to Astronomy  
 PHYS 140 Great Concepts of Physics  
 PHYS 141 Light, Lasers, Cameras, Perception  
 PHYS 143 Energy, Technology, and Society  
 PHYS 144 Concepts of the Universe  
 (duplicate credit if taken after PHYS 133 or 134)  
 PHYS 145 Quasars, Black Holes, and the Universe

PHYS 146	Quarks, Gluons, and the Big Bang
PHYS 147	Atoms for Everyone
PHYS 199	Exploring Physics Concepts: I
PHYS 201	Introductory Physics I (duplicate credit with PHYS 104, 207, and SCEN 101)
PHYS 202	Introductory Physics II (duplicate credit with PHYS 208 and SCEN 102)
PHYS 207	Fundamentals of Physics I (duplicate credit with PHYS 104, 201, and SCEN 101)
PHYS 208	Fundamentals of Physics II (duplicate credit with PHYS 202 and SCEN 102)

**Plant Science (PLSC)**

PLSC 101	Botany I
PLSC 204	Introduction to Soil Science

**Psychology (PSYC)**

PSYC 314	Brain and Behavior (cross-listed with CGSC 314)
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**Science (SCEN)**

SCEN 101	Physical Science (duplicate credit with PHYS 104, 201, and 207)
SCEN 102	Physical Science (duplicate credit with PHYS 202 and 208)
SCEN 103	Concepts of Science and Technology

**Statistics (STAT)**

STAT 201	Introduction to Statistics I (duplicate credit with STAT 205)
STAT 205	Statistical Methods (duplicate credit with STAT 201)

**MAJORS AND MINORS**

Every attempt has been made to present an accurate description of the curriculum requirements in the programs that follow. However, programs and policies may be changed during the academic year, and students are advised to check with the department concerned or the Advisement Center and Dean's Office, Room 102, Elliott Hall, 831-1281, for the most current information.

**AFRICAN STUDIES**

The African Studies Minor has been designed to provide an intellectually coherent program of study based upon regularly offered courses in the fields of African history and culture, as well as anthropology.

Telephone: (302) 831-2189

<http://www.udel.edu/AreaStudies/africa.html>

**REQUIREMENTS FOR THE MINOR IN AFRICAN STUDIES**

The minor requires eighteen credit hours drawn from the list of courses below. Twelve credit hours must be from courses that deal with Africa proper. Students must consult with the program coordinator on making their selection of courses. It should be noted that not all courses are offered every semester.

**6 credits in Anthropology, selected from the following:**

ANTH 260	Socio Cultural History of Africa	3
ANTH 333	Peoples of Africa	3
ANTH 368	Anthropology of Slavery	3
ANTH 370	Culture of Food Production and Economic Development	3
ANTH 457/657	Survey of African Art	3

**6 credits in History, selected from the following:**

HIST 134	History of Africa	3
HIST 330	Peasants and Revolution in Africa	3
HIST 394	Africa Since 1960	3
HIST 395	Pan Africanism	3
HIST 397	History of South Africa	3
HIST 439	Women and Revolution in Africa	3
HIST 440	Africa Under Colonial Rule	3

**3 credits from Black American Studies, selected from the following:**

BAMS/HIST 331	History of the Caribbean I	3
HIST 332	History of the Caribbean II	3
BAMS 367	Africanisms in America	3

**3 credits from other areas, which may include:**

POSC 433	African Political Systems	3
POSC/BAMS 439	Southern African Politics	3

**ANTHROPOLOGY**

The Department of Anthropology offers undergraduate major programs in Anthropology, including an Honors Degree option, and in Anthropology Education. In addition, interdepartmental majors with other departments are possible, and an Anthropology minor is also available.

Anthropology is the study of humans and their works. The field includes both the comparative study of worldwide variations in culture and the development of humankind from prehistoric to contemporary times. Anthropology at the University of Delaware encompasses three distinct but interconnected fields of study: social and cultural anthropology, physical or biological anthropology, and archaeology. Social and cultural anthropologists undertake holistic comparative studies of communities throughout the world, studying their art forms, religions, social organizations, and political and economic institutions. Physical anthropology addresses itself to the evolutionary differentiation of primates, the emergence of hominid populations, primate behavior and processes of adaptation in modern populations. Archaeological work is directed toward recovering the physical remains of prehistoric and historic communities and retracing their many different forms of cultural development and adaptation.

The undergraduate program at the University emphasizes a variety of subspecialties in social and cultural anthropology, but provides, nevertheless, a broad perspective on the fields of archaeology and physical anthropology. Because the department is devoted primarily to undergraduate instruction, students can take advantage of many opportunities to work closely with the faculty and to participate in small seminar classes. Courses are enriched by visits to museums and special exhibits in neighboring cultural centers, by films, and by local field inquiry.

Telephone: (302) 831-2802

<http://www.udel.edu/anthro/>

**DEGREE: BACHELOR OF ARTS  
MAJOR: ANTHROPOLOGY****CURRICULUM**

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Social and Cultural Anthropology courses	12
Biological Anthropology courses	6
Archaeological Anthropology courses	6
ANTH 486 Tutorial in Social and Cultural Anthropology	3
ANTH 487 Tutorial in Archaeology	3
or	
ANTH 488 Tutorial in Physical Anthropology	3
Anthropology course	3

A minimum of six credits of ANTH must be taken at the 200-level and a minimum of twelve credits of ANTH must be taken at the 300-level

**ELECTIVES**

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS  
MAJOR: ANTHROPOLOGY EDUCATION****CURRICULUM**

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Social and Cultural Anthropology courses	12
Biological Anthropology courses	6
Archaeological Anthropology courses	6
ANTH 486 Tutorial in Social and Cultural Anthropology	3

ANTH 487	Tutorial in Archaeology	3
or		
ANTH 488	Tutorial in Physical Anthropology	3
Anthropology course		3
A minimum of six credits of ANTH must be taken at the 200-level and a minimum of twelve credits of ANTH must be taken at the 300-level.		
Economics course		3
Geography course		3
History course		3
Political Science course		3
Sociology course		3
PSYC 201	General Psychology	3
Six additional credits selected from the departments listed above		6
EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
HIST 491	Planning a Course of Instruction	3
HIST 493	Seminar: Problems in Teaching History and Social Sciences	3
EDUC 420	Reading in the Content Areas	1
EDUC 400	Student Teaching	9

To be eligible to student teach, Anthropology Education majors must have a g.p.a. of 3.0 in their major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

### HONORS BACHELOR OF ARTS: ANTHROPOLOGY OR ANTHROPOLOGY EDUCATION

Honors Degree candidates must complete a minimum of 33 credit hours of approved courses to include 18 Honors credits (6 credits of Honors Thesis). All Honors Degree candidates must complete satisfactorily the following:

	CREDITS
Social and Cultural Anthropology courses	12
Biological Anthropology courses	6
Archaeological Anthropology courses	6
ANTH 486 Tutorial in Social and Cultural Anthropology	3
ANTH 487 Tutorial in Archaeology	3
or	
ANTH 488 Tutorial in Physical Anthropology	3
Anthropology course	3

A minimum of 6 credits of ANTH must be taken at the 200-level and a minimum of 12 credits of ANTH must be taken at the 300-level.

The Department will strongly encourage Honors students to take special problem courses beyond the 33 hours required in Anthropology. For University requirements for the Honors bachelor's degree, see the University Honors Program in this catalog.

### INTERDEPARTMENTAL MAJORS

An interdepartmental major, for students having interests in two areas, requires 21 credits each in anthropology and in one other department. The following areas are required by the Anthropology Department:

- 3 Credits in biological anthropology
- 3 Credits in archaeology
- 9 Credits in social and cultural anthropology
- 12 Credits at the 300-level or above
- 3 Credits of any 48X Tutorial

A 48X Tutorial satisfies a 300+ requirement as well as any three credits in a subdiscipline (e.g. ANTH 486 would also satisfy three of the nine credit hours required in social and cultural anthropology).

Students should consult with their advisors for additional information on interdepartmental majors.

### REQUIREMENTS FOR THE MINOR IN ANTHROPOLOGY

Students wishing to minor in anthropology must complete 18 credits in anthropology courses distributed as follows: 6 credits in 200-level courses and 12 credits in 300- and 400-level courses.

### ART

The Department of Art is a studio-oriented department offering a wide range of visual arts activities and subject areas. The department offers undergraduate majors in Art (Bachelor of Arts), Fine Arts (Bachelor of Fine Arts), and Visual Communications (Bachelor of Fine Arts), as well as a minor in art. The B.A. degree requires 36 credit hours minimum of art courses and 45 credit hours maximum. The B.F.A. degree requires 69 credit hours minimum of art courses and 80 credit hours maximum. All grades in art courses must be C- or better. Admission to the B.F.A. is contingent upon submission of a portfolio of slides and/or original work after completion of the freshman year, a minimum of 12 credits of foundation courses and a 2.66 GPA in studio art courses. A limited number of students are admitted to the B.F.A. degree programs.

Foundation studio art courses are taken in the freshman year. The Foundation Colloquium is taken both semesters of the freshman year. Art concentration, art studies, and art electives are taken in the sophomore through senior years. Art 315 is taken after completion of 62 credits and may be applied toward both the art major requirement and a breadth requirement, but credits are counted only once toward the total credits for graduation. Art 416 and Art 417 are only required of BFA majors and are taken in the senior year. Art History courses may be applied toward both the art major requirement and a breadth requirement, but credits are counted only once toward the total credits for graduation.

The art or fine arts major may specialize in ceramics, illustration, painting, photography, printmaking, or sculpture. The visual communications major may specialize in advertising design, applied photography, or graphic design. The courses of study are designed to prepare the student for professional practice in the student's chosen area of specialization.

The department enjoys an excellent reputation and has a Macintosh-based computer site within the department, including imaging and layout software, scanners, and color printers. The proximity of the University to major cultural centers of the northeastern United States provides students with easy access to important museums and galleries and allows for an outstanding program of visiting artists.

Telephone: (302) 831-2244

<http://Seurat.art.udel.edu/ArtDeptHP.html>

### DEGREE: BACHELOR OF ARTS MAJOR: ART

CURRICULUM	CREDITS
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See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

ART 110	Foundation Drawing I	3
ART 111	Foundation 2D Design	3
ART 112	Foundation Drawing II	3
ART 113	Foundation 3D Design	3
ART 114	Foundation Colloquium (fall semester)	0
ART 115	Foundation Colloquium (spring semester)	0
ART 114/115	Required fall and spring of freshman year	
Art Discipline		12
Twelve credits beyond those that might have been taken as part of foundation requirements. At least three credits must be at the 400-level. (ceramics, illustration, painting, photography, printmaking, sculpture)		
Art Electives		9
Courses from other department disciplines outside of chosen art discipline		
ART 315	Issues in Contemporary Art	3
Art History courses		6

**ELECTIVES**

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF FINE ARTS**  
**MAJOR: FINE ARTS**

**CURRICULUM** **CREDITS**

**UNIVERSITY REQUIREMENTS**

ENGL 110 Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).	3

**COLLEGE REQUIREMENTS**

**Writing:** (minimum grade C-) ..... 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Mathematics** (one of the following) ..... 0-4

MATH 113 Contemporary Mathematics  
(designed for students who do not intend to continue the study of mathematics)

MATH 114 College Mathematics and Statistics  
(designed for students who do not intend to continue the study of mathematics)

MATH 115 Pre-Calculus  
(designed for students who intend to continue the study of mathematics)

MATH 221 Calculus I

MATH 241 Analytic Geometry and Calculus A  
Successful performance on the college proficiency exam. (0 credits awarded)

**Breadth Requirements** (See page 83)

**Group A** ..... 9

Understanding and appreciation of the creative arts and humanities.  
Nine credits representing at least two areas.

**Group B** ..... 9

The study of culture and institutions over time. Nine credits representing at least two areas

**Group C** ..... 9

Empirically based study of human beings and their environment. Nine credits representing at least two areas.

**Group D** ..... 7

The study of natural phenomena through experiment and analysis. A minimum of seven credits representing at least two areas including a minimum of one course with an associated laboratory.

**MAJOR REQUIREMENTS**

NOTE: 69 credit hours minimum Art Department courses; 80 credit hours maximum Art Department courses; all grades in art must be C- or better

ART 110 Foundation Drawing I ..... 3

ART 111 Foundation 2D Design ..... 3

ART 112 Foundation Drawing II ..... 3

ART 113 Foundation 3D Design ..... 3

ART 114 Foundation Colloquium (fall semester) ..... 0

ART 115 Foundation Colloquium (spring semester) ..... 0

ART 114/115 Required fall and spring of freshman year

Art Discipline ..... 21

Taken from a specified sequence of courses for each discipline in the department (ceramics, illustration, painting, photography, printmaking, sculpture). At least nine credits must be at the 400-level.

Art Studies ..... 21

Taken from a list of specified courses established for each discipline.

Art Electives ..... 9

ART 315 Issues in Contemporary Art ..... 3

ART 416 Professional Practices ..... 3

ART 417 BFA Exhibition ..... 0

Art History courses ..... 9

**ELECTIVES**

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF FINE ARTS**  
**MAJOR: VISUAL COMMUNICATIONS**

**CURRICULUM****CREDITS****UNIVERSITY REQUIREMENTS**

ENGL 110 Critical Reading and Writing (minimum grade C-) ..... 3

Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).

**COLLEGE REQUIREMENTS**

**Writing:** (minimum grade C-) ..... 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Mathematics** (one of the following) ..... 0-4

MATH 113 Contemporary Mathematics  
(designed for students who do not intend to continue the study of mathematics)

MATH 114 College Mathematics and Statistics  
(designed for students who do not intend to continue the study of mathematics)

MATH 115 Pre-Calculus  
(designed for students who intend to continue the study of mathematics)

MATH 221 Calculus I

MATH 241 Analytic Geometry and Calculus A

Successful performance on the college proficiency exam. (0 credits awarded)

**Breadth Requirements** (See page 83)

**Group A** ..... 9

Understanding and appreciation of the creative arts and humanities.  
Nine credits representing at least two areas

**Group B** ..... 9

The study of culture and institutions over time. Nine credits representing at least two areas.

**Group C** ..... 9

Empirically based study of human beings and their environment. Nine credits representing at least two areas.

**Group D** ..... 7

The study of natural phenomena through experiment and analysis. A minimum of seven credits representing at least two areas including a minimum of one course with an associated laboratory.

**MAJOR REQUIREMENTS**

NOTE: 69 credit hours minimum Art Department courses; 80 credit hours maximum Art Department courses; all grades in art must be C- or better.

ART 110 Foundation Drawing I ..... 3

ART 111 Foundation 2D Design ..... 3

ART 112 Foundation Drawing II ..... 3

ART 113 Foundation 3D Design ..... 3

ART 114 Foundation Colloquium (fall semester) ..... 0

ART 115 Foundation Colloquium (spring semester) ..... 0

ART 114/115 Required fall and spring of freshman year

Art Discipline ..... 21

Taken from a specified sequence of courses for each discipline in the department (advertising design, applied photography, graphic design). At least nine credits must be at the 400-level.

Art Studies ..... 21

Taken from a list of specified courses established for each discipline.

Art Electives ..... 9

ART 315 Issues in Contemporary Art ..... 3

ART 408 Internship ..... 3

ART 417 BFA Exhibition ..... 0

Art History courses ..... 9

**ELECTIVES**

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**REQUIREMENTS FOR A MINOR IN ART**

**S**tudents must obtain written permission from the chair before declaring the minor. Admitted students will be assigned an advisor,

generally in the discipline of study. Eighteen credits are required, distributed as follows:

- a) Three studio art courses at the 100-200 level from one or two disciplines. .... 9 credits
- b) Two studio art courses at the 300-400 level from one or two disciplines. .... 6 credits
- c) One related nonstudio art, art history or art criticism course. .... 3 credits

## ART CONSERVATION

The Art Conservation Department offers an undergraduate major leading to the Bachelor of Arts, with two separate concentrations. Both concentrations focus on interdisciplinary study in chemistry, studio arts, and art history or anthropology with a focus on art conservation. Students must choose either the concentration in Pre-Graduate Studies for Art Conservation, which prepares students for graduate-level study in a formal academic conservation program, or the concentration in Collections Care, which prepares students for a more general art-related career, focussing on collections management and care. An Honors Degree option is available in both concentrations.

Working closely with an advisor, the students elect a concentration as well as coordinated courses in the Departments of Anthropology, Art, Art History, Chemistry and Biochemistry, and others. During their junior or senior years, majors are required to participate in one or two on-site internships in local conservation laboratories. Specialized courses in the historic development of art materials and techniques and the general philosophy and practice of art conservation and preservation are also required. Students in this program must earn a minimum of a C- in all required courses.

Conservation encompasses interdisciplinary approaches to the study and care of art and other cultural property. Conservators are professionals who have the specialized knowledge and skills in the arts, sciences, and other fields that enable them to undertake scientific studies on objects, stabilizing the structure and reintegrating the appearance of deteriorated cultural artifacts, and establishing the environment in which artifacts are best preserved. Often, conservators specialize in some particular material or group of objects such as paintings, art on paper, textiles, library and archival artifacts, photographs, archeological or ethnographic materials, sculpture, furniture, or decorative objects. Conservation demands a broad knowledge of many subjects in the sciences and humanities, the astuteness to make sound judgements, the development of excellent manual skills, and the temperament and ability to carry out precise work.

Telephone: (302) 831-3489

<http://Seurat.art.udel.edu/ArtConHP.html>

### DEGREE: BACHELOR OF ARTS

### MAJOR: ART CONSERVATION

### CONCENTRATION: COLLECTIONS CARE

#### CURRICULUM

#### CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS (56 credits)

ARTC 301	Care and Preservation of Cultural Property I	3
ARTC 302	Care and Preservation of Cultural Property II	3
ARTC 464	Conservation Internship (one semester) (Junior and/or Senior status only)	3
ARTC 485	Color Mixing and Matching	3
ARTC 488	Studio in the Materials and Techniques of Painting I	3
or		
ARTC 489	Studio in the Materials and Techniques of Painting II	
ARTC 480	Studio in the Materials and Techniques of Drawing in the West	3
or		
ARTC 490	Studio in the Materials and Techniques of Printmaking I	

MSST 403	History, Philosophy, Functions and Future of Museums	3
MSST 466	Independent Study: Museum Studies Internship	3
ART 110	Foundation Drawing	3
or		
ART 130	Drawing I: Tools and Techniques	
or		
ART 138	Elementary Drawing and Painting I	
ART 280	Beginning Photography	3
ART 250	Beginning Sculpture	3
or		
ART 260	Beginning Metals	
or		
ART 290	Beginning Ceramics	
or		
ART 370	Fiber Survey: Structure and Surface	
Two courses from the following:		6
ANTH 103	Introduction to Prehistoric Archaeology	
ARTH 153	Introduction to Art History I	
ARTH 154	Introduction to Art History II	
ARTH 155	Asian Art	
ARTH 161	Art in the East and West	
ARTH 162	History of Architecture	
CHEM 101	General Chemistry	4
CHEM 102	General Chemistry	4
Three courses, with at least two courses at or above the 300-level, from the following:		9
ANTH 216	Introduction to Material Culture Studies	
ANTH 222	Technology and Culture	
ANTH 229	Indians of North America	
ANTH 251	Introduction to Ethnic Arts	
ANTH 324	Old World Archaeology	
ANTH 338	Arts & Crafts: Native South America	
ANTH 340	Historical Archaeology	
ANTH 379	Historical Archaeology of the Eastern United States	
ANTH 410	Archaeological Analysis of Material Culture	
ANTH 451	Myth and Culture	
ANTH 457	Survey of African Art	
ARTC 444	Technology of Cultural Materials: Ceramics and Glass	
ARTC 445	Technology of Cultural Materials: Metals	
ARTH 207	Origins of Art	
ARTH 208	Greek and Roman Art	
ARTH 209	Early Medieval Art 200-1100 AD	
ARTH 210	Later Medieval Art 1000-1400 AD	
ARTH 213	Art of the Northern Renaissance	
ARTH 217	Early Renaissance Art	
ARTH 218	High Renaissance and Mannerist Art	
ARTH 220	Italian Renaissance Architecture	
ARTH 222	Baroque Art	
ARTH 223	Baroque and Rococo Architecture and Urbanism	
ARTH 225	Eighteenth Century Art	
ARTH 227	Modern Art I	
ARTH 228	Modern Art II	
ARTH 230	American Art: 1607-1865	
ARTH 231	American Art: 1865-present	
ARTH 233	Art of China	
ARTH 234	Art of Japan	
ARTH 235	Art of India	
ARTH 236	The Arts of Islam	
ARTH 301	Research and Methodology in Art History	
ARTH 302	Prints and Society	
ARTH 304	Northern Baroque Art	
ARTH 305	Italian Baroque: Metaphor and Marvel	
ARTH 308	Modern Architecture I: 1750-1900	
ARTH 309	Modern Architecture II: The Twentieth Century	
ARTH 310	The Role of the Artist in Society	
ARTH 318	History of Photography	
ARTH 339	Art & Architecture of Europe	
BAMS 320	History of Afro-American Art	
CNST 214	Costume History Before 1700	
CNST 224	Clothing Design and Production Since 1700	

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS**  
**MAJOR: ART CONSERVATION**  
**CONCENTRATION: PREGRADUATE STUDY**

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS (64 or 67 credits)**

ARTC 301	Care and Preservation of Cultural Property I	3
ARTC 302	Care and Preservation of Cultural Property II	3
ARTC 464	Conservation Internship (two semesters) (Junior and/or Senior status only)	6
ARTC 485	Color Mixing and Matching	3
ARTC 488	Studio in the Materials and Techniques of Painting I	3
or		
ARTC 489	Studio in the Materials and Techniques of Painting II	
ARTC 480	Studio in the Materials and Techniques of Drawing in the West	3
or		
ARTC 490	Studio in the Materials and Techniques of Printmaking I	
ART 110	Foundation Drawing I	3
or		
ART 130	Drawing I: Tools and Techniques	
or		
ART 138	Elementary Drawing and Painting I	
ART 280	Beginning Photography	3
ART 250	Beginning Sculpture	3
or		
ART 260	Beginning Metals	
or		
ART 290	Beginning Ceramics	
or		
ART 370	Fiber Survey: Structure and Surface	

Two courses from the following 6

ANTH 103	Introduction to Prehistoric Archaeology
ARTH 153	Introduction to Art History I
ARTH 154	Introduction to Art History II
ARTH 155	Asian Art
ARTH 161	Art in the East and West
ARTH 162	History of Architecture

One of the following (A or B) chemistry sequences 16-19

Option A (16 credits)

CHEM 103	General Chemistry
CHEM 104	General Chemistry
CHEM 321	Organic Chemistry
CHEM 322	Organic Chemistry

Option B (for Chemistry majors or minors) (19 credits)

CHEM 111	General Chemistry
CHEM 119	Quantitative Chemistry I
CHEM 112	General Chemistry
CHEM 120	Quantitative Chemistry II
CHEM 321	Organic Chemistry
CHEM 322	Organic Chemistry

Four courses, with at least three courses at or above the 300-level, from the following: 12

ANTH 216	Introduction to Material Culture Studies
ANTH 222	Technology and Culture
ANTH 229	Indians of North America
ANTH 251	Introduction to Ethnic Arts
ANTH 324	Old World Archaeology
ANTH 338	Arts & Crafts: Native South America
ANTH 340	Historical Archaeology
ANTH 379	Historical Archaeology of the Eastern United States
ANTH 410	Archaeological Analysis of Material Culture
ANTH 451	Myth and Culture
ANTH 457	Survey of African Art
ARTC 444	Technology of Cultural Materials: Ceramics and Glass
ARTC 445	Technology of Cultural Materials: Metals
ARTH 207	Origins of Art
ARTH 208	Greek and Roman Art
ARTH 209	Early Medieval Art 200-1100 AD
ARTH 210	Later Medieval Art 1000-1400 AD
ARTH 213	Art of the Northern Renaissance
ARTH 217	Early Renaissance Art
ARTH 218	High Renaissance and Mannerist Art
ARTH 220	Italian Renaissance Architecture
ARTH 222	Baroque Art

ARTH 223	Baroque and Rococo Architecture and Urbanism
ARTH 225	Eighteenth Century Art
ARTH 227	Modern Art I
ARTH 228	Modern Art II
ARTH 230	American Art: 1607-1865
ARTH 231	American Art: 1865-present
ARTH 233	Art of China
ARTH 234	Art of Japan
ARTH 235	Art of India
ARTH 236	The Arts of Islam
ARTH 301	Research and Methodology in Art History
ARTH 302	Prints and Society
ARTH 304	Northern Baroque Art
ARTH 308	Modern Architecture I: 1750-1900
ARTH 309	Modern Architecture II: The Twentieth Century
ARTH 310	The Role of the Artist in Society
ARTH 318	History of Photography
ARTH 339	Art & Architecture of Europe
BAMS 320	History of Afro-American Art
MSST 403	History, Philosophy, Functions and Future of Museums
CNST 214	Costume History Before 1700
CNST 224	Clothing Design and Production Since 1700

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**HONORS BACHELOR OF ARTS: ART CONSERVATION**  
**(Both Concentrations)**

Students wishing to receive an Honors B.A. in Art Conservation must complete:

1. All requirements for the Bachelor of Arts degree in Art Conservation.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).

The Honors credits required in Art Conservation include ARTC 301 and ARTC 302 and courses in such collateral disciplines as Anthropology, Art History, and Chemistry.

The Art Conservation Department will offer ARTC 301 and ARTC 302 for Honors credit in conjunction with the regular section. Students enrolled for Honors credit will be responsible for additional assignments and activities, including in-depth investigation of art and artifact technology and deterioration using visual and microscopic analysis, individual meetings with the instructor and local conservation professionals focussed on current issues relating to the care and preservation of cultural property, and on-site assessment of the condition and collection care practices of local cultural institutions.

Students seeking an Honors degree will normally be expected to take ARTH 153/154 for Honors credit. Those in the Pregraduate Study Concentration will normally be expected to take CHEM 103/104 or (at least some of) CHEM 111/112 and CHEM 119/120 for Honors credit. The Honors Thesis (UNIV 401/402) will involve 6 credits of advanced-level research in Art Conservation studies.

**ART HISTORY**

The Department of Art History offers both an undergraduate major and a minor in art history. Because art history is an interdisciplinary field that touches on many aspects of civilization, the course of study includes work in such related disciplines as anthropology, studio art, English, history, languages and literatures, music, philosophy, and theater. Although art history majors may concentrate in a particular area, the program is designed to provide students with a broad liberal arts education that is necessary preparation for a variety of careers.

Art history is concerned with the historical development of ideas and institutions as expressed in the visual arts throughout the ages. The Department offers courses in nearly every area of art histo-

ry, with special expertise in European and American painting, photography, sculpture, and architecture from antiquity to the present. The faculty of the Department collaborate with the Winterthur Programs in Early American Culture and Art Conservation, as well as with those in Museum Studies and Historic Preservations. Visits to museums from New York to Washington are scheduled in connection with many art history courses. The University Gallery houses a collection of original works of art and offers internship, research, and exhibition opportunities for students. Advanced students may draw upon the departmental slide and photograph collections.

Undergraduate students may participate in an interdepartmental major in art, art history, and chemistry that will prepare them for graduate study or apprenticeship in art conservation, or they may enroll in the art conservation major, an interdisciplinary program. Students interested in museum work should consider taking museum studies courses offered at the University.

Telephone: (302) 831-8415

<http://Seurat.art.udel.edu/ArtHistHP.html>

## DEGREE: BACHELOR OF ARTS

### MAJOR: ART HISTORY

#### CURRICULUM

#### CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

ARTH 153	Introduction to Art History I	3
ARTH 154	Introduction to Art History II	3

Fifteen credits at the 200-level or above, distributed as follows:

a. Ancient	3
b. Medieval (including Northern Renaissance)	3
c. Renaissance	3
d. Baroque or 18th Century	3
e. Modern	3

ARTH 301	Research and Methodology in Art History	3
Art History Seminar at the 300- or 400-level		3
Other Art History courses above 100-level		6
ENGL 202	Biblical and Classical Literature	3
Any advisor-approved 200- or 300-level History course		3

**Nine credits**, with the advisor's approval, from appropriate courses in the following areas: Anthropology, Studio Art, Education, English, History, Foreign Languages and Literatures (other than that used to satisfy the College's foreign language requirement), Music, Philosophy, and Theatre. A second History course, a Studio Art course, and a foreign language literature course are recommended.

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

### REQUIREMENTS FOR THE MINOR IN ART HISTORY

The minor in art history requires 18 credits of course work, including at least four courses above the 100-level. Students must distribute their courses among at least three different key areas of art history: Ancient, Medieval, Renaissance, Baroque, Modern, American, and non-western art.

Several courses in art history may be applied toward fulfilling Group A and B requirements in the College of Arts and Science.

## ASIAN STUDIES

(See East Asian Studies)

## ASTRONOMY

(See Physics and Astronomy)

## BIOLOGICAL SCIENCES

The Department of Biological Sciences offers both a major and a minor in Biological Sciences, as well as a major in biological sciences education, an Honors degree, and Honors courses. An interdepartmental major between biology and psychology with an emphasis on neuroscience is also available. The Department of Biological Sciences also offers a B.S. degree with a concentration in biotechnology and participates in an interdepartmental B.S. degree program in Environmental Sciences.

The undergraduate programs in biology are designed to meet intellectual needs as well as to prepare students for subsequent professional or vocational training. Preprofessional students (medicine, physical therapy, dentistry, osteopathy, etc.) generally enroll as majors in the biological sciences. Special advisement for these students is available through the Health Sciences Advisement and Evaluation Committee, Room 118 Wolf Hall, telephone (302) 831-2282.

Students interested in marine biology are encouraged to take advantage of course and research opportunities in the Department of Biological Sciences and the University's College of Marine Studies.

Courses at the 100-level are designed to serve students who do not choose to major in biology or other sciences. Most of these courses may be used to satisfy the Group D requirements of the College of Arts and Science, but may not be counted toward the credits required for graduation for students majoring or minoring in biological sciences. Students not majoring in biological sciences who have some academic maturity in the sciences or engineering and an interest in biology are advised to elect BISC 207 or 208, perhaps followed by other core courses or other biology courses appropriate to their professional interests.

Telephone: (302) 831-2282

<http://www.udel.edu/bio/>

### BIOLOGICAL SCIENCES DEGREE PROGRAMS

During the freshman year, biological science majors for the B.A., B.S., and Biological Sciences Education degrees ordinarily take courses in biology, chemistry, English, foreign language, and mathematics through calculus. Students should consult their faculty advisors to select wisely from the variety of advanced courses and electives available to sophomores, juniors and seniors.

Many opportunities exist for research experience with a faculty member. In addition, an opportunity for teaching experience exists. Up to 4 credits of research or independent study (BISC 266, 366, 466, or 666) may be counted toward the 33 credits required for the majors in Biological Sciences or Biological Sciences Education. Some biology-related courses in other departments may be counted toward the major (limit 6 credits).

A grade of C- or better must be obtained in all biology courses that are used to satisfy the requirements for the Biological Sciences B.A., B.S., and Biological Sciences Education degrees. A grade of D (not D-) or better must be obtained in chemistry, physics, and mathematics courses required for the Biological Sciences majors and minor. Biology courses at the 100-level may not be counted toward these degrees.

### BIOTECHNOLOGY

The Bachelor of Science degree in Biological Sciences with a concentration in Biotechnology is a four-year program that emphasizes laboratory courses/experiences in various aspects of molecular, cellular, and physical biosciences. It is intended for students who hope to be employed in a laboratory setting after graduation and for those who will be continuing their education at the graduate level in a related discipline.



During the first two years at the University, students interested in biotechnology generally take the same courses as those pursuing a B.A. degree in biological sciences. At any time during these two years, students can declare *interest* in biotechnology; however, they are not admitted into the program until the fall semester of the third year. Students apply for admission in the spring of the sophomore year. Admission is limited to 10 students per class. A minimum grade-point index of 2.5 is required for application.

Eligibility for admission to the junior year of the Biotechnology program will be based on the following criteria:

1. Minimal cumulative index; first three semesters — 2.5
2. Minimal index in the sciences; first three semesters — 2.5
3. A grade of C or better in BISC 207, BISC 208, BISC 301 and BISC 371 (or other bio course if BISC 371 is not taken).
4. Within the pool of eligible applicants, admission into the program will be determined by academic achievement, and priority will be given to full-time University sophomores with a stated interest in obtaining employment in biotechnology or in pursuing a graduate degree in a related discipline.

The following courses are recommended. Some courses are not available each year, so advisement and careful planning are strongly suggested.

### NEUROSCIENCE

An interdepartmental major between Biological Sciences and Psychology is designed for students with an interest in the interdisciplinary field of neuroscience. The major prepares students for graduate programs in neuroscience, neuropsychology, physiology, and pharmacology, and for positions in pharmaceutical and biotechnology companies. It also provides preparation for professional programs in medicine, physical therapy, and related areas.

In this interdepartmental major students first learn the fundamentals of biology and psychology and then concentrate on courses that examine the structure and function of the nervous system and its relationship to behavior. Detailed instructions regarding an interdepartmental major are available from the Departments or the Arts and Science Advisement Center.

### COOPERATIVE EDUCATION PROGRAM

Through the cooperation of area businesses, industry, and government agencies, students may integrate their academic study with practical work experience. Co-op positions are available during any semester, including winter and summer sessions, for academic credit. Students register for BISC 444 (1-9 credit hours). Credits earned in this pass/fail course count toward graduation but not toward the 33 credit hours needed for the major in biological sciences. Placements vary from part to full time and may be salaried or on a volunteer basis.

Information about this program may be obtained from the Career Services Center or the Biology Advisement Office, 118 Wolf Hall, telephone (302) 831-2282.

### DEGREE: BACHELOR OF ARTS MAJOR: BIOLOGICAL SCIENCES

#### CURRICULUM

CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

Minimum grade C- required in all BISC courses for a total of at least 33 credits in biology.

BISC 207/208	Introductory Biology I and II	8
BISC 303	Genetic and Evolutionary Biology	4
At least two of the following courses:		7-8
BISC 301	Molecular Biology of the Cell	
BISC 302	General Ecology	
BISC 306	General Physiology	

Biology electives at the 300-level or above, including one 600-level course other than Independent Study		13-14
CHEM 103/104	General Chemistry	8
CHEM 321	Organic Chemistry	4
CHEM 322	Organic Chemistry	4
or		
CHEM 213	Elementary Organic Chemistry	4
CHEM 214	Elementary Biochemistry	3
CHEM 216	Elementary Biochemistry Laboratory	1
PHYS 201/202	Introductory Physics I and II	8
MATH 221	Calculus I	3

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

### DEGREE: BACHELOR OF ARTS MAJOR: BIOLOGICAL SCIENCES EDUCATION

Students planning to major in biology with the purpose of teaching science in secondary schools must identify themselves and plan their programs with the faculty advisor for secondary education as early in their academic careers as possible. The following course of study is designed to prepare students for teacher certification

#### CURRICULUM

CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

Minimum grade C- required in all BISC courses for a total of at least 33 credits in biology.

BISC 207/208	Introductory Biology I and II	8
BISC 301	Molecular Biology of the Cell	4
BISC 303	Genetic and Evolutionary Biology	4
BISC 302	General Ecology	3-4
or		
BISC 306	General Physiology	
Biology electives at the 300-level or above, including one 600-level course other than Independent Study.		13-14
CHEM 103/104	General Chemistry	8
CHEM 213	Elementary Organic Chemistry	4
or		
CHEM 321	Organic Chemistry	4
CHEM 214	Elementary Biochemistry	3
and		
CHEM 216	Elementary Biochemistry Laboratory	1
PHYS 201/202	Introductory Physics I and II	8
MATH 221	Calculus I	3
GEOL 105/115	General Geology and Laboratory	4
Geology Elective		3-4
EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
EDUC 420	Reading in the Content Areas	1
SCEN 491	Teaching Science in Secondary Schools	4
EDUC 400	Student Teaching	9

To be eligible to student teach, Biological Sciences Education students must have a g.p.a. of 2.75 in their biology major and an overall g.p.a. of 2.5. Students must consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

### DEGREE: BACHELOR OF SCIENCE MAJOR: BIOLOGICAL SCIENCES CONCENTRATION: BIOTECHNOLOGY

#### CURRICULUM

CREDITS

#### UNIVERSITY REQUIREMENTS

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57)		3

**COLLEGE REQUIREMENTS**

**Writing:** (minimum grade C-) ..... 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** ..... 0-12

Completion of the intermediate-level course (107 or 112 or 214) in a given language. The number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination

**Breadth Requirements** (See page 83)

A total of twenty-one credits from Groups A, B and C is ..... 21  
required with a minimum of six credits in each group. The six credits from each group could be from the same area.

Group A: Understanding and appreciation of the creative arts and humanities

Group B: The study of culture and institutions over time

Group C: Empirically based study of human beings and their environment

**MAJOR REQUIREMENTS**

Minimum grade C- in BISC courses for the major

BISC 207/208 Introductory Biology I and II ..... 8

BISC 301 Molecular Biology of the Cell ..... 4

BISC 303 Genetic and Evolutionary Biology ..... 4

BISC 305 Cell Physiology ..... 4

BISC 371 Introduction to Microbiology ..... 4

BISC 604 Recombinant DNA Laboratory ..... 4

BISC 653 Recent Advances in Molecular Biology ..... 2

Two courses selected from the following: ..... 5-7

BISC 499/699 Computers in Biological Research

BISC 602 Molecular Biology of Animal Cells

BISC 608 Genetic Toxicology

BISC 617 Laboratory Techniques for Electron Microscopy

BISC 650 Bacterial Physiology

BISC 654 Biochemical Genetics

BISC 658 Developmental Genetics

BISC 673 Topics in Immunogenetics

BISC 679 Virology

BISC 693 Human Genetics

Two of the following three groups: (Ie, I and II, II and III, or I and III) ..... 4-6

I (6 credits)

BISC 492 Human and Mammalian Cytogenetics

BISC 493 Mammalian Cytogenetics Laboratory

II (6 credits)

BISC 471/671 Immunobiology

BISC 601 Immunochemistry

III (4 credits)

BISC 619 Macromolecules Laboratory

CHEM 103/104 General Chemistry ..... 8

CHEM 321/322 Organic Chemistry ..... 8

CHEM 527 Introductory Biochemistry ..... 3-6

or

CHEM 641/642 Biochemistry

PHYS 201/202 Introductory Physics I and II ..... 8

MATH 221 Calculus I ..... 3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree. BISC 444 is encouraged but not required, and does not count as credit in the major.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**REQUIREMENTS FOR A MINOR IN BIOLOGY**

The required courses are BISC 207, 208; two courses from BISC 301, 302 (or 321), 303, 371, 306 (or 276), plus additional biology courses at the 300-level or above to total 19 credits in biology; CHEM 103, 104 (or 101, 102), and 213 (or 321); plus the necessary prerequisites for any of these courses. Nursing majors may satisfy the

chemistry requirement by taking CHEM 104, 105 and 106. Nursing, Medical Technology, Nutrition, and Dietetics majors may substitute BISC 276 for BISC 306. A grade of C- or better is required in all biology courses taken for the minor, and a D (not a D-) is required in the non-biology courses for the minor.

**BLACK AMERICAN STUDIES**

**B**lack American Studies focuses on the study of Black Americans and their ancestry. Although a major in Black American Studies is not available, special arrangements within the Bachelor of Arts in Liberal Studies degree program are possible. An undergraduate minor in Black American Studies is available for those students wishing to pursue related careers in this area.

The program is designed to present a comprehensive study of the origins, conditions, and experiences of Black Americans using the perspectives and techniques of various disciplines in the humanities and social sciences. As a study of human beings, Black American Studies deals with human issues, seeking to relate specific problems to the major value systems in this country and the world. Integrated with other disciplines in all appropriate phases of education, Black American Studies has meaning for present life and is useful for future learning or coping situations. The program serves as a catalyst for multi-ethnic and cultural understanding.

Black American Studies is an interdisciplinary program with its basic content in the social sciences and humanities. The program involves regular course offerings that deal with historic, cultural, and social phenomena of people of African descent. Students from diverse disciplines utilize Black American Studies courses to fulfill general requirements as well as to supplement their majors. The interdisciplinary and multidisciplinary nature of the program allows flexibility for students seeking the relationships between their respective majors and Black American Studies. For information, contact Professor Carole Marks, 417 Ewing Hall (302) 831-2897.

**REQUIREMENTS FOR A MINOR IN BLACK AMERICAN STUDIES**

**S**tudents applying for the minor in Black American Studies must have completed at least one semester of full-time study at the University with a grade-point average of at least 2.1. The minor requires 18 credits, including BAMS 110, 304, 306, and one BAMS elective at or above the 300-level with the approval of an advisor, plus 2 more BAMS courses.

Alternative arrangements for a minor in Black American Studies are available but must be approved in advance by a program advisor and the director. Students may arrange alternative course selections, provided that at least 15 of the 18 credits toward the minor carry BAMS designations, that no more than 6 credits of the 18 differ from the basic program, and that at least 9 credits of the program are at or above the 300-level.

Advanced students who have shown the potential for doing research in a particular area may participate in independent study and special projects on an individual or group basis. Suggested prerequisites for advanced classes in Black American Studies include BAMS 110, 205 and 206.

**CHEMISTRY AND BIOCHEMISTRY**

**T**he Department of Chemistry and Biochemistry provides five undergraduate degree options: B.A. in Chemistry, B.A. in Chemistry Education, B.S. in Chemistry, B.S. in Chemistry with concentration in Environmental Studies, and a B.S. in Biochemistry. Honors Degree options are available in the B.A. in Chemistry Education, the B.S. in Chemistry, and the B.S. in Biochemistry. A minor in Chemistry is also available.

Telephone: (302) 831-1247

<http://www.udel.edu/chem/chem.html>

**DEGREE: BACHELOR OF ARTS  
MAJOR: CHEMISTRY****CURRICULUM****CREDITS****See page 78 for University and College requirements.****MAJOR REQUIREMENTS**

A minimum grade C- is required in each CHEM course required for the B.A. degree in Chemistry.

CHEM 103/104	General Chemistry .....	8
CHEM 220/221	Quantitative Analysis and Laboratory .....	4
or		
CHEM 111/112	General Chemistry .....	6
CHEM 119/120	Quantitative Chemistry I and II .....	5
CHEM 321/322	Organic Chemistry .....	8
or		
CHEM 331/332/333/334	Organic Chemistry and Laboratory I and II .....	10
CHEM 437/438	Instrumental Methods and Laboratory .....	4
CHEM 418/419/445	Introductory Physical Chemistry and Laboratory .....	7
or		
CHEM 443/444/445	Physical Chemistry and Laboratory .....	7
One of the following eight courses: .....		3
CHEM 457	Inorganic Chemistry .....	
CHEM 527	Introductory Biochemistry .....	
CHEM 610	History of Chemistry .....	
CHEM 620	Analytical Spectroscopy .....	
CHEM 622	Electroanalytical Chemistry .....	
CHEM 623	Chemometrics .....	
CHEM 633	Advanced Organic Chemistry: Physical .....	
CHEM 634	Advanced Organic Chemistry: Synthesis and Reactivity .....	
MATH 221	Calculus I .....	3-4
or		
MATH 241	Analytic Geometry and Calculus A (strongly preferred) .....	
PHYS 201/202	Introductory Physics I and II .....	8
or		
PHYS 207/208	Fundamentals of Physics I and II .....	

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124****DEGREE: BACHELOR OF ARTS  
MAJOR: CHEMISTRY EDUCATION****CURRICULUM****CREDITS****See page 78 for University and College requirements.****MAJOR REQUIREMENTS**

CHEM courses to total 30 credits minimum .....		
CHEM 111/112	General Chemistry .....	6
CHEM 119/120	Quantitative Chemistry I and II .....	5
or		
CHEM 103/104	General Chemistry .....	8
CHEM 220/221	Quantitative Analysis and Laboratory .....	4
One of the following: .....		4-8
CHEM 213	Elementary Organic Chemistry .....	
CHEM 321/322	Organic Chemistry .....	
CHEM 331/332/333	Organic Chemistry and Laboratory .....	
CHEM 437/438	Instrumental Methods and Laboratory .....	4
CHEM 418/445	Introductory Physical Chemistry and Laboratory .....	4
or		
CHEM 443/445	Physical Chemistry and Laboratory .....	4
CHEM 214/216	Elementary Biochemistry and Laboratory .....	4
Chemistry courses selected with consent of advisor .....		0-3
BISC 207	Introductory Biology I .....	4
GEOL 105/115	General Geology and Laboratory .....	4
MATH 221/222	Calculus I and II .....	6-8
or		
MATH 241/242	Analytic Geometry and Calculus A and B .....	
PHYS 201/202	Introductory Physics I and II .....	8
or		
PHYS 207/208	Fundamentals of Physics I and II .....	

EDUC 201	Diversity in the Classroom .....	3
EDUC 304	Educational Psychology – Social Aspects .....	3
EDUC 305	Educational Psychology – Cognitive Aspects .....	3
SCEN 491	Teaching Science in Secondary Schools .....	4
EDUC 420	Reading in the Content Areas .....	1
EDUC 400	Student Teaching .....	9

To be eligible to student teach, Chemistry Education students must have a g.p.a. of 2.75 in their chemistry major and an overall g.p.a. 2.5. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student application and other information concerning student teacher policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****HONORS BACHELOR OF ARTS: CHEMISTRY EDUCATION****The recipient must complete:**

1. All requirements for the Bachelor of Arts degree in Chemistry Education.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).

**Note:** At least eight of the twelve credits described in the University's generic requirements for the Honors Degree must be in CHEM courses. The remaining four credits must be in a required course in a related technical area, e.g., BISC, MATH, PHYS, EDUC. CHEM courses at the 600-level or higher may be considered as Honors courses.

3. The additional requirement of a grade point index of at least 3.30 in chemistry courses at the time of graduation.

**DEGREE: BACHELOR OF SCIENCE  
MAJOR: CHEMISTRY****CURRICULUM****CREDITS****UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-) .....	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57) .....		3

**COLLEGE REQUIREMENTS**

<b>Writing:</b> (minimum grade C-) .....	3
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A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

<b>Foreign Language:</b> .....	0-12
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Completion of the intermediate-level course (107 or 112) in a modern foreign language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single modern foreign language may attempt to fulfill the requirement in that language by taking an exemption examination. (German recommended)

**Breadth Requirements** (See page 83)

A total of twenty-one credits from Groups A, B and C is required with a minimum of six credits in each group. The six credits from each group could be from the same area

**Group A:** Understanding and appreciation of the creative arts and humanities.**Group B:** The study of culture and institutions over time**Group C:** Empirically based study of human beings and their environment.**MAJOR REQUIREMENTS****Minimum 45 credits total in CHEM**

CHEM 111/112	General Chemistry .....	6
CHEM 119/120	Quantitative Chemistry I and II .....	5
CHEM 331/332	Organic Chemistry .....	6
CHEM 333/334	Organic Chemistry Majors Laboratory I and II .....	4
CHEM 443/445	Physical Chemistry and Laboratory .....	4
CHEM 437/438	Instrumental Methods and Laboratory .....	4
CHEM 527	Introductory Biochemistry .....	3
or		
CHEM 641	Biochemistry .....	

CHEM 444/446 Physical Chemistry and Laboratory	4
CHEM 457/458 Inorganic Chemistry and Laboratory	4
CHEM 465 Seminar (two semesters)	2
Advanced Chemistry course at 600-level or higher	3
CHEM 468 Undergraduate Research (optional)	3
MATH 241/242/243 Analytic Geometry and Calculus A, B and C	12
PHYS 201/202 Introductory Physics I and II	8
or	
PHYS 207/208 Fundamentals of Physics I and II	
Strongly Recommended:	
MATH 302 Ordinary Differential Equations I	3

**ELECTIVES**

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 128**

**DEGREE: BACHELOR OF SCIENCE****MAJOR: CHEMISTRY****CONCENTRATION: ENVIRONMENTAL STUDIES**

CURRICULUM	CREDITS
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**MAJOR REQUIREMENTS**

All requirements for the B.S. in Chemistry must be met. In addition, the following courses are required for the concentration.

One of the following two-semester sequences:	7-8
BISC 207/208 Introductory Biology I/II	
GEOG 152/220 Climate and Life/Meteorology	
GEOL 106/107 General Geology	
Two of the following three-credit courses:	6
BISC 302 General Ecology	
CIEG 433 Hazardous Waste Management	
CIEG 435 Industrial Wastes Management	
CIEG 437/637 Water and Waste Water Quality	
CIEG 632 Chemical Aspects of Environmental Engineering	
CIEG 634 Physical Aspects of Environmental Engineering	
CIEG 636 Biological Aspects of Environmental Engineering	
GEOG 412 Physical Climatology	
GEOG 420 Atmospheric Physics	
GEOG 423 Atmospheric Dynamics	
GEOL 421 Environmental and Applied Geology	
MAST 646 Chemical Oceanography	
MAST 647 Physical Chemistry of Seawater	
MAST 681 Remote Sensing of Environment	
PLSC 608 Soil Chemistry	

**CREDITS TO TOTAL A MINIMUM OF ..... 128**

Candidates for a B.S. in chemistry must achieve a cumulative GPA of at least 2.00 for all chemistry courses taken. Repeated Chemistry courses will be counted only once in the calculation of the chemistry GPA. The calculation of the chemistry course GPA (2.00 minimum required for graduation) for candidates for the B.S. degree in Chemistry or Biochemistry will not include grades earned for lower level subdisciplinary courses taken **after** a higher level course in the same subdiscipline has been taken and passed with a grade of C or higher. Likewise, freshman-level courses may not be used by upperclassmen as GPA enhancers **after** those required for graduation have been taken. CHEM 342 and CHEM 100 will be regarded as exceptions to the foregoing prohibitions, since their subject matter coverage is considerably different than that found in higher level courses.

**Example:** A grade earned in CHEM 214 subsequent to a C or better grade earned in CHEM 527 (or CHEM 641/642) would not be counted in the chemistry GPA calculation for B.S. chemistry or biochemistry majors.

**DEGREE: BACHELOR OF SCIENCE****MAJOR: BIOCHEMISTRY**

CURRICULUM	CREDITS
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**UNIVERSITY REQUIREMENTS**

ENGL 110 Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).	3

**COLLEGE REQUIREMENTS**

<b>Writing:</b> (minimum grade C-)	3
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A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for

extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** 0-12

Completion of the intermediate-level course (107 or 112) in a modern foreign language. Number of credits needed and initial placement depends on number of years of high school study of foreign language. Students with four or more years of high school work in a single modern foreign language may attempt to fulfill the requirement in that language by taking an exemption examination. (German recommended)

**Breadth Requirements** (See page 83)

A total of twenty-one credits from Groups A, B and C is required with a minimum of six credits in each group. The six credits from each group could be from the same area.

Group A: Understanding and appreciation of the creative arts and humanities.

Group B: The study of culture and institutions over time.

Group C: Empirically based study of human beings and their environment.

**MAJOR REQUIREMENTS****Minimum 46 credits total in CHEM**

CHEM 111/112 General Chemistry	6
CHEM 119/120 Quantitative Chemistry I and II	5
CHEM 331/332 Organic Chemistry	6
CHEM 333/334 Organic Chemistry Majors Laboratory I and II	4
CHEM 342 Introduction to Biochemistry	3
CHEM 418 Introductory Physical Chemistry	3
or	
CHEM 443 Physical Chemistry	
CHEM 437/438 Instrumental Methods and Laboratory	4
CHEM 641 Biochemistry	3
CHEM 419 Introductory Physical Chemistry	3
or	
CHEM 444 Physical Chemistry	
CHEM 445 Physical Chemistry Laboratory	1
CHEM 642 Biochemistry	3
Advanced Chemistry or Biochemistry course at 600-level	3
Two Advanced Biochemistry courses at 600-level	6-8
or	
Two Biology courses selected from the following:	
BISC 301 Molecular Biology of the Cell (4)	
BISC 303 Genetic and Evolutionary Biology (4)	
BISC 601 Immunochimistry (4)	
BISC 604 Recombinant DNA Laboratory (4)	
BISC 654 Biochemical Genetics (3)	
BISC 679 Virology (3)	
BISC 698 Comparative Endocrinology (3)	
CHEM 465 Seminar (two semesters)	2
CHEM 468 Undergraduate Research	6-8
or	
Two Biology laboratory courses selected from the following:	
BISC 303 Genetic and Evolutionary Biology (4)	
BISC 306 General Physiology (4)	
BISC 371 Introduction to Microbiology (4)	
BISC 601 Immunochimistry (4)	

**Related Work**

MATH 241/242 Analytic Geometry and Calculus A and B	6-8
or	
MATH 221/222 Calculus I and II	
BISC 207/208 Introductory Biology I and II	8
PHYS 201/202 Introductory Physics I and II	8

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 127**

Candidates for a B.S. in biochemistry must achieve a cumulative GPA of at least 2.00 for all chemistry courses taken. Repeated Chemistry courses are counted only once in the calculation of the Chemistry GPA. The calculation of the chemistry course GPA (2.00 minimum required for graduation) for candidates for the B.S. degree in Chemistry or Biochemistry will not include grades earned for lower level subdisciplinary courses taken **after** a higher level course in the same subdiscipline has been taken and passed with a grade of C or higher. Likewise, freshman-level courses may not be used by upperclassmen as GPA enhancers **after** those required for graduation has been taken. CHEM 342 and CHEM 100 will be regarded as exceptions to the

foregoing prohibitions, since their subject matter coverage is considerably different than that found in higher level courses

**Example:** A grade earned in CHEM 214 subsequent to a C or better grade earned in CHEM 527 (or CHEM 641/642) would not be counted in the chemistry GPA calculation for B.S. chemistry or biochemistry majors.

### HONORS BACHELOR OF SCIENCE: CHEMISTRY OR BIOCHEMISTRY

The recipient must complete:

1. All requirements for the Bachelor of Science degree in Chemistry or Biochemistry.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).

**Note:** Courses at the 600-level or higher in chemistry in excess of the 600-level courses required for the B.S. degree may be considered as Honors courses. Only one 3- or 4-credit required course in a related technical area may be considered as part of the twelve credits described in the University's generic requirements for the Honors Degree.

3. The additional requirement of a grade point index of at least 3.30 in chemistry courses at the time of graduation.

### REQUIREMENTS FOR A MINOR IN CHEMISTRY

The minor in chemistry requires a minimum of 19 credits as follows:

	Credits
CHEM 103, 104, (or 111, 112, 119)	8
Any three of the following:	
CHEM 220, 221 (or 437, 438)	4
CHEM 321 (or 331, 333)	4-5
CHEM 457, 458	4
CHEM 418, 445 (or 443, 445)	4
CHEM 527 or 641	3

Students must have a minimum grade of C- in each course counted toward the minor.

### CLASSICS

(See Foreign Languages and Literatures)

### COGNITIVE SCIENCE

(See Linguistics)

### COMMUNICATION

The Communication Department offers an undergraduate major program in Communication, with concentrations in Interpersonal Communication and in Mass Communication. An Honors Degree option is also available.

A major in communication is designed to increase knowledge about communication processes, to increase awareness of the potential impact of communication on society, and to make students more competent in communicating with others and in assisting others to communicate more effectively.

Toward this end, communication is viewed as a social and behavioral science. Courses are offered in the areas of human communication theory, interpersonal communication, mass communication, organizational communication, public relations, and oral communication skills. Classes emphasize the use of theory and research to understand and analyze communication processes.

Students enter this major as communication interest majors. A 2.0 overall GPA is required to declare the communication interest major. Communication interest majors must complete the four core courses: COMM 245, 256, 301 and 330. Based on their GPA in these four courses, the top 100 students will annually be allowed to matriculate into the communication major.

Students who major in communication will work with their assigned faculty advisor to plan a program of courses that leads to the degree of Bachelor of Arts.

Telephone: (302) 831-8041

<http://www.udel.edu/john/udcomm.html>

### DEGREE: BACHELOR OF ARTS MAJOR: COMMUNICATION CONCENTRATION: INTERPERSONAL COMMUNICATION

#### CURRICULUM

#### CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

**NOTE:** All 4XX communication courses may be limited to COMM majors. COMM 245, 256, 301, and 330 comprise the four core courses in the communication interest major.

COMM 245	Mass Communication and Culture	3
COMM 256	Principles of Communication Theory	3
COMM 301	Introduction to Communication Research Methods	3
COMM 330	Communication and Interpersonal Behavior	3
COMM 341	Theories of Interpersonal Communication	3
COMM 350	Public Speaking	3
COMM 417	Communication and the Management of Conflict	3
COMM 485	Analysis of Face-to-Face Communication	3
One additional 400-level Interpersonal or Organizational		3

Communication course.

One additional 400-level COMM course, not COMM 466 or COMM 464 ..... 3

Six to 15 COMM elective credits ..... 6-15

for a total of not less than 36 nor more than 45 COMM credits. These may be taken from the other concentration or from the following:

#### Interpersonal Communication Electives

COMM 200	Introduction to Human Communication Systems
COMM 251	The Development of Verbal Communication
COMM 438	Speech, Language and Communication
COMM 440	Topics in Interpersonal Communication
COMM 452	Communication and Persuasion

#### Mass Communication Electives

**NOTE:** COMM 325 is prerequisite to COMM 388 and COMM 435.

COMM 325	Studio Television Production
COMM 326	Field Television Production
COMM 388	TV Production Practicum
COMM 418	Topics in Mass Communication
COMM 454	Children and the Mass Media

#### Organizational Communication Electives

COMM 356	Small Group Communication
COMM 442	Topics in Organizational Communication
COMM 456	Communication in Organizations

#### Public Relations Electives

**NOTE:** ENGL 307 is prerequisite to the following sequence and should be taken in the sophomore year.

COMM 309	Introduction to Public Relations
COMM 311	Public Relations Writing
COMM 409	Public Relations Campaign Planning
COMM 413	Public Relations Management

#### General Electives

COMM 366/466	Independent Study/Special Problems
COMM 364	Internship
COMM 367/467	Experimental Courses not listed in Catalog

#### ELECTIVES

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS**  
**MAJOR: COMMUNICATION**  
**CONCENTRATION: MASS COMMUNICATION**

## CURRICULUM

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

NOTE: All 4XX communication courses may be limited to COMM majors. COMM 245, 256, 301, and 330 comprise the four core courses in the communication interest major.

COMM 245	Mass Communication and Culture	3
COMM 256	Principles of Communication Theory	3
COMM 301	Introduction to Communication Research Methods	3
COMM 330	Communication and Interpersonal Behavior	3
COMM 345	Legal Issues of the Mass Media	3
COMM 350	Public Speaking	3
COMM 370	Theories of Mass Communication	3
COMM 424	Media Message Analysis	3
COMM 450	Mass Communication Effects	3
One additional 400-level COMM course, not COMM 466 or COMM 464		3
Six to 15 COMM elective credits		6-15

for a total of not less than 36 nor more than 45 COMM credits. These may be taken from the other concentration or from the following:

**Interpersonal Communication Electives**

COMM 200	Introduction to Human Communication Systems
COMM 251	The Development of Verbal Communication
COMM 438	Speech, Language and Communication
COMM 440	Topics in Interpersonal Communication
COMM 452	Communication and Persuasion

**Mass Communication Electives**

NOTE: COMM 325 is prerequisite to COMM 388 and COMM 435.

COMM 325	Studio Television Production
COMM 326	Field Television Production
COMM 388	TV Production Practicum
COMM 418	Topics in Mass Communication
COMM 454	Children and the Mass Media

**Organizational Communication Electives**

COMM 356	Small Group Communication
COMM 442	Topics in Organizational Communication
COMM 456	Communication in Organizations

**Public Relations Electives**

NOTE: ENGL 307 is prerequisite to the following sequence and should be taken in the sophomore year.

COMM 309	Introduction to Public Relations
COMM 311	Public Relations Writing
COMM 409	Public Relations Campaign Planning
COMM 413	Public Relations Program Management

**General Electives**

COMM 366/466	Independent Study/Special Problems
COMM 364	Internship
COMM 367/467	Experimental Courses not listed in Catalog

**ELECTIVES**

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**HONORS BACHELOR OF ARTS: COMMUNICATION**

The recipient must complete:

1. All requirements for the Bachelor of Arts degree in Communication.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).
3. Honors students concentrating in Interpersonal Communication must take Honors sections of COMM 245, COMM 330, COMM 417, and COMM 485. Students concentrating in Mass Communication must take Honors sections of COMM 245, COMM 330, COMM 424, and COMM 450.

**COMPARATIVE LITERATURE**

Both an undergraduate major and a minor in Comparative Literature are available. The aim of the program in comparative literature is to allow students to study literature in an international and intercultural relationship, across boundaries of nation and language. Comparative literature embraces the study of literary themes, forms, movements and relations, as well as the interrelations of literature and other disciplines. The program offers the student the opportunity, with the aid of an advisor, to construct a program reflecting individual areas of interest.

Students majoring or minoring in comparative literature must have a command of at least one foreign language at the advanced elective level. It is strongly recommended that majors pursue a second foreign language at least through the intermediate level. Students planning to go on to graduate work in comparative literature would be well advised to include work in a classical language in their program. Majors are expected to make use of their command of foreign languages in comparative literature courses. For information on the Comparative Literature major or minor, contact Professor Nicolas Gross, 439 Smith Hall (302) 831-2039.

In addition to the courses designed specifically for students specializing in comparative literature, the program offers a number of courses in cooperation with other departments (English, Foreign Languages and Literatures, Anthropology, Philosophy, etc.); these courses should be of interest to most students.

Telephone: (302) 831-2039

**DEGREE: BACHELOR OF ARTS**  
**MAJOR: COMPARATIVE LITERATURE**

## CURRICULUM

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

CLMT 202	Biblical and Classical Literature	3
(ENGL 205 or 206 or CLMT 316 may be substituted with advisor's approval)		
CLMT 207	Great Writers of the Western World: 1100-1700	3
CLMT 208	Great Writers of the Western World: 1650-1950	3
Comparative Literature courses or courses in related fields approved by the advisor		9

Nine credits in each of two national literatures studied in the original text with at least three credits at the 400-level.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**REQUIREMENTS FOR THE MINOR IN COMPARATIVE LITERATURE**

The minor requires a minimum of 18 credits, as follows:

- I. Core courses in comparative literature (6 credits)  
Two of CLMT 202, 207, or 208
- II. Foreign literature courses (6 credits)  
Advanced elective-level courses studied in the original text.
- III. Advanced English or Advanced CLMT course (3 credits)
- IV. Approved related area course (3 credits)

**COMPUTER AND INFORMATION SCIENCES**

The Department of Computer and Information Sciences offers four-year undergraduate programs leading to either a Bachelor of Arts degree in computer science or a Bachelor of Science degree in computer science. In conjunction with the University Honors Program, the Department also offers a program of study leading to an Honors B.A. or an Honors B.S. with a major in Computer Science.

Courses are also provided for students in other areas who desire an understanding of the application of computers to the subject of their major interest. In many courses, problem solutions require the use of computers located in the University of Delaware Computing Center. These computers are available to undergraduate students for use in connection with both course work and research.

Telephone: (302) 831-2712

E-mail: [ugradprgm@cis.udel.edu](mailto:ugradprgm@cis.udel.edu)

<http://www.cis.udel.edu/home.html>

## DEGREE: BACHELOR OF ARTS

### MAJOR: COMPUTER AND INFORMATION SCIENCES

CURRICULUM CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

CISC 181	Introduction to Computer Science	3
(Assumes some prior programming experience. Students without prior experience should first take CISC 105.)		
CISC 220	Data Structures	3
CISC 260	Machine Organization and Assembly Language	3
CISC 280	Program Development Techniques	3
Eighteen credits of Computer Science numbered 301 or above, approved by the student's advisor.		18
MATH 210	Discrete Mathematics I	3
MATH 241	Analytic Geometry and Calculus A	4
MATH 315	Discrete Mathematics II	3

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

## DEGREE: BACHELOR OF SCIENCE

### MAJOR: COMPUTER AND INFORMATION SCIENCES

CURRICULUM CREDITS

#### UNIVERSITY REQUIREMENTS

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).		3

#### COLLEGE REQUIREMENTS

**Writing:** (minimum grade C-) 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Breadth Requirements** (See page 83)

Six credits from each of the following groups. 18

Group A: Understanding and appreciation of the creative arts and humanities.

Group B: The study of culture and institutions over time

Group C: Empirically based study of human beings and their environment.

#### MAJOR REQUIREMENTS

CISC 181	Introduction to Computer Science	3
(Assumes some prior programming experience. Students without prior experience should first take CISC 105.)		
CISC 220	Data Structures	3
CISC 260	Machine Organization and Assembly Language	3
CISC 280	Program Development Techniques	3
CISC 301	Elements of Logic and Automata Theory	3
CISC 320	Introduction to Algorithms	3
CISC 360	Computer Architecture	3
CISC 361	Operating Systems	3
CISC 475	Object-oriented Software Engineering	3

Twelve credits of Computer Science numbered 301 or above, approved by the student's advisor. Three of these credits may be in Math at the 300-level or above.

Twelve credits in advanced courses in an advisor-approved CISC concentration. Students are encouraged to explore how other subject areas impact and are impacted by computer science. An approval form signed by the CISC advisor is required.

MATH 210	Discrete Mathematics I	3
MATH 241	Analytic Geometry and Calculus A	4
STAT 205	Statistical Methods	4
ENGL 312	Written Communications in Business	3
or		
ENGL 410	Technical Writing	3
CSCC 355	Computers, Ethics and Society	3
CPEG 210	Introduction to Combinational Logic	2
CPEG 211	Introduction to Sequential Circuits	2

One of the following sequences of laboratory science courses:

PHYS 207/208	Fundamentals of Physics	8
or		
CHEM 103/104	General Chemistry	8
or		
BISC 207/208	Introductory Biology	8
or		
GEOL 106/107/116	General Geology and Laboratory	8

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

### REQUIREMENTS FOR A MINOR IN COMPUTER SCIENCE

A minor in computer science consists of a total of 15 or more credits including CISC 181, CISC 220, and CISC 280. Students without prior programming experience should take CISC 105 first. Six additional credits of CISC at the 200-level or above should be chosen with the advisor's approval. Note that the College of Arts and Science requires a grade of C- or better in all courses counted towards a minor.

### CONTINENTAL EUROPEAN STUDIES

An interdisciplinary major in Continental European Studies, including an Honors option, is offered jointly by the Departments of Foreign Languages and Literatures, History, and Political Science and International Relations. The B.A. program in Continental European Studies prepares undergraduate students as Europeanists; accordingly, it gives students a focused knowledge of the history and political institutions of a particular European country (e.g., Italy) in a general European context, together with the linguistic skills required to engage in a rigorous program of research or graduate-level studies in the target country and to discharge their future professional responsibilities competently and successfully. Students will acquire a unique cultural perspective of the target country, combining several disciplines into a sharply defined major.

Students enrolled in this program will enhance their knowledge and their experience with the civilization of the country they propose to study, and provide themselves with the tools they will need in such future undertakings as graduate school, government or other international agencies, international law, or commercial enterprises with an international orientation.

Students in other majors who wish to change their major to Continental European Studies must have a minimum grade point average of 2.3. Students transferring into the major from outside the University of Delaware will have their transcripts evaluated on a case-by-case basis.

Study abroad is strongly recommended for students in this program.

Telephone: (302) 831-2038

E-mail: [braun@udel.edu](mailto:braun@udel.edu)

<http://www.udel.edu/flt/lang/french/euro.html>



**DEGREE: BACHELOR OF ARTS**  
**MAJOR: CONTINENTAL EUROPEAN STUDIES**

## CURRICULUM

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS****Foreign Languages and Literatures:**

12 credit hours of work at the 200-level and above in a European foreign language (French, German, Italian, Russian, and Spanish), as follows:

- 3 credits at the 200-level
- 3 credits at the 200- or 300-level
- 3 credits in continental literature at the 300-level
- 3 credits in continental civilization at the 300- or 400-level

**History:**

12 credit hours of work in History courses as follows:

- |  |   |
|--|---|
| HIST 101 or 102 Western Civilization .....                     | 3 |
| 3 additional credits of History at the 200-, 300- or 400-level |   |
| 6 additional credits of History at the 300- or 400-level       |   |

The 200-, 300-, and 400-level History courses will be drawn from courses such as the following, depending on the student's specialization:

- HIST 210, 241, 245, 250, 339, 342, 343, 344, 345, 346, 347, 348, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, plus 400-level History courses, with the prior approval of the advisor

**Political Science and International Relations:**

12 credit hours of work in Political Science courses, as follows:

- |   |   |
|---|---|
| POSC 270 Comparative Politics .....           | 3 |
| One of the following two courses:             |   |
| POSC 310 European Governments .....           | 3 |
| POSC 372 East Central European Politics ..... | 3 |

Two of the following:

- |   |   |
|---|---|
| POSC 432 Political Systems of the Post-Soviet Union .....   | 3 |
| POSC 441 Problems of Western European Politics by Country .....                                       | 3 |
| POSC 442 Problems of Western European Politics .....  | 3 |
| POSC 300- or 400-level topics courses with European content, as approved by the program advisor ..... | 3 |

**Nine credits** of work in any combination of courses in the foreign language, History, Political Science, or in related fields (such as Art History, Geography, Music), all **with the prior consent of the student's advisor**. The Honors thesis or Degree with Distinction thesis can be included in this category

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**
**HONORS BACHELOR OF ARTS:**  
**CONTINENTAL EUROPEAN STUDIES**

The requirements for the Honors B.A. in Continental European Studies are:

1. All requirements for the B.A. in Continental European Studies.
2. All the University's generic requirements for the Honors Degree (see page 43 of this catalog). The Honors credits in the major shall come from at least two different participating departments, and shall include at least two courses at the 300-level or above.
3. The cumulative grade point average for all courses in the major must be at least 3.400.

**CRIMINAL JUSTICE**

See Sociology and Criminal Justice.

**EARTH SCIENCE EDUCATION**

See Geology.

**EAST ASIAN STUDIES**

An interdisciplinary major in East Asian Studies, including an Honors option, is offered jointly by several departments in the College of Arts and Science. In addition, a minor in East Asian Studies is available.

The B.A. program in East Asian Studies prepares undergraduate students as East Asian studies specialists; accordingly, it provides students with training in the history, political institutions, and culture of a particular East Asian country (e.g., China or Japan) in a general East Asian context, together with the linguistic skills required to engage in a rigorous program of research or graduate-level studies in the target country, and to discharge their future professional responsibilities competently and successfully. Students will acquire a unique cultural perspective of the target country, combining several disciplines into a sharply defined major.

Students enrolled in this program will enhance their knowledge and their experience with the civilization of the country they propose to study, and provide themselves with the tools they will need in such future undertakings as graduate school, government or other international agencies, international law, or commercial enterprises with an international orientation. Students in this program may choose a second major offered by such departments as art history, economics, history, music, philosophy, and political science.

Students in other majors who wish to change their major to East Asian Studies must have a minimum grade point average of 2.3. Students transferring into the major from outside the University of Delaware will have their transcripts evaluated on a case-by-case basis.

Study abroad is strongly recommended for students in this program.

Telephone: (302) 831-2371

<http://www.udel.edu/AreaStudies/asia.html>
**DEGREE: BACHELOR OF ARTS**  
**MAJOR: EAST ASIAN STUDIES**

## CURRICULUM

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS (31 or 32)****One of the following options (A or B):****A. Concentration in China or Japan - (7 credits total)**

- One of the following two courses: .....
- |  |   |
|--|---|
| CHIN 107 Chinese III - Intermediate .....  | 4 |
| JAPN 107 Japanese III - Intermediate ..... | 3 |
- Plus 3 credit hours at the 200-level or above in Chinese or in Japanese (including JAPN 200, 205, 206, or 209).

or

**B. Joint Chinese/Japanese Concentration (8 credits total)**

- |  |   |
|--|---|
| CHIN 107 Chinese III - Intermediate .....  | 4 |
| JAPN 107 Japanese III - Intermediate ..... | 4 |

**For both concentrations:**

- |  |   |
|--|---|
| HIST 137 East Asian Civilization: China .....  | 3 |
| HIST 138 East Asian Civilization: Japan .....  | 3 |
| PHIL 310 Chinese Religion and Philosophy ..... | 3 |
| POSC 312 East Asian Political Systems .....    | 3 |

Choose one of the following three courses: .....

- |   |   |
|---|---|
| ARTH 155 Asian Art .....                        | 3 |
| JAPN 204 The Art of Japanese Calligraphy .....  |   |
| MUSC 206 Music of China, Korea, and Japan ..... | 3 |

**Nine credits** of major electives in the Humanities and Social Sciences, from at least 2 departments, selected through prior consultation with the student's Advisor

These courses include, among others: ARTH 155 (if not selected as a required course), ARTH 156, ARTH 233, ARTH 234, ARTH 237, FLIT 328 (may be repeated when topic differs), FLIT 380 (may be repeated when topic differs), FLIT 338, HIST 270, HIST 333, HIST 368 (restricted to sophomores and above), HIST 369 (restricted to sophomores and above), HIST 370, HIST 371, HIST 372, HIST 479 (may be repeated when topic differs), JAPN 200, JAPN 204, JAPN 205, JAPN 206, JAPN 208, JAPN 209, JAPN



266, JAPN 305, JAPN 340, JAPN 350, JAPN 355, JAPN 366, JAPN 440, JAPN 455, LING 470 (prereq.=LING 101), LING 495 (prereq.=LING 101), MUSC 119, MUSC 121 (1 credit), MUSC 206 (if not selected as a required course), POSC 427, POSC 428, POSC 443, plus 200-level CHIN, 200-level JAPN, 300-level ECON and certain HESC courses

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

### HONORS BACHELOR OF ARTS: EAST ASIAN STUDIES

The requirements for the Honors B.A. in East Asian Studies include:

1. All requirements for the B.A. in East Asian Studies.
2. All the University's generic requirements for the Honors Degree (see page 43 of this catalog). The Honors credits in the major shall come from at least two different participating departments, and shall include at least two courses at the 300-level or above.
3. The successful completion of the two courses (6 credit hours) required to produce an Honors Thesis. This requirement would be in addition to the 31 or 32 credit hours required for the East Asian Studies major, to yield a total of 37 or 38 credit hours.
4. The cumulative grade point average for all courses in major must be at least 3.400.

### REQUIREMENTS FOR A MINOR IN EAST ASIAN STUDIES

This is an interdisciplinary minor program for students wishing to focus their interests on East Asia as an enhancement and complement to their undergraduate majors. Students will declare the minor in *either* East Asian Studies without Language *or* East Asian Studies with Language. For information, contact Professor David Pong, 401A Ewing Hall (302) 831-2371.

### EAST ASIAN STUDIES MINOR WITHOUT LANGUAGE

**Number of credits required: ..... 18**

A minimum grade of C- is required in all courses.

**6 credits in two disciplines from the following courses in the humanities:**

ARTH 155	Asian Art
ARTH 161	Art in East and West
FLIT 380	Topics: Japanese Culture in Translation
HIST 333	The Age of Confucius
MUSC 206	Music of China, Korea, and Japan
PHIL 310	Chinese Religion and Philosophy

**6 credits from the following courses in the social sciences:**

HIST 137	East Asian Civilization: China
HIST 138	East Asian Civilization: Japan
HIST 270	History of Modern Asia
HIST 390	History of Modern Southeast Asia
POSC 312	East Asian Political Systems

**6 credits from the following courses in economics, history, linguistics, and political science:**

ECON 3xx	East Asian Economic Systems
HIST 368	Modern China: 1600-1920s
HIST 369	China Since 1900
HIST 370	History of Modern Japan
HIST 393	History of Modern Vietnam
HIST 3xx	China and the West
HIST 479	Seminar in Asian History
LING 470	Structure of Chinese
LING 495	Structure of Japanese
POSC 427	Politics in China
POSC 428	Politics in Japan
POSC 443	China and the World

Substitutions for the above courses may be made with permission from the program director. Independent studies and special problems courses may also count towards the minor with the director's approval. The course list will be updated as new courses become available.

### EAST ASIAN STUDIES MINOR WITH LANGUAGE

The minor in East Asian Studies with Language consists of the 18 credits of requirements for East Asian Studies without Language *plus* completion of either CHIN 107 or JAPN 107 or their equivalents in transfer credit or by successful performance on a proficiency examination. The number of credits required for this minor therefore ranges from 18-30, depending upon the student's language placement.

### ECONOMICS

Students enrolled in the College of Arts and Science may earn a Bachelor of Arts degree by majoring in Economics or in Economics Education. These majors have the same group and language requirements as other Bachelor of Arts programs offered in the College of Arts and Science.

Both a Bachelor of Arts and Bachelor of Science degree are available to students enrolled in the College of Business and Economics. The group and language (Bachelor of Arts) or quantitative proficiency (Bachelor of Science) requirements for students enrolled in the College of Business and Economics are described in the College of Business and Economics section of this catalog.

A minor program in economics is also available through the College of Business and Economics.

Economics, a social science, analyzes the market and non-market production and allocation of goods and services. The problems associated with society's effort to prosper in a world possessing finite resources provide the focus. Students majoring in economics will be advised by the faculty of the Department of Economics within the College of Business and Economics.

Telephone: (302) 831-2563

[http://www.be.udel.edu/Econ\\_Site/EconHP.html](http://www.be.udel.edu/Econ_Site/EconHP.html)

### DEGREE: BACHELOR OF ARTS

#### MAJOR: ECONOMICS

##### CURRICULUM

CREDITS

See page 78 for University and College requirements.

##### MAJOR REQUIREMENTS

**Minimum C- in all required ECON courses.**

ECON 151	Introductory Microeconomics: Prices and Markets	3
ECON 152	Introductory Macroeconomics: National Economy	3
ECON 300	Intermediate Microeconomic Theory	3
or		
ECON 301	Quantitative Microeconomic Theory	3
ECON 302	Banking and Monetary Policy	3
ECON 303	Intermediate Macroeconomic Theory	3
Five Economics courses, at least two of which are at or above the 400-level		15
STAT 201	Introduction to Statistics I	3
STAT 202	Introduction to Statistics II	3
Nine credits chosen from any 300-level or higher course in Accounting, Anthropology, Business Administration, Computer Science, Finance, Geography, History, Mathematics, Philosophy, Political Science, Psychology, Sociology and Statistics. Also acceptable are ACCT 207,208 and 261, any 200-level Mathematics course and any BUEC courses.		9

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

Credit will not be allowed for both courses of any of the following sets of corresponding courses: ECON 311 and ECON 411; ECON 332 and ECON 433; ECON 344 and ECON 444; ECON 360 and ECON 463; and ECON 381 and ECON 483.

Departmental requirements and course descriptions are subject to continual revision. Up-to-date statements of requirements, course descriptions, and departmental policies are available in the department office.

**DEGREE: BACHELOR OF ARTS  
MAJOR: ECONOMICS EDUCATION**

## CURRICULUM

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS****Minimum C- in all required ECON courses.**

ECON 151	Introductory Microeconomics: Prices and Markets	3
ECON 152	Introductory Macroeconomics: National Economy	3
ECON 300	Intermediate Microeconomic Theory	3
or		
ECON 301	Quantitative Microeconomic Theory	3
ECON 302	Banking and Monetary Policy	3
ECON 303	Intermediate Macroeconomic Theory	3
Five Economics courses, at least two of which are at or above the 400-level		15
POSC 105	The American Political System	3
GEOG 120	World Regional Geography	3
HIST 104	World History 1648 to Present	3
HIST 206	United States History since 1865	3
Additional credits as follows		15
6 credits in POSC, 6 credits in GEOG, 3 credits in HIST		
EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
HIST 491	Planning a Course of Instruction	3
HIST 493	Seminar: Problems in Teaching History and Social Sciences	3
EDUC 420	Reading in the Content Areas	1
EDUC 400	Student Teaching	9

To be eligible to student teach, Economics Education students must have a g.p.a. of 3.0 in their major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**
**HONORS BACHELOR OF ARTS:  
ECONOMICS OR ECONOMICS EDUCATION**

The recipient must complete:

1. All requirements for the Bachelor of Arts in Economics or in Economics Education in the College of Arts and Science.
2. All the University's generic requirements for the Honors Degree (see page 43 of this catalog).
3. The courses in Intermediate Microeconomic Theory and Intermediate Macroeconomic Theory must be taken in Honors sections.
4. Courses in Economics at the 600 level or higher may be considered as Honors courses.

**ENGLISH**

The English Department has a widely varied undergraduate program. In the undergraduate literary studies major, students can study literature in English from Britain, America, and around the world. Undergraduates may elect concentrations in journalism, film, drama, ethnic and cultural studies, or business/technical writing, or, if they meet the admission requirements, may elect the program in English education. Journalism concentrators undergo intensive training in written journalism and serve on the staff of the University newspaper, *The Review*, in connection with their study. A number of undergraduate journalism concentrators also gain internship experience with local newspapers, TV stations, and other organizations. The film concentration includes courses in history and theory of film as well as film and literature, Black cinema, and other subjects. The drama concentration allows students to earn the English degree with an emphasis on the study of the theatre and its literature. The ethnic and cultural studies concentration emphasizes multicultural literatures in the Americas, folklore, and media studies. The program in business/technical writing is designed

to prepare students for positions as professional writers or editors in industry and government. This concentration requires internships of qualified students. The major in English education prepares students to teach English in the secondary schools (grades 7-12). Graduates of this program receive the B.A. in English and are eligible for teacher certification in 27 states and the Overseas Dependent Schools System.

The department regularly offers a series of creative writing courses both comprehensive and tailored to individual student needs. Courses in writing poetry and fiction are available at all levels, and the department publishes the literary magazine *Caesura*. In addition, the students give poetry and fiction readings, both with the faculty and by themselves.

The following courses may not be counted toward the English major or minor: ENGL 200, 204, 210, 301, and 365 ENGL 307, 308, 309, 310, 407, 408, and 409 may be counted only as part of the journalism concentration; ENGL 312, 410, 411, 412, 413, 414, 415, and 464 may be counted only as part of the concentration in business/technical writing; and ENGL 384 may be counted only as part of the concentration in English education.

Telephone: (302) 831-2361

<http://www.english.udel.edu/>

**DEGREE: BACHELOR OF ARTS  
MAJOR: ENGLISH**

## CURRICULUM

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Five of the following six courses:		15
ENGL 202	Biblical and Classical Literature	3
ENGL 205	British Literature I	
ENGL 206	British Literature II	
ENGL 300	Texts and Contexts	
ENGL 324	Shakespeare	
ENGL 340 or ENGL 341	American Literature	

Twelve credits at the 300-level or above distributed as follows: ..... 12

- a. A course other than Shakespeare in Medieval or Renaissance literature.
- b. A course in literature between 1700 and 1900.
- c. A course in Modern literature.
- d. A course in cultural and theoretical studies.

English courses at or above the 300-level	6
English courses at or above the 200-level	3

All English majors must take at least one ENGL 480 seminar and can count only one 200-level elective course (excluding those in the core or in addition to those counted in the core) toward the minimum number of credits for the major.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**
**DEGREE: BACHELOR OF ARTS  
MAJOR: ENGLISH  
CONCENTRATION: BUSINESS/TECHNICAL WRITING**

## CURRICULUM

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Five of the following six courses:		15
ENGL 202	Biblical and Classical Literature	
ENGL 205	British Literature I	
ENGL 206	British Literature II	
ENGL 300	Texts and Contexts	
ENGL 324	Shakespeare	
ENGL 340 or ENGL 341	American Literature	

Nine credits at the 300-level or above distributed as follows: ..... 9

- a. A course other than Shakespeare in Medieval or Renaissance literature or a course in literature between 1700 and 1900.
- b. A course in Modern literature or a course in cultural and theoretical studies.
- c. A literature course.

One of the following three courses	3
ENGL 312 Written Communications in Business	
ENGL 410 Technical Writing	
ENGL 415 Writing for the Professions	
ENGL 411 Rhetoric for Business and Technical Writers	3
ENGL 412 Business and Technical Publication	3
ENGL 414 Technical Editing	3
ENGL 464 Internship in Business/Technical Writing	3

**Optional:**

ENGL 413 Topics in Technical Writing or one other EBT course	3
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All English Business/Technical Writing majors must take at least one ENGL 480 seminar and can count only one 200-level course toward the minimum number of credits for the major.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree. Most concentrators take a core of courses in a technical or business discipline such as Computer Science, Chemistry, Business Administration or Accounting.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: ENGLISH****CONCENTRATION: DRAMA**

CURRICULUM	CREDITS
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See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

ENGL 324 Shakespeare	3
Four of the following six courses:	12
ENGL 202 Biblical and Classical Literature	
ENGL 205 British Literature I	
ENGL 206 British Literature II	
ENGL 300 Texts and Contexts	
ENGL 340 or ENGL 341 American Literature	

One course at the 300-level or above from each of the following groups (2 courses total):

Medieval and Renaissance literature (excluding ENGL 324)

or

Literature Between 1700 and 1900

Modern Literature

or

Cultural and Theoretical Studies

One other literature course is required. This course may be at the 200-, 300-, or 400-level if one of the courses taken in the above two groups is a 480 seminar. Otherwise, this additional course must be a 480 seminar.

ENGL 208 Introduction to Drama	3
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Three additional courses (approved by the Faculty Advisor), at least one of which should be either a Theatre Studies course or a comparable course.

ENGL 307, 308, 309, 310, 407, 408, 409 count toward the English major only as part of the concentration in journalism; ENGL 312, 410, 411, 412, 413, 415, 464 count toward the English major only as part of the concentration in Business and Technical Writing; ENGL 200, 204, 210, 301, 365 do not count toward the English major

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: ENGLISH****CONCENTRATION: ETHNIC AND CULTURAL STUDIES**

CURRICULUM	CREDITS
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See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Five of the following six courses:	15
ENGL 202 Biblical and Classical Literature	
ENGL 205 British Literature I	
ENGL 206 British Literature II	

ENGL 300 Texts and Contexts (Concentrators in Ethnic and Cultural Studies must include ENGL 300 as one of the five courses chosen.)

ENGL 324 Shakespeare	3
ENGL 340 or ENGL 341 American Literature	

Nine credits at the 300-level or above, distributed as follows:

- A course other than Shakespeare in Medieval or Renaissance literature or a course in literature between 1700 and 1900.
- A course in Modern literature or a course in cultural and theoretical studies.
- A literature course.

ENGL 379 Introduction to Ethnic and Cultural Studies	3
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ENGL 382 Studies in Multicultural Literature (may be repeated for credit when topics differ)	3
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Two other courses at the 300-level or above, to be chosen in consultation with the student's concentration advisor.

All English/Ethnic and Cultural Studies majors must take at least one ENGL 480 seminar and can count only one 200-level course toward the minimum number of credits for the major.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: ENGLISH****CONCENTRATION: FILM**

CURRICULUM	CREDITS
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See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Five of the following six courses:	15
ENGL 202 Biblical and Classical Literature	
ENGL 205 British Literature I	
ENGL 206 British Literature II	
ENGL 300 Texts and Contexts	
ENGL 324 Shakespeare	
ENGL 340 or ENGL 341 American Literature	

Nine credits at the 300-level or above distributed as follows:

- A course other than Shakespeare in Medieval or Renaissance literature or a course in literature between 1700 and 1900.
- A course in Modern literature or a course in cultural and theoretical studies.
- A literature course.

ENGL 217 Introduction to Film	3
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ENGL 317 Film History	3
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ENGL 318 Studies in Film (variable content, may be repeated once)	3
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ENGL 417 Film Theory and Criticism	3
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All English/Film majors must take at least one ENGL 480 seminar and can count only one 200-level course toward the minimum number of credits for the major.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: ENGLISH****CONCENTRATION: JOURNALISM**

CURRICULUM	CREDITS
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See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Five of the following six courses:	15
ENGL 202 Biblical and Classical Literature	
ENGL 205 British Literature I	
ENGL 206 British Literature II	
ENGL 300 Texts and Contexts	
ENGL 324 Shakespeare	
ENGL 340 or ENGL 341 American Literature	

Nine credits at the 300-level or above distributed as follows:

- A course other than Shakespeare in Medieval or Renaissance literature or a course in literature between 1700 and 1900.
- A course in Modern literature or a course in cultural and theoretical studies.
- A literature course.

ENGL 307 News Writing and Editing ..... 3  
Prior to enrolling in ENGL 307, ENGL 110 or equivalent must be completed with a grade of B or better.

At least nine credits chosen from among the following courses: ..... 9

ENGL 308 Reporter's Practicum  
ENGL 309 Feature and Magazine Writing  
ENGL 310 Copy Editing and Layout  
ENGL 407 Advanced Reporting  
ENGL 408 Sports Writing  
ENGL 409 Topics in Journalism

May be taken in addition to the 36 required credits in English:  
ENGL 466 Internship ..... 1-6

All English/Journalism majors must take at least one ENGL 480 seminar and can count only one 200-level course toward the minimum number of credits for the major

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

## DEGREE: BACHELOR OF ARTS MAJOR: ENGLISH EDUCATION

### CURRICULUM

### CREDITS

See page 78 for University and College requirements.

Six credits of American History; three credits of British History; three credits of European History; three credits of Philosophy; and three credits of Art History, Theatre, or Music are required. Students are encouraged to take these courses within their Arts and Science Breadth Requirements

### MAJOR REQUIREMENTS

ENGL 202 Biblical and Classical Literature ..... 3  
ENGL 205 British Literature I ..... 3  
ENGL 206 British Literature II ..... 3  
ENGL 300 Texts and Contexts ..... 3  
ENGL 302 Advanced Composition ..... 3  
ENGL 324 Shakespeare ..... 3  
ENGL 340 American Literature to the Civil War ..... 3  
ENGL 341 American Literature: Civil War to World War II ..... 3  
ENGL 390 English Linguistics ..... 3

British literature before 1900 (300-level or above) ..... 3  
20th-century British, American or Comparative literature (300-level or above) ..... 3

All English Education majors must take at least one ENGL 480 seminar.

COMM 251, 255, 312, or 350 or THEA 102 or 226 ..... 3  
LING 101 Introduction to Linguistics ..... 3  
EDUC 201 Diversity in the Classroom ..... 3  
EDUC 304 Educational Psychology – Social Aspects ..... 3  
EDUC 305 Educational Psychology – Cognitive Aspects ..... 3  
ENGL 183 Grammar for English Teachers ..... 2  
ENGL 383 Seminar in Teaching English I ..... 3  
ENGL 384 Seminar in Teaching English II ..... 3  
ENGL 481 Seminar in Teaching English ..... 3  
EDUC 400 Student Teaching ..... 9  
EDUC 403 Adolescent Literature ..... 3

To be eligible to student teach, English Education students must have a g.p.a. of 3.0 in their English major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

## HONORS BACHELOR OF ARTS: ENGLISH DEGREE WITH DISTINCTION IN ENGLISH OR ENGLISH EDUCATION

Eligible students may elect to pursue the Honors degree in English or the Degree with Distinction. Those taking the Honors degree must satisfy all the requirements established by the University Honors Pro-

gram; in addition, they must meet requirements set by the English Department: a minimum of 12 credits in Honors courses in English, not including the thesis (one course must be an Honors Seminar, ENGL 480 Honors); and an Honor thesis.

### REQUIREMENTS FOR A MINOR IN ENGLISH

The English Department also offers a program leading to a minor in English. The course of study for the English minor includes ENGL 202, 205, 206, 324 and two additional courses in literature and composition above the 200-level. One course must be in British Literature or Cultural and Theoretical Studies, and one course must be in American Literature. By earning 15 credits in recommended courses at the 300-level, a student may minor in Irish Studies. Required courses include ENGL 351 and HIST 373. A student may also minor in Medieval Studies.

## ENVIRONMENTAL SCIENCE

See Geography.

## ENVIRONMENTAL STUDIES

See Chemistry and Biochemistry.

## EUROPEAN STUDIES

See Continental European Studies.

## FOREIGN LANGUAGES AND LITERATURES

**Modern.** The Department of Foreign Languages and Literatures administers major programs leading to the B.A. in French Studies, German Studies, Italian Studies, Russian Studies, Spanish Studies, and Three Languages. In addition, the department co-sponsors joint majors in History/Foreign Language and in Political Science/Foreign Language. Honors Degree major programs are also available in Foreign Languages, Foreign Language Education, History/Foreign Languages, and Foreign Language/Political Science. Minors are offered in French, German, Italian, Japanese, Russian, and Spanish and in French Studies, German Studies, and Spanish Studies. Foreign Language Certificate and Honors Foreign Language Certificate programs are offered for students in majors other than foreign languages, and there is an International Honors Certificate program for students majoring in French Studies, German Studies, Spanish Studies, or Political Science and International Relations.

To prepare students to speak, understand, read and write the language they are studying, the Department of Foreign Languages and Literatures uses proficiency-oriented communicative approaches to language learning. Many of the elementary/intermediate courses are team taught, and there are special programs for students at this level who want to continue their language/culture study abroad. A high-tech Foreign Language Media Center is available for student use.

All majors and minors are encouraged to spend at least one semester, one winter session, or one summer of study in a country in which the foreign language is spoken natively.

**Ancient.** The Department of Foreign Languages and Literatures administers major programs in Classical Studies, Classics, Latin Studies, and a minor in Classics. Honors Degree programs are also available. The program offers a liberal education in the fullest sense of that term by giving one the means to identify a problem, solve it without losing sight of its larger implications, express the solution

clearly, and persuade others of its validity. Students of the classics learn habits of accuracy and clarity of expression and in the process grapple with the universal ethical, social, and political problems.

Telephone: (302) 831-2591

<http://www.flit.udel.edu/>

### FOREIGN LANGUAGE TEACHER EDUCATION PROGRAMS

The Department of Foreign Languages and Literatures administers the B.A. program in Foreign Language Education leading to certification for teaching French, German, Italian, Latin, Russian, and Spanish in grades K-12 or in secondary schools only. Those students pursuing teaching certification are encouraged to study in the country where their particular foreign language is spoken. Information on study abroad programs is available through the Department of Foreign Languages and Literatures.

### PLACEMENT AND DUPLICATE CREDIT

Students intending to enroll in a foreign language course will be placed according to the number of years of previous study of that language. As a general rule, students with fewer than two years of high school foreign language or the equivalent will be placed at the 105 level, students with two or three years will be placed at the 106-level, and students with more than three years will be placed at the 107-level. Exceptions to this rule can be made only upon the recommendation of the Foreign Language Placement Advisor.

No credit will be granted for a 100-level course if the student has already successfully completed a 200-level course or a course higher in the 100-level sequence in the same language, e.g., credit for a 105 course will not be given if a 106 course has already been successfully completed.

***Skipping Courses:*** Students are advised that once they begin their foreign language courses at the 100-level, they are *not* permitted to skip courses in the sequence (for example, students are not permitted to move directly from 105 to 107). The prerequisite for each 100-level course *must* be observed.

It is important to note that only 15 credits of the same elementary/intermediate language will be counted towards the degree.

### STUDY ABROAD

In addition to several University-sponsored semester programs abroad in such locations as Costa Rica, London, Paris, Scotland, and Madrid, various programs for study abroad are specifically designed for students of foreign languages.

For the advanced foreign language student, the Department of Foreign Languages and Literatures sponsors fall semester programs in France (Paris), and Spain (Granada), and spring semester programs in Germany (Bayreuth) and Italy (Siena). Beginning and intermediate-level students may participate in winter and/or summer session programs in Costa Rica, France, Germany, Italy, Mexico, Japan, Martinique, or Spain.

Students majoring in French, German, Italian, and Spanish are *expected* to spend a semester abroad, and minors are strongly encouraged to do so.

Please consult the main office of the Department of Foreign Languages and Literatures for further details on all programs.

### RESIDENCY REQUIREMENT

At least 15 hours of courses acceptable for credit in the major language and literature, including at least 6 credits at the 400-level, must be taken on campus or as part of a semester abroad program

sponsored by the Department of Foreign Languages and Literatures. In the case of the three-languages major, at least 12 of the hours must be taken in Language One on campus or as part of a semester abroad program sponsored by the Department of Foreign Languages and Literatures.

### MISCELLANY

***Special Interest Housing:*** Foreign language students who wish to practice their linguistic skills in an informal setting may elect to live in a residence hall housing students with a special interest in a foreign language and culture. In addition to providing an opportunity for daily conversation in the foreign language, these residences sponsor relevant cultural events.

***Credit by Examination:*** Students may receive credit by examination for language courses at the 200-level and above. The normal prerequisite is foreign study. Native speakers may not receive credits for courses in conversation.

***Language Proficiency:*** For information concerning language proficiency see Requirements for the Degree of Bachelor of Arts, under College of Arts and Science.

***Waivers or Substitutions:*** Waivers or substitutions for any requirements may be requested by seeking recommendation of the advisor and approval of the department chair.

### HONORS BACHELOR OF ARTS: FOREIGN LANGUAGES AND LITERATURES; FOREIGN LANGUAGE EDUCATION; HISTORY/FOREIGN LANGUAGE; FOREIGN LANGUAGE/POLITICAL SCIENCE

The following B.A. Degrees may be taken as Honors Degrees:

- Foreign Languages and Literatures Concentrations: Classics, French Studies, German Studies, Italian Studies, Latin Studies, Russian Studies, Spanish Studies, Three Languages
- Classical Studies
- French Education
- German Education
- Italian Education
- Latin Education
- Russian Education
- Spanish Education
- History/Classics, French, German, Russian, or Spanish
- French, German, or Spanish/Political Science

### Honors Degree Requirements

To receive the B.A. with Honors, students must complete the following:

- A. All requirements for one of the degrees listed above.
- B. All the University's generic requirements for the Honors Degree (see page 43 of this catalog).
  1. At least six of the Honors credits in the B.A. in Foreign Languages and Literatures or the B.A. in Foreign Language Education must be at the 300-level or above. The Honors thesis for these degrees will normally be written in the target language; with the prior approval of the thesis director and the Department Chair, the thesis may be written in English.
  2. For the joint degree with History, at least six of the Honors credits in the major must be at the 300-level or above.
  3. For the joint degree with Political Science, the Honors credits in the majors shall come from both participating departments, and shall include at least two courses at the 300-level or above. The cumulative grade point average for all courses in the major must be at least 3.400.

**DEGREE: BACHELOR OF ARTS  
MAJOR: CLASSICAL STUDIES**

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

GREK 101	Elementary Ancient Greek I	3
GREK 102	Elementary Ancient Greek II	3
LATN 213	Intermediate Latin I	3
LATN 214	Intermediate Latin II	3
Three additional credits in Latin at the 200- or 300-level		3
Three additional credits in Latin or Greek at the 200-level or above		3
Twenty-one credits		21
chosen with prior approval of the advisor and according to option requirements, from the following areas: Anthropology (3 credits), Art History (3 credits), Foreign Languages and Literatures (6 credits), History (6 credits), Philosophy (3 credits)		

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****Note:** See the associate chair of the department for detailed requirements. The faculty of each program shall determine specific course requirements, which may be more stringent than those listed above**DEGREE: BACHELOR OF ARTS  
MAJOR: FOREIGN LANGUAGES AND LITERATURES  
CONCENTRATION: CLASSICS**

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

GREK 101	Elementary Ancient Greek	3
GREK 102	Elementary Ancient Greek	3
Eighteen credits in Greek and Latin above the 100-level with six credits at or above the 300-level, and at least six credits in each language		18
FLIT 202	Biblical and Classical Literature	3
FLIT 316	Classical Mythology	3
FLIT 322	Topics: Classical Literature in Translation	3
Six credits from 200-, 300-, or 400-level courses (including courses in translation) in Foreign Languages and Literatures, Comparative Literature, Linguistics, or other departments, selected in consultation with the advisor		6

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****DEGREE: BACHELOR OF ARTS  
MAJOR: FOREIGN LANGUAGES AND LITERATURES  
CONCENTRATION: FRENCH STUDIES**

For the different options available under the French Studies concentration (language and literature, civilization and culture, area studies, period studies, linguistics), students should see their advisor or the associate chair of the department.

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Twelve credits in FREN electives at the 200-level and above		12
Twelve credits in FREN literature at the 300 or 400-level (at least six credits must be at the 400-level)		12
A total of twelve to fifteen credits at the 200-level or above, chosen with prior approval of the advisor and according to option requirements, from the following areas: French, Anthropology, Art History, Comparative Literature, English, Foreign Languages and Literatures, History, Linguistics, Music, Philosophy, Political Science, Theatre		12-15

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****Note:** See the associate chair of the department for detailed requirements. The faculty of each program shall determine specific course requirements, which may be more stringent than those listed above.**DEGREE: BACHELOR OF ARTS  
MAJOR: FRENCH EDUCATION**

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

FREN 211	French Reading & Composition	3
FREN 301	French Literature: Prose	3
FREN 302	French Literature: Poetry & Theatre	3
FREN 314	French Phonetics	3

One of the following courses: 3

FREN 313	Intensive French Composition
FREN 306	Practical Oral/Written Expression
FREN 305	Advanced French Conversation

Two of the following courses: 6

FREN 308	Contemporary France II
FREN 325	French Civilization I
FREN 326	French Civilization II
FREN 453	French Civilization III

One of the following courses: 3

FREN 401	Advanced French Grammar
FREN 402	Advanced French Composition
FREN 403	History & Evolution of French Language
FREN 406	Advanced French Language
LING 440	Structure of French

Six credits in French Literature at the 400-level 6

EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
EDUC 400	Student Teaching	9
FLIT/LING 421	Methods of Teaching Foreign Languages	3
FLIT/LING 422	Language Syllabus Design	3
LING/FLIT 424	Second Language Testing	3

For Foreign Language in Elementary School (K-12 certification) option, required courses in addition to above:

FLIT/EDUC 429	Methods of Teaching Foreign/Second Languages in Elementary Schools	3
EDUC/LING 476	Second Language Acquisition and Bilingualism	3
EDUC 202	Human Development I: Grades K-4	3

To be eligible to student teach, Foreign Language Education students must have a g.p.a. of 3.0 in their French Education major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student application and other information concerning student teaching policies.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****DEGREE: BACHELOR OF ARTS  
MAJOR: FOREIGN LANGUAGES AND LITERATURES  
CONCENTRATION: GERMAN STUDIES**

For the different options available under the German Studies concentration (language and literature, civilization and culture, area studies, period studies, linguistics), students should see their advisor or the associate chair of the department.

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Twelve credits in GRMN electives at the 200-level and above		12
Twelve credits in GRMN literature at the 300 or 400-level (at least six credits must be at the 400-level)		12

A total of twelve to fifteen credits at the 200-level or above, 12-15

chosen with prior approval of the advisor and according to option requirements, from the following areas: German, Anthropology, Art History, Comparative Literature, English, Foreign Languages and Literatures, History, Linguistics, Music, Philosophy, Political Science, Theatre.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**Note:** See the associate chair of the department for detailed requirements. The faculty of each program shall determine specific course requirements, which may be more stringent than those listed above

**DEGREE: BACHELOR OF ARTS  
MAJOR: GERMAN EDUCATION**

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

GRMN 200	German Grammar Review	3
or		
GRMN 205	German Conversation	
GRMN 211	German Reading and Composition: Short Fiction	3
or		
GRMN 212	German Reading and Composition: Drama	
GRMN 305	German Conversation and Composition	3
or		
GRMN 306	Practical Oral/Written Expression	
GRMN 311/312	Introduction to German Literature I and II	6
GRMN 308	Contemporary Germany II	3
or		
GRMN 325	German Civilization and Culture	
GRMN 340	Focus on Genre: German Drama, Prose or Poetry	3
or		
GRMN 355	Special Topics	
One of the following courses:		3
GRMN 403	History of the German Language	
GRMN 406	Advanced German Language	
LING 460	The Structure of German	
Six credits in GRMN literature at the 400-level		6
EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
FLIT/LING 421	Methods of Teaching Foreign Languages	3
FLIT/LING 422	Language Syllabus Design	3
LING/FLIT 424	Second Language Testing	3
EDUC 400	Student Teaching	9

For Foreign Language in Elementary School (K-12 certification) option, required courses in addition to above:

FLIT/EDUC 429	Methods of Teaching Foreign/Second Languages in Elementary Schools	3
EDUC/LING 476	Second Language Acquisition and Bilingualism	3
EDUC 202	Human Development I: Grades K-4	3

To be eligible to student teach, Foreign Language Education students must have a g.p.a. of 3.0 in their German Education major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student application and other information concerning student teaching policies.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**
**DEGREE: BACHELOR OF ARTS  
MAJOR: FOREIGN LANGUAGES AND LITERATURES  
CONCENTRATION: ITALIAN STUDIES**

For the different options available under the Italian Studies concentration (language and literature, civilization and culture, linguistics, area studies, period studies), students should see their advisor or the associate chair of the department

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Twelve credits in ITAL electives at the 200-level and above	12
Twelve credits in ITAL literature at the 300 or 400-level (at least six credits must be at the 400-level)	12

A total of twelve to fifteen credits at the 200-level or above, chosen with prior approval of the advisor and according to option requirements, from the following areas: Italian, Anthropology, Art History, Comparative Literature, English, Foreign Languages and Literatures, History, Linguistics, Music, Philosophy, Political Science, Theatre

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**Note:** See the associate chair of the department for detailed requirements. The faculty of each program shall determine specific course requirements, which may be more stringent than those listed above.

**DEGREE: BACHELOR OF ARTS  
MAJOR: ITALIAN EDUCATION**

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

ITAL 200	Italian Grammar Review	3
or		
ITAL 250	Introduction to Business Italian	
ITAL 205	Italian Conversation	3
or		
ITAL 206	Culture through Conversation	
ITAL 211	Italian Reading and Composition: Short Fiction	3
or		
ITAL 212	Italian Reading and Composition: Drama and Prose	
ITAL 305	Advanced Italian Conversation and Composition	3
or		
ITAL 306	Practical Oral/Written Expression	
ITAL 3xx	Literature	6
ITAL 3xx	Civilization	3
ITAL 4xx	Literature	6
ITAL 4xx	Language	3
EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
EDUC 400	Student Teaching	9
FLIT/LING 421	Methods of Teaching Foreign Languages	3
FLIT/LING 422	Language Syllabus Design	3
LING/FLIT 424	Second Language Testing	3

For Foreign Language in Elementary School (K-12 certification) option, required courses in addition to above:

FLIT/EDUC 429	Methods of Teaching Foreign/Second Languages in Elementary Schools	3
EDUC/LING 476	Second Language Acquisition and Bilingualism	3
EDUC 202	Human Development I: Grades K-4	3

To be eligible to student teach, Foreign Language Education students must have a g.p.a. of 3.0 in their Italian Education major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student application and other information concerning student teaching policies.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**
**DEGREE: BACHELOR OF ARTS  
MAJOR: FOREIGN LANGUAGES AND LITERATURES  
CONCENTRATION: LATIN STUDIES**

For the different options available under the Latin Studies concentration (language and literature, area studies, period studies), students should see their advisor or the associate chair of the department.

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Twelve credits in LATN electives at the 200-level and above	12
Twelve credits in LATN literature at the 300 or 400-level (at least six credits must be at the 400-level)	12

A total of twelve to fifteen credits at the 200-level or above, ..... 12-15  
 chosen with prior approval of the advisor and according to option  
 requirements, from the following areas: Latin, Anthropology, Art History,  
 Comparative Literature, English, Foreign Languages and Literatures, His-  
 tory, Linguistics, Music, Philosophy, Political Science, Theatre

**ELECTIVES**

After required courses are completed, sufficient elective credits must be  
 taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**Note:** See the associate chair of the department for detailed requirements.  
 The faculty of each program shall determine specific course requirements,  
 which may be more stringent than those listed above.

**DEGREE: BACHELOR OF ARTS****MAJOR: LATIN EDUCATION****CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

LATN 2xx	6
LATN 3xx and/or LATN 4xx	9
LATN 421 Latin Prose Composition	3
LATN 431 History of Latin Literature	3
LATN 4xx	9
EDUC 201 Diversity in the Classroom	3
EDUC 304 Educational Psychology – Social Aspects	3
EDUC 305 Educational Psychology – Cognitive Aspects	3
EDUC 400 Student Teaching	9
FLIT/LING 421 Methods of Teaching Foreign Languages	3
FLIT/LING 422 Language Syllabus Design	3
LING/FLIT 424 Second Language Testing	3

For Foreign Language in Elementary School (K-12 certification) option,  
 required courses in addition to above:

FLIT/EDUC 429 Methods of Teaching Foreign/Second Languages in Elementary Schools	3
EDUC/LING 476 Second Language Acquisition and Bilingualism	3
EDUC 202 Human Development I: Grades K-4	3

To be eligible to student teach, Foreign Language Education students must  
 have a g.p.a. of 3.0 in their Latin Education major and an overall g.p.a.  
 of 2.75. Students should consult the teacher education program coordina-  
 tor (see list on p. 176) to obtain the student application and other informa-  
 tion concerning student teaching policies.

**ELECTIVES**

After required courses are completed sufficient elective credits must be taken  
 to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****DEGREE: BACHELOR OF ARTS****MAJOR: FOREIGN LANGUAGES AND LITERATURES  
CONCENTRATION: RUSSIAN STUDIES**

For the different options available under the Russian Studies concentration  
 (language and literature, area studies, period studies, linguistics), students  
 should see their advisor or the associate chair of the department.

**CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Twelve credits in RUSS electives at the 200-level and above	12
Twelve credits in RUSS literature at the 300 or 400-level (at least six credits must be at the 400-level)	12
FLIT 327 Topics: Russian Literature in Translation	3
FLIT 375 Topics: Russian and Soviet Culture in Translation	3
A total of nine credits at the 200-level or above, chosen with prior approval of the advisor and according to option require- ments, from the following areas: Russian, Art History, Comparative Litera- ture, English, Foreign Languages and Literatures, History, Linguistics, Music, Political Science.	9

**ELECTIVES**

After required courses are completed, sufficient elective credits must be  
 taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**Note:** See the associate chair of the department for detailed requirements.  
 The faculty of each program shall determine specific course requirements,  
 which may be more stringent than those listed above.

**DEGREE: BACHELOR OF ARTS****MAJOR: RUSSIAN EDUCATION****CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

RUSS 211 Russian Reading and Composition	3
RUSS 305 Russian Conversation and Composition	3
RUSS 401 Advanced Russian Grammar and Composition	3
Six credits in RUSS literature at the 400-level	6
One of the following courses:	3
RUSS 200 Russian Grammar Review	
RUSS 205 Russian Conversation	
Two of the following courses:	6
RUSS 310 Introduction to Russian Literature I	
RUSS 312 Introduction to Russian Literature II	
RUSS 325 Russian Civilization and Culture	
FLIT 327 Topics: Russian Literature in Translation	3
FLIT 375 Topics: Russian and Soviet Culture in Translation	3
EDUC 201 Diversity in the Classroom	3
EDUC 304 Educational Psychology – Social Aspects	3
EDUC 305 Educational Psychology – Cognitive Aspects	3
EDUC 400 Student Teaching	9
FLIT/LING 421 Methods of Teaching Foreign Languages	3
FLIT/LING 422 Language Syllabus Design	3
LING/FLIT 424 Second Language Testing	3

For Foreign Language in Elementary School (K-12 certification) option,  
 required courses in addition to above:

FLIT/EDUC 429 Methods of Teaching Foreign/Second Languages in Elementary Schools	3
EDUC/LING 476 Second Language Acquisition and Bilingualism	3
EDUC 202 Human Development I: Grades K-4	3

To be eligible to student teach, Foreign Language Education students must  
 have a g.p.a. of 3.0 in their Russian Education major and an overall  
 g.p.a. of 2.75. Students should consult the teacher education program  
 coordinator (see list on p. 176) to obtain the student application and other  
 information concerning student teaching policies.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be  
 taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****DEGREE: BACHELOR OF ARTS****MAJOR: FOREIGN LANGUAGES AND LITERATURES  
CONCENTRATION: SPANISH STUDIES**

For the different options available under the Spanish Studies concentra-  
 tion (language and literature, civilization and culture, Spanish area  
 studies, Latin American area studies, period studies, linguistics), stu-  
 dents should see their advisor or the associate chair of the department.

**CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Twelve to fifteen credits in SPAN electives at the 200-level and above	12-15
Twelve credits in SPAN literature at the 300 or 400-level (at least six credits must be at the 400-level)	12
A total of twelve to fifteen credits at the 200-level or above, chosen with prior approval of the advisor and according to option require- ments, from the following areas: Spanish, Anthropology, Art History, Com- parative Literature, English, Foreign Languages and Literatures, History, Linguistics, Music, Philosophy, Political Science, Theatre.	12-15

**ELECTIVES**

After required courses are completed, sufficient elective credits must be  
 taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**Note:** See the associate chair of the department for detailed requirements.  
 The faculty of each program shall determine specific course requirements,  
 which may be more stringent than those listed above.



**DEGREE: BACHELOR OF ARTS  
MAJOR: SPANISH EDUCATION**

CURRICULUM CREDITS

**See page 78 for University and College requirements.****MAJOR REQUIREMENTS**

SPAN 201	Spanish Reading and Composition (SPAN 200 is a prerequisite)	3
SPAN 305	Oral Communication	3
or		
SPAN 306	Practical Oral/Written Expression	
SPAN 314	Spanish Phonetics and Phonology	3
One of the following courses:		3
SPAN 308	Contemporary Spain II	
SPAN 325	Spanish Civilization and Culture	
SPAN 326	Latin American Civilization and Culture	
Any three of the following four literature survey courses:		9
SPAN 301	Survey of Spanish Literature	
SPAN 302	Survey of Spanish Literature	
SPAN 303	Survey of Spanish-American Literature3	
SPAN 304	Survey of Spanish-American Literature	
One of the following courses:		3
SPAN 401	Advanced Spanish Grammar	
SPAN 403	History of the Spanish Language	
SPAN 406	Advanced Spanish Language	
Six credits in SPAN literature at the 400-level		6
EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
EDUC 400	Student Teaching	9
FLIT/LING 421	Methods of Teaching Foreign Languages	3
FLIT/LING 422	Language Syllabus Design	3
LING/FLIT 424	Second Language Testing	3
For Foreign Language in Elementary School (K-12 certification) option, required courses in addition to above:		
FLIT/EDUC 429	Methods of Teaching Foreign/Second Languages in Elementary Schools	3
EDUC/LING 476	Second Language Acquisition and Bilingualism	3
EDUC 202	Human Development I: Grades K-4	3

To be eligible to student teach, Foreign Language Education students must have a g.p.a. of 3.0 in their Spanish Education major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student application and other information concerning student teaching policies.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****DEGREE: BACHELOR OF ARTS  
MAJOR: FOREIGN LANGUAGES AND LITERATURES  
CONCENTRATION: THREE LANGUAGES**

CURRICULUM CREDITS

**See page 78 for University and College requirements.****MAJOR REQUIREMENTS****First Language**

Six first-language elective credits at the 200-level and above	6
Nine credits in literature at the 300 and 400-level (at least three credits at each level)	9
Three additional credits at the 400-level	3

**Second Language**

Six second-language elective credits at the 200-level and above	6
Nine credits in literature at the 300 and 400-level (at least three credits at each level)	9
Three additional credits at the 400-level	3

**Third Language**

Nine to twelve credits of third-language courses (at least three credits at or above the 200-level for Western language)	9-12
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**Related Work**

Six credits from 200-, 300-, or 400-level courses (including courses in translation) in Foreign Languages and Literatures, Comparative Literature, or Linguistics, selected in consultation with the advisor.	6
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**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****DEGREE: BACHELOR OF ARTS  
MAJOR: HISTORY/CLASSICS, FRENCH,  
GERMAN, RUSSIAN, OR SPANISH**

CURRICULUM CREDITS

**See page 78 for University and College requirements.****MAJOR REQUIREMENTS**

HIST 101	Western Civilization to 1648	3
HIST 102	Western Civilization: 1648 to the Present	3
Five 300-level courses, at least two of which must deal with countries that use the chosen foreign language		15
History seminar at the 400-level or above (excluding HIST 491 and 493 and Independent Study)		3

**One of the following language options:****Classics**

Civilization: Two classical civilization (or culture) courses: e.g., FLIT 202 (Biblical and Classical Literature) and FLIT 316 (Mythology)	6
Literature: Either 9 credits of Latin at the 200-level or above and 3 credits of Latin at the 300-level or above, or GREK 213 and GREK 214 and 6 credits of Latin at the 200-level or above	12

**French**

Civilization: FREN 325 (French Civilization I), or FREN 326 (French Civilization II) or FREN 453 (French Civilization III)	3
Literature: FREN 301 (Introduction to French Literature: Prose) and FREN 302 (Introduction to French Literature: Poetry and Theatre)	6
400-level literature course	3
Two courses at the 200, 300, or 400-level	6

**German**

Civilization: GRMN 325 (German Civilization and Culture)	3
Literature: GRMN 311 (Introduction to German Literature I) and GRMN 312 (Introduction to German Literature II)	6
400-level literature course	3
Two courses at the 200, 300, or 400-level	6

**Russian**

Civilization: RUSS 325 (Russian Civilization)	3
Literature: RUSS 310 (Introduction to Russian Literature I) and RUSS 312 (Introduction to Russian Literature II)	6
400-level literature course	3
Two courses at the 200, 300, or 400-level	6

**Spanish**

Students must choose either the Peninsular (325, 301, 302) or the Latin American (326, 303, 304) track.	
Civilization: SPAN 325 (Spanish Civilization and Culture) or SPAN 326 (Latin American Civilization and Culture)	3
Literature: SPAN 301 (Survey of Spanish Literature) and SPAN 302 (Survey of Spanish Literature)	6
or	
SPAN 303 (Survey of Spanish-American Literature) and SPAN 304 (Survey of Spanish-American Literature)	6
400-level literature course	3
Two courses at the 200, 300, or 400-level	6

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**Honors Degree:** An Honors Degree option is also available; see page 94.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: FRENCH, GERMAN, OR SPANISH/POLITICAL SCIENCE**

## CURRICULUM

## CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

French, German, or Spanish/Political Science majors must complete all designated courses and any prerequisite courses (e.g., for admission to the 200-level language courses) with no grade below a C.

POSC 105	The American Political System (or other required intro courses)	3
POSC 240	Introduction to International Relations	3
POSC 270	Comparative Politics	3
POSC 310	European Governments	3
POSC 441	Problems of Western European Politics by Country	3
or		
POSC 442	Problems of Western European Politics	
3 additional courses at the 300 or 400-level with at least 2 at the 400-level and at least 2 in the area of International Relations		9

**One of the following language options:****French**

FREN 2xx, 3xx, 4xx (prior to semester abroad)	6
FREN 3xx, 4xx	12
FREN 4xx (literature) (Newark campus only)	3

**German**

GRMN 2xx, 3xx, 4xx (prior to semester abroad)	6
GRMN 3xx, 4xx	12
GRMN 4xx (literature) (Newark campus only)	3

**Spanish**

SPAN 2xx, 3xx, 4xx (prior to semester abroad)	6
SPAN 3xx, 4xx	12
SPAN 4xx (literature) (Newark campus only)	3

In addition to completing one of the language options above, students are required to participate in a semester abroad program sponsored by the Department of Foreign Languages and Literatures (in Paris, or the equivalent, for French; in Bayreuth, or the equivalent, for German; in Granada, or the equivalent, for Spanish).

The following courses taken abroad count toward the French, German, or Spanish/Political Science major:

**Political Science**

POSC 441

**French**

FREN 306 or FREN 406  
FREN 308  
FREN 355 or FREN 455  
HIST 339

**German**

GRMN 306 or GRMN 406  
GRMN 308  
GRMN 355 or GRMN 455  
HIST 339

**Spanish**

SPAN 306 or SPAN 406  
SPAN 308  
SPAN 355 or SPAN 455  
HIST 339

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**Honors Degree:** An Honors Degree option is available for the B.A. in French, German, or Spanish/Political Science (see page 94).

**CREDITS TO TOTAL A MINIMUM OF ..... 124****MINORS**

**Foreign Language Minors:** An advisor on minors for each language will help students tailor the chosen minor program to their needs. A minor in a foreign language requires a minimum of 18-21 credits at the 200 level or above, as follows:

**CLASSICS:** 18 credits including 12 credits in Latin and/or Greek at or above the 200-level and 6 credits in FLLT courses, with one course at or above the 300-level.

**FRENCH:** 18 credits above the 100-level including FREN 211, FREN 301 and 302, one course at the 300 or 400-level, and one other 400-level course.

**GERMAN:** 18 credits above the 100-level including GRMN 311 or GRMN 312, one other 300-level course, one 400-level literature course, and one other 400-level course.

**ITALIAN:** 18 credits composed of ITAL 211 or 212; two additional courses at the 200, 300 or 400-level; one 300-level literature course; one 300 or 400-level course; and one 400-level course.

**JAPANESE:** 18 credits; including 15 credits in JAPN courses at the 200-level or above, with at least 6 of those credits at the 300-level or above, plus 3 credits in a Japan-related FLLT course.

**RUSSIAN:** 18 credits composed of two Russian courses at the 200-level; three courses at the 300 or 400-level, one of which must be a 400-level course; and 3 credits of related work (e.g., Russian history, political science, art, music, etc.).

**SPANISH:** 21 credits including SPAN 200, SPAN 201 and an additional 200-level course; two 300-level courses (one must be a Survey of Literature) and two 400-level courses (one must be a literature course).

**Foreign Language Studies Minors:** The Foreign Language Studies (FLS) minor (in French, German or Spanish) requires participation in a UD Department of Foreign Languages and Literatures sponsored semester abroad program. See the Foreign Languages and Literatures Study Abroad Coordinator for details and prerequisites. Credit requirements for the FLS minors are as follows:

**FRENCH STUDIES MINOR**

FREN 2xx, 3xx, 4xx	6
FREN 306 or 406	3
FREN 308	3
Three of: ARTH 339, FREN 355, FREN 455, HIST 339, POSC 441	9
	21

Minors in French Studies are required to take at least one literature course at the 300-level or above.

**Note:** A student **cannot** receive both a French Minor and a French Studies Minor.

**GERMAN STUDIES MINOR**

GRMN 2xx, 3xx, 4xx	6
GRMN 306 or 406	3
GRMN 308	3
Three of: ARTH 339, GRMN 355, GRMN 455, HIST 339, POSC 441	9
	21

Minors in German Studies are required to take at least one literature course at the 300-level or above.

**Note:** A student **cannot** receive both a German Minor and a German Studies Minor.

**SPANISH STUDIES MINOR**

SPAN 2xx, 3xx, 4xx	6
SPAN 306 or 406	3
SPAN 308	3
Three of: ARTH 339, SPAN 355, SPAN 455, HIST 339, POSC 441	9
	21

Minors in Spanish Studies are required to take at least one literature course at the 300-level or above.

**Note:** A student **cannot** receive both a Spanish Minor and a Spanish Studies Minor.

**INTERNATIONAL HONORS CERTIFICATES**

For majors in *Foreign Languages and Literatures (French Studies, German Studies, Spanish Studies)* or *Political Science and International Relations*. This program requires participation in a semester program abroad (in Paris for French, Bayreuth for German, or Granada for Spanish).

18 credits of Honors courses at the 300-level or above are required for this interdisciplinary certificate, 9 in a foreign language (French, German, or Spanish), and 9 in Political Science or International Relations.

Information is available in the Foreign Languages and Literatures Department office.

**FOREIGN LANGUAGE AND HONORS FOREIGN LANGUAGE CERTIFICATES**

The Foreign Language Certificate Program and the Honors Foreign Language Certificate Program are intended to enhance the international dimension of the baccalaureate program for students in majors other than foreign languages by providing them with some first-hand knowledge of a foreign language and a foreign culture.

Students pursuing a major in the Department of Foreign Languages and Literatures or a minor in the language of the certificate are not eligible for these certificates.

To earn a Bachelor's degree with a *Foreign Language Certificate* in French, German, Italian, Japanese, or Spanish, a student is required to complete a designated sequence of four courses at the 200- and 300-levels. This is accomplished through a combination of two courses taken during Study Abroad Sessions in France, Martinique, Germany, Italy, Japan, Spain, or Latin America, and two courses taken on the Delaware campus. A qualified student must complete the designated sequence of four 200- or 300-level French, German, Italian, Japanese, or Spanish courses with no grade below a C.

To earn a Bachelor's degree with an *Honors Foreign Language Certificate* in French, German, Italian, Japanese, or Spanish, a qualified student must:

1. Complete the designated sequence of four 200- or 300-level French, German, Italian, Japanese, or Spanish courses with no grade below a B-.
2. Take all four of these courses for Honors credit.
3. Achieve a 3.000 cumulative grade index by the time of completion of the course requirements.

The Honors Foreign Language Certificate can be earned in addition to other kinds of Honors Certificates. Honors courses taken in the sequence leading to the Honors Foreign Language Certificate can also be applied toward those required for other forms of Honors recognition.

**French Certificate Course (France or Martinique)**

*Study Abroad Session in Caen, France or Fort de France, Martinique:* CREDITS  
FREN 206 Culture through Conversation ..... 3

and one of the following:

FREN 207 Contemporary Caribbean World (Martinique) ..... 3  
FREN 208 Contemporary France I (France) ..... 3

*Delaware Campus:*

FREN 211 (or higher) French Reading and Composition ..... 3  
FREN 3xx ..... 3

**German Certificate Courses**

*Study Abroad Session in Bayreuth, Germany:* CREDITS  
GRMN 206 Culture through Conversation ..... 3  
GRMN 208 Contemporary Germany I ..... 3

*Delaware Campus:*

GRMN 211 (or higher) German Reading and Composition ..... 3  
GRMN 3xx ..... 3

**Italian Certificate Courses**

*Winter Session in Siena, Italy:* CREDITS  
ITAL 206 Culture through Conversation ..... 3  
ITAL 208 Contemporary Italy I ..... 3

*Delaware Campus:*

ITAL 211 (or higher) Italian Reading and Composition: Short Fiction ..... 3  
ITAL 3xx ..... 3

**Alternate Plan for Italian Certificate**

*Spring Semester in Siena:* CREDITS  
ITAL courses at the 200-, 300- or 400-level ..... 9  
plus one of the following, also taught abroad:  
ARTH 339 Art and Architecture of Europe ..... 3  
HIST 339 Topics in Modern European History ..... 3  
POSC 441 Problems of Western European Politics by Country ..... 3

**Japanese Certificate Courses**

*Study Abroad Session in Kobe, Japan:* CREDITS  
JAPN 206 Culture through Conversation ..... 3  
JAPN 208 Contemporary Japan I ..... 3

*Delaware Campus:*

JAPN 200 (or higher) Japanese Grammar and Composition ..... 3  
JAPN 3xx ..... 3

**Spanish Certificate Courses (Spain or Latin America)**

*Study Abroad Session in Spain or Latin America:* CREDITS  
SPAN 206 Culture through Conversation ..... 3

and one of the following:

SPAN 207 Contemporary Latin America I ..... 3  
SPAN 208 Contemporary Spain I ..... 3

*Delaware Campus:*

SPAN 201 (or higher, excluding 205) Spanish Reading and Composition ..... 3  
SPAN 3xx ..... 3

**GEOGRAPHY**

The Department of Geography offers B.A. programs in Geography and Geography Education, as well as a minor in geography. The Department also co-sponsors the B.S. degree program in Environmental Science, and participates in other interdepartmental opportunities.

Geographers investigate processes that explain the location of human and natural phenomena, as well as the interactions between people and their environment. A broad range of interests characterizes geography and reflects its position simultaneously in the natural sciences, social sciences, and humanities.

Students who major in geography may, if they choose, specialize. The department has an excellent program in climatology, for instance, and research may be undertaken through its Center for Climatic Research. Other areas include environmental studies, biogeography, conservation, cultural-historical geography, urban geography and geomorphology. Computer skills, such as geographic information systems, cartographic and other skills also are studied by geography majors. Students are required to take an introductory sequence of courses to provide a common background for all majors. During the senior year, majors may, at their option, undertake a research paper under the direction of their program advisors. A detailed brochure describing the geography program and requirements is available upon request from the department office.

Telephone: (302) 831-2294

<http://www.udel.edu/Geography/geog.html>

**BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE**

Complementing the B.A. programs in Geography, the Geography Department, in cooperation with the Geology Department and the Department of Biology, offers a B.S. degree in Environmental Science. The program emphasizes a broad scientific understanding of the character, function, and analysis of environmental systems. It is hoped that Environmental Science B.S. students will be able to contribute to society's understanding of and solutions to problems that arise from the human occupation and use of the environment.

**INTERDEPARTMENTAL AND DOUBLE MAJORS**

An interdepartmental major, for students having interests in two areas, requires 21 credits each in geography and in one other department in the college plus 9 more elective credits, approved by both departments. Of the minimum of 21 credits in geography, a student must take 9 credits from the foundation level, of which one course must be from the Natural Geography area, one course from the Human Geography area, and one course from the Methods area. Nine more geography credits must be taken at the 300/400-level. The remaining three geography credits may be chosen from any 200-, 300-, or 400-level course.

Students may also declare a double major with another department in the College of Arts and Science, provided they satisfy the requirements of both geography and their second major field. Departmental requirements for the double major are identical to those for the major.

**DEGREE: BACHELOR OF ARTS  
MAJOR: GEOGRAPHY****CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Two of the following natural geography courses: ..... 6-7

GEOG 101	Physical Geography: Climatic Processes
GEOG 106	Physical Geography: Land Surface Processes
GEOG 152	Climate and Life
GEOG 220	Meteorology
GEOG 230	Humans and the Earth Ecosystem
GEOG 235	Conservation of Natural Resources
GEOG 255	Applied Climatology

Two of the following human geography courses: ..... 6

GEOG 102	Human Geography
GEOG 120	World Regional Geography
GEOG 203	Cultural Geography
GEOG 210	Economic Geography
GEOG 225	Historical Geography of the United States
GEOG 236	Conservation: Global Issues

One of the following methods courses: ..... 3-4

GEOG 250	Computer Methods in Geography
GEOG 270	Map Communication and Design
GEOG 272	Map and Air Photo Interpretation

Nine credits selected from geography courses ..... 9  
at the 300 or 400-level (GEOG 445 strongly recommended).

Six elective credits selected from geography courses ..... 6  
at the 200, 300, or 400-level.

**ELECTIVES**

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS  
MAJOR: GEOGRAPHY EDUCATION****CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

Two of the following natural geography courses: ..... 6-7

GEOG 101	Physical Geography: Climatic Processes
GEOG 106	Physical Geography: Land Surface Processes
GEOG 152	Climate and Life
GEOG 220	Meteorology
GEOG 230	Humans and the Earth Ecosystem
GEOG 235	Conservation of Natural Resources
GEOG 255	Applied Climatology

Two of the following human geography courses: ..... 6

GEOG 102	Human Geography
GEOG 120	World Regional Geography

GEOG 203	Cultural Geography
GEOG 210	Economic Geography
GEOG 225	Historical Geography of the United States
GEOG 236	Conservation: Global Issues

One of the following methods courses: ..... 3-4

GEOG 250	Computer Methods in Geography
GEOG 270	Map Communication and Design
GEOG 272	Map and Air Photo Interpretation

Nine credits selected from geography courses ..... 9  
at the 300 or 400-level (GEOG 445 strongly recommended).

Six credits selected from geography courses ..... 6  
at the 200, 300, or 400-level.

ECON 151	Introduction to Microeconomics	3
ECON 152	Introduction to Macroeconomics	3
POSC 105	The American Political System	3
HIST 104	World History 1648 to Present	3
HIST 206	United States History since 1865	3

Additional credits as follows: ..... 12  
3 credits in ECON, 6 credits in POSC, 3 credits in HIST

EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
HIST 491	Planning a Course of Instruction	3
HIST 493	Seminar: Problems in Teaching History and Social Sciences	3
EDUC 420	Reading in the Content Areas	1
EDUC 400	Student Teaching	9

To be eligible to student teach, Geography Education students must have a g.p.a. of 3.0 in their major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**REQUIREMENTS FOR THE MINOR IN GEOGRAPHY**

A minimum of 18 credits of course work in geography must be completed for a minor. Nine credits must be taken at the foundation level, with three credits from each of the foundation areas (Natural Geography, Human Geography, Methods). Nine more geography credits must be taken at the 300/400-level.

**DEGREE: BACHELOR OF SCIENCE  
MAJOR: ENVIRONMENTAL SCIENCE****CURRICULUM****CREDITS****UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57)		3

**COLLEGE REQUIREMENTS**

**Writing:** (minimum grade C-) ..... 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** ..... 0-12

Completion of the intermediate-level course (107 or 112 or 214) in a given language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

**Breadth Requirements** (See page 83)

Group A	Understanding and appreciation of the creative arts and humanities. At least two areas must be represented	9
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**Group B** ..... 9  
The study of culture and institutions over time. At least two areas must be represented.

**Group C** ..... 9  
Empirically based study of human beings and their environment. At least two areas must be represented.

### MAJOR REQUIREMENTS

GEO 107	General Geology	4
BISC 207/208	Introductory Biology I and II	8
GEO 220	Meteorology	3
GEO 250	Computer Methods in Geography	4
BISC 302	General Ecology	3
BISC 312	General Ecology Lab	1
GEO 412	Physical Climatology	4
GEO 414	Quaternary Geology and Geochronology	3
GEO 450, GEO 450 or BISC 450	Proseminar in Environmental Science	3

Two additional courses from within one of the following three areas of concentration: ..... 6

#### Atmospheric Environment

GEO 343	Climatic Geomorphology
GEO 420	Atmospheric Physics
GEO 423	Atmospheric Dynamics
GEO 451	Microclimatology
GEO 453	Synoptic Climatology
GEO 455	Water Budget in Environmental Analysis

#### Biological Environment

BISC 306	General Physiology
BISC 494	Experimental Ecology
BISC 495	Evolution
BISC 637	Population Ecology
BISC 641	Microbial Ecology

#### Geology

GEO 203	Mineralogy and Crystallography
GEO 303	Sedimentology
GEO 304	Stratigraphy
GEO 305	Structural Geology3

Three additional courses taken from the following list or from the courses listed under the three areas of concentration above. At least one course must be outside the chosen area of concentration. For students following the Geology track, two courses must be 400-level geology courses..... 8-12

BISC 301	Molecular Biology of the Cell
BISC 321	Environmental Biology
BISC 324	Invertebrate Zoology
BISC 371	Introduction to Microbiology
BISC 608	Genetic Toxicology
BISC 660	Environmental Physiology
CHEM 213	Elementary Organic Chemistry
CIEG 331	Introduction to Environmental Engineering
GEO 106	Physical Geography: Land Surface Processes
GEO 152	Climate and Life
GEO 230	Humans and the Earth Ecosystem
GEO 235	Conservation of Natural Resources
GEO 236	Conservation: Global Issues
GEO 255	Applied Climatology
GEO 272	Map and Air Photo Interpretation
GEO 320	Water and Society
GEO 330	Biogeography
GEO 342	Bioclimatology
GEO 351	Urban Climatology
GEO 357	Paleoclimatology
GEO 430	Conservation Forest Ecosystems
GEO 471	Advanced Geographic Information Systems
GEO 474	Introduction to Environmental Remote Sensing
GEO 681	Remote Sensing of Environment
GEO 204	Properties of Rocks and Minerals
GEO 402	History of the Earth
GEO 403	Regional Geology of North America
GEO 407	Igneous and Metamorphic Petrology
GEO 411	Quantitative Geomorphology
GEO 412	Geological Approaches to Archaeology and History
GEO 415	General Geomorphology
GEO 421	Environmental and Applied Geology
GEO 428	Hydrogeology
GEO 431	Marine Geology
GEO 432	Recent Sedimentary Environments
GEO 434	The Geology of Coasts
GEO 446	General Geochemistry

GEO 460	Field Geology in the Western States	
MAST 482	Introduction to Ocean Sciences	
PHYS 208	Fundamentals of Physics II	
PLSC 204	Introduction to Soil Science	
POSC 350	Politics and the Environment	
MATH 241/242/243	Analytic Geometry and Calculus	12
CHEM 103/104	General Chemistry	8
PHYS 207	Fundamentals of Physics I	4
or		
PHYS 201	Introductory Physics I	
One of the following six courses:		3
MATH 302	Ordinary Differential Equations	
MATH 349	Elementary Linear Algebra	
STAT 450	Statistics for Engineering & Physical Sciences	
STAT 475	Statistics for Environmental Sciences	
STAT 656	Biostatistics	
STAT 657	Statistics for Earth Sciences	

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 127**

## GEOLOGY

The Department of Geology offers B.A. degrees in geology (including a B.A. with a concentration in paleobiology) and in earth science education. The Department offers B.S. degrees in geology and geophysics (jointly with the Physics Department), and a minor in geology. Environmental Science majors can concentrate in geology while earning a B.S. in Environmental Science.

Advanced undergraduate geology students are encouraged to undertake research, under the supervision of the faculty, in areas such as geochemistry, geophysics, igneous and metamorphic petrology, micropaleontology and paleontology, mineralogy, paleomagnetism, sedimentary petrology, stratigraphy, and structural geology. As an additional resource, the Department maintains close ties with the Delaware Geological Survey and with the College of Marine Studies.

In view of the close relationship between geology and other disciplines, interdepartmental and double majors are encouraged. Various interdisciplinary programs within the field of geology are also possible. Examples of such programs include paleobiology, geochemistry, and geophysics. Students interested in any of these programs should contact the Geology Department for information.

Telephone: (302) 831-2569

<http://www.udel.edu/geology/geology.html>

### BACHELOR OF SCIENCE DEGREE IN GEOPHYSICS

The Geology Department, jointly with the Physics Department, offers a B.S. degree in geophysics. Geophysics involves the use of seismic, gravity, magnetic, and electrical methods to study the structure and tectonic evolution of the earth. The geophysics program is designed to produce students well-grounded in both geology and physics, but specifically trained in geophysical principles and techniques.

### DEGREE: BACHELOR OF ARTS

#### MAJOR: GEOLOGY

##### CURRICULUM

##### CREDITS

Superior figures indicate year or years in which the course is normally taken, i.e., <sup>1</sup>freshman year, <sup>2</sup>sophomore year, etc

**See page 78 for University and College requirements.**

#### MAJOR REQUIREMENTS

GEO 107	General Geology I	4 <sup>1</sup>
GEO 203	Mineralogy and Crystallography	3 <sup>2</sup>
GEO 204	Properties of Rocks and Minerals	4 <sup>2</sup>

GEOL 301	Systematic and Evolutionary Paleontology	3 <sup>3</sup>
GEOL 303	Sedimentology	3 <sup>3</sup>
GEOL 304	Stratigraphy	3 <sup>3</sup>
GEOL 305	Structural Geology	3 <sup>3</sup>
GEOL 402	History of the Earth	3 <sup>4</sup>
GEOL 407	Igneous and Metamorphic Petrology	3 <sup>4</sup>
GEOL 452	Plate Tectonics and Geophysics	3 <sup>4</sup>
Three credits of field geology (taught only in the summer; see department chair for other acceptable courses):		3 <sup>3,4</sup>
GEOL 432	Recent Sedimentary Environment	
GEOL 460	Field Geology in the Western States	
CHEM 103/104	General Chemistry	8 <sup>2</sup>
PHYS 201/202	Introductory Physics	8 <sup>3</sup>
Mathematics courses through college-level trigonometry		3-4 <sup>1</sup>

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: GEOLOGY****CONCENTRATION: PALEOBIOLOGY**

CURRICULUM	CREDITS
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Superior figures indicate year or years in which the course is normally taken, i.e., <sup>1</sup>freshman year, <sup>2</sup>sophomore year, etc.

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

GEOL 107	General Geology I	4 <sup>1</sup>
GEOL 203	Mineralogy and Crystallography	3 <sup>2</sup>
GEOL 204	Properties of Rocks and Minerals	4 <sup>2</sup>
GEOL 301	Systematic and Evolutionary Paleontology	3 <sup>3</sup>
GEOL 303	Sedimentology	3 <sup>3</sup>
GEOL 304	Stratigraphy	3 <sup>3</sup>
GEOL 305	Structural Geology	3 <sup>4</sup>
GEOL 402	History of the Earth	3 <sup>4</sup>
GEOL 466	Independent Study	3 <sup>4</sup>

Three credits of field geology (taught only in the summer; see department chair for other acceptable courses):

GEOL 432	Recent Sedimentary Environment	3 <sup>3,4</sup>
GEOL 460	Field Geology in the Western States	

BISC 207/208	Introductory Biology I and II	8 <sup>1</sup>
BISC 302	General Ecology	3 <sup>3</sup>
BISC 324	Invertebrate Zoology	4 <sup>4</sup>
BISC 442	Vertebrate Morphology (recommended)	3 <sup>4</sup>
BISC 495	Evolution	3 <sup>4</sup>
STAT 201/202	Introduction to Statistics I and II	6 <sup>4</sup>
CHEM 103/104	General Chemistry	8 <sup>2</sup>
MATH 115	Pre-calculus	3 <sup>1</sup>

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirements for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF SCIENCE****MAJOR: GEOLOGY**

CURRICULUM	CREDITS
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Superior figures indicate year or years in which the course is normally taken, i.e., <sup>1</sup>freshman year, <sup>2</sup>sophomore year, etc.

**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3 <sup>1</sup>
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57)		3 <sup>1-4</sup>

**COLLEGE REQUIREMENTS**

<b>Writing:</b> (minimum grade C-)	3 <sup>3,4</sup>
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A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet (See list of courses approved for second writing requirement, page 81)

**Foreign Language:** 0-12<sup>1-4</sup>

Completion of the intermediate-level course (107 or 112 or 214) in a given language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

**Breadth Requirements** (See page 83)

A total of eighteen credits from Groups A, B and C is required with six credits in each group. The six credits from each group could be from the same area:

**Group A:** Understanding and appreciation of the creative arts and humanities

**Group B:** The study of culture and institutions over time.

**Group C:** Empirically based study of human beings and their environment

**MAJOR REQUIREMENTS**

GEOL 107	General Geology I	4 <sup>1</sup>
GEOL 203	Mineralogy and Crystallography	3 <sup>2</sup>
GEOL 204	Properties of Rocks and Minerals	4 <sup>2</sup>
GEOL 301	Systematic and Evolutionary Paleontology	3 <sup>3</sup>
GEOL 303	Sedimentology	3 <sup>3</sup>
GEOL 304	Stratigraphy	3 <sup>3</sup>
GEOL 305	Structural Geology	3 <sup>3,4</sup>
GEOL 402	History of the Earth	3 <sup>4</sup>
GEOL 407	Igneous and Metamorphic Petrology	3 <sup>4</sup>
GEOL 452	Plate Tectonics and Geophysics	3 <sup>3,4</sup>

Six credits from the following: 6<sup>3,4</sup>

(see department chair for other acceptable courses)

GEOL 460	Field Geology in the Western States	
GEOL 432	Recent Sedimentary Environments	

Geology courses (400-level)

MATH 241	Analytic Geometry and Calculus A	4 <sup>1</sup>
CHEM 103/104	General Chemistry	8 <sup>2</sup>
PHYS 201	Introductory Physics I	4 <sup>3</sup>

Two of the following: 8

MATH 242	Analytic Geometry and Calculus B	
PHYS 202	Introductory Physics II	
STAT 205	Statistical Methods	

Two of the following: 7-8<sup>2-4</sup>

BISC 207 Introductory Biology I

BISC 208 Introductory Biology II

Elective supporting science course

(see department chair for a list of approved courses)

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 125**

**REQUIREMENTS FOR THE MINOR IN GEOLOGY**

The minor consists of at least 18 credit hours in geology. The requirements are: GEOL 107; GEOL 203; at least two of the following: GEOL 204, 301, 303, 304, 305; any 400-level geology course or courses must be used to obtain the remaining credits to reach a total of 18.

**DEGREE: BACHELOR OF ARTS****MAJOR: EARTH SCIENCE EDUCATION**

CURRICULUM	CREDITS
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Superior figures indicate year or years in which the course is normally taken, i.e., <sup>1</sup>freshman year, <sup>2</sup>sophomore year, etc.

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

GEOG 101	Physical Geography: Climatic Processes	3 <sup>1-4</sup>
GEOL 105/115	General Geology and Laboratory	4 <sup>1</sup>
or		
GEOL 107	General Geology	4 <sup>1</sup>
GEOL 106/116	General Geology and Laboratory	4 <sup>1</sup>
GEOL 203	Mineralogy and Crystallography	3 <sup>2</sup>
GEOG 220	Meteorology	3 <sup>1-4</sup>
GEOG 235	Conservation of Natural Resources	3 <sup>1-4</sup>
GEOL 303	Sedimentology	3 <sup>3</sup>

GEOG 343	Climatic Geomorphology	3 <sup>1,4</sup>
or		
GEOG 255	Applied Climatology	3
PHYS 133	Introduction to Astronomy	4 <sup>1,2</sup>
PHYS 201/202	Introductory Physics I and II	8 <sup>1,2</sup>
CHEM 103	General Chemistry	4 <sup>1,2</sup>
BISC 195	Biological Evolution	3 <sup>1,4</sup>
MATH 221	Calculus I	3 <sup>1,2</sup>
MAST 200	The Oceans	3 <sup>1,4</sup>

One of the following: ..... 3<sup>3,4</sup>

(see department chair for other acceptable courses)

GEOG 432	Recent Sedimentary Environments	
GEOG 460	Field Geology in the Western States	
EDUC 201	Diversity in the Classroom	3 <sup>1,4</sup>
EDUC 304	Educational Psychology – Social Aspects	3 <sup>1,4</sup>
EDUC 305	Educational Psychology – Cognitive Aspects	3 <sup>1,4</sup>
SCEN 491	Teaching Science in Secondary Schools	4 <sup>4</sup>
EDUC 420	Reading in the Content Area	1 <sup>1,4</sup>
EDUC 400	Student Teaching	9 <sup>4</sup>

To be eligible to student teach, Earth Science Education students must have a g p a. of 2.75 in their geology, geography, marine studies, and biological science courses and an overall g p a. of 2.5. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

## DEGREE: BACHELOR OF SCIENCE

### MAJOR: GEOPHYSICS

#### CURRICULUM CREDITS

Superior figures indicate year or years in which the course is normally taken, i.e., <sup>1</sup>freshman year, <sup>2</sup>sophomore year, etc.

#### UNIVERSITY REQUIREMENTS

ENGL 110	Critical Reading and Writing (minimum grade C-)	3 <sup>1</sup>
Three credits in an approved course or courses stressing		3 <sup>1,4</sup>
multicultural, ethnic, and/or gender-related content (see p. 57)		

#### COLLEGE REQUIREMENTS

<b>Writing:</b> (minimum grade C-)	3 <sup>3,4</sup>
------------------------------------	------------------

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

#### Breadth Requirements (See page 83)

A total of eighteen credits from Groups A, B and C is required with six credits in each group. The six credits from each group could be from the same area.

Group A: Understanding and appreciation of the creative arts and humanities.

Group B: The study of culture and institutions over time.

Group C: Empirically based study of human beings and their environment.

#### MAJOR REQUIREMENTS

##### Within the Department

GEOG 107	General Geology I	4 <sup>1</sup>
GEOG 203	Mineralogy and Crystallography	3 <sup>2</sup>
GEOG 204	Properties of Rocks and Minerals	4 <sup>2</sup>
GEOG 303	Sedimentology	3 <sup>3</sup>
GEOG 305	Structural Geology	3 <sup>3</sup>
GEOG 402	History of the Earth	3 <sup>3,4</sup>
GEOG 451	Geophysical Field Methods	3 <sup>3,4</sup>
GEOG 452	Plate Tectonics and Geophysics	3 <sup>3,4</sup>
GEOG 453	Elementary Geophysics I	3 <sup>4</sup>
GEOG 454	Elementary Geophysics II	3 <sup>4</sup>
GEOG 460	Field Geology in the Western States	3 <sup>3,4</sup>

One of the following three courses: ..... 3<sup>3</sup>

GEOG 301	Systematic and Evolutionary Paleontology	
GEOG 304	Stratigraphy	
GEOG 407	Igneous and Metamorphic Petrology	

PHYS 207/208/209	Fundamentals of Physics I, II, and III	11 <sup>1,2</sup>
PHYS 208	Fundamentals of Physics II	4 <sup>2</sup>
PHYS 209	Fundamentals of Physics III	3 <sup>2</sup>
PHYS 645	Electronics for Scientists	3 <sup>3,4</sup>
PHYS 646	Instrumentation for Scientists	3 <sup>3,4</sup>

One of the following four courses: ..... 3<sup>4,3,4</sup>

PHYS 313	Physical Optics	
PHYS 603	Electricity and Magnetism I	
(If PHYS 603 is selected, PHYS 604 is strongly encouraged as an elective course.)		

PHYS 616	Kinetic Theory and Thermodynamics	
PHYS 631	Acoustics	
CISC 106	General Computer Science for Engineers	3 <sup>1,2</sup>
MATH 241/242/243	Analytic Geometry and Calculus A, B and C	12 <sup>1,2</sup>
MATH 302	Ordinary Differential Equations I	3 <sup>2</sup>
CHEM 103	General Chemistry	4 <sup>2</sup>

**CREDITS TO TOTAL A MINIMUM OF ..... 125**

## HISTORY

The History Department offers several options to its undergraduate students. In addition to the regular major, students can choose a concentration in American, European, Global, or Policy history. In conjunction with the College of Human Resources, Education and Public Policy, it offers a History Education program for those choosing careers as secondary school social studies teachers. Collaboration with the Department of Foreign Languages and Literatures has resulted in a major combining languages with the history of the regions in which those languages are spoken. Together with the Department of English, the History Department administers a History/Journalism concentration. Honors Degree options are available for all majors and concentrations. The department also maintains an advisory program for prelaw students majoring in history.

The department encourages interdepartmental or double majors that enable a student to develop competence in two areas, such as history and art history, or history and literature. A Degree with Distinction is also possible. An advisor in the History Department can provide details.

Telephone: (302) 831-2371

<http://www.udel.edu/clio/>

## DEGREE: BACHELOR OF ARTS

### MAJOR: HISTORY

#### CURRICULUM CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

HIST 101	Western Civilization to 1648	3
HIST 102	Western Civilization: 1648 to the Present	3
HIST 268	Seminar	3
History course on the history of Asia, Africa, Latin America, or the Ancient World		3
History courses at or above the 300-level		12
History seminar at the 400-level or above (excluding HIST 491 and 493 and Independent Study)		3
History course		3

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

## DEGREE: BACHELOR OF ARTS

### MAJOR: HISTORY

#### CONCENTRATION: AMERICAN HISTORY

#### CURRICULUM CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

HIST 101	Western Civilization to 1648	3
HIST 102	Western Civilization: 1648 to the Present	3
HIST 268	Seminar	3
History course on the history of Asia, Africa, Latin America, or the Ancient World		3
Seven courses in the field of emphasis. With written approval of the advisor, a student may take two of these courses outside the Department of History.		21

History seminar at the 400-level or above ..... 3  
(excluding HIST 491 and 493 and Independent Study)

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: HISTORY****CONCENTRATION: EUROPEAN HISTORY****CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

HIST 101 Western Civilization to 1648 ..... 3  
HIST 102 Western Civilization: 1648 to the Present ..... 3  
HIST 268 Seminar ..... 3

History course on the history of Asia, Africa, Latin America, or the Ancient World ..... 3

Seven courses in the field of emphasis. With written approval of the advisor, a student may take two of these courses outside the Department of History ..... 21

History seminar at the 400-level or above ..... 3  
(excluding HIST 491 and 493 and Independent Study)

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: HISTORY****CONCENTRATION: GLOBAL HISTORY****CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

HIST 101 Western Civilization to 1648 ..... 3  
HIST 102 Western Civilization: 1648 to the Present ..... 3  
HIST 268 Seminar ..... 3

History course on the history of Asia, Africa, Latin America, or the Ancient World ..... 3

Seven courses in the field of emphasis. With written approval of the advisor, a student may take two of these courses outside the Department of History ..... 21

History seminar at the 400-level or above ..... 3  
(excluding HIST 491 and 493 and Independent Study)

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: HISTORY****CONCENTRATION: POLICY HISTORY****CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

HIST 101 Western Civilization to 1648 ..... 3  
HIST 102 Western Civilization: 1648 to the Present ..... 3  
HIST 268 Seminar ..... 3

History course on the history of Asia, Africa, Latin America, or the Ancient World ..... 3

Seven courses in the field of emphasis. With written approval of the advisor, a student may take two of these courses outside the Department of History ..... 21

History seminar at the 400-level or above ..... 3  
(excluding HIST 491 and 493 and Independent Study)

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: HISTORY****CONCENTRATION: JOURNALISM****CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

HIST 101 Western Civilization to 1648 ..... 3

HIST 102 Western Civilization: 1648 to the Present ..... 3

HIST 268 Seminar ..... 3

History course on the history of Asia, Africa, Latin America, or the Ancient World ..... 3

History courses at or above the 300-level ..... 12

History seminar at the 400-level or above ..... 3  
(excluding HIST 491 and 493 and Independent Study)

History course ..... 3

ENGL 307 New Writing and Editing ..... 3

Nine credits chosen from the following courses: ..... 9

ENGL 308 Reporter's Practicum ..... 3

ENGL 309 Feature and Magazine Writing ..... 3

ENGL 310 Copy Editing and Layout ..... 3

ENGL 407 Advanced Reporting ..... 3

ENGL 408 Sports Writing ..... 3

ENGL 409 Topics in Journalism ..... 3

ENGL 466 Independent Study ..... 3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: HISTORY EDUCATION****CURRICULUM****CREDITS**

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

HIST 101 Western Civilization to 1648 ..... 3

HIST 102 Western Civilization: 1648 to the Present ..... 3

HIST 103 World History to 1648 ..... 3

HIST 104 World History to Present ..... 3

HIST 268 Seminar ..... 3

Depending on its emphasis, this seminar course can count as three of the required credits in European, American, or Third World history.

The total number of credits required in the major is 36.

History courses on the history of Europe including Ancient Greece and Rome ..... 6

History courses on the history of the United States ..... 12

History courses on the history of Asia, Africa, or Latin America ..... 6

Course work must include a three credit History seminar at or above the 400 level (excluding HIST 491, 493, and independent study) and twelve additional credits at or above the 300 level.

ECON 151 Introduction to Microeconomics ..... 3

ECON 152 Introduction to Macroeconomics ..... 3

POSC 105 The American Political System ..... 3

GEOG 120 World Regional Geography ..... 3

Additional credits as follows: ..... 15

3 credits in Economics, 6 credits in Political Science, 6 credits in Geography

EDUC 201 Diversity in the Classroom ..... 3

EDUC 304 Educational Psychology – Social Aspects ..... 3

EDUC 305 Educational Psychology – Cognitive Aspects ..... 3

HIST 491 Planning a Course of Instruction (minimum grade C-) ..... 3

HIST 493 Seminar: Problems in Teaching History and Social Sciences (Spring semester only) ..... 3

EDUC 420 Reading in the Content Areas ..... 1

EDUC 400 Student Teaching ..... 9

To be eligible to student teach, History Education students must have a g.p.a. of 3.0 in their major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**



**DEGREE: BACHELOR OF ARTS**  
**MAJOR: HISTORY/CLASSICS, FRENCH,**  
**GERMAN, RUSSIAN, SPANISH**

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

HIST 101 Western Civilization to 1648 .....	3
HIST 102 Western Civilization: 1648 to the Present .....	3
Five 300-level courses, at least two of which must deal with countries that use the chosen foreign language .....	15
History seminar at the 400-level or above (excluding HIST 491 and 493 and Independent Study) .....	3

One of the following language options:

**Classics**

Civilization: Two classical civilization (or culture) courses: e.g., FLIT 202 (Biblical and Classical Literature) and FLIT 316 (Mythology) .....	6
Literature: Either 9 credits of Latin at the 200-level or above and 3 credits of Latin at the 300-level or above, or GREK 213 and GREK 214 and 6 credits of Latin at the 200-level or above .....	12

**French**

Civilization: FREN 325 (French Civilization I), or FREN 326 (French Civilization II) .....	3
Literature: FREN 301 (Introduction to French Literature: Prose) and FREN 302 (Introduction to French Literature: Poetry and Theatre) .....	6
400-level literature course .....	3
Two courses at the 200, 300, or 400-level .....	6

**German**

Civilization: GRMN 325 (German Civilization and Culture) .....	3
Literature: GRMN 311 (Introduction to German Literature I) and GRMN 312 (Introduction to German Literature II) .....	6
400-level literature course .....	3
Two courses at the 200, 300, or 400-level .....	6

**Russian**

Civilization: RUSS 325 (Russian Civilization) .....	3
Literature: RUSS 310 (Introduction to Russian Literature I) and RUSS 312 (Introduction to Russian Literature II) .....	6
400-level literature course .....	3
Two courses at the 200, 300, or 400-level .....	6

**Spanish**

Students must choose either the Peninsular (325, 301, 302) or the Latin American (326, 303, 304) track.	
Civilization: SPAN 325 (Spanish Civilization and Culture) or SPAN 326 (Latin American Civilization and Culture) .....	3
Literature: SPAN 301 (Survey of Spanish Literature) and SPAN 302 (Survey of Spanish Literature) .....	6
or	
SPAN 303 (Survey of Spanish-American Literature) and SPAN 304 (Survey of Spanish-American Literature) .....	6
400-level literature course .....	3
Two courses at the 200, 300, or 400-level .....	6

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**HONORS BACHELOR OF ARTS:**  
**HISTORY (ALL CONCENTRATIONS); HISTORY EDUCATION;**  
**HISTORY/FOREIGN LANGUAGE**

To receive the B.A. with Honors, students must complete the following:

1. All requirements for the B.A. with a major in History, History Education, or History/Foreign Language.
2. All the University's generic requirements for the Honors Degree (see page 43 of this catalog).

For all the History degrees/concentrations, including the joint degree with a Foreign Language, at least six of the Honors credits in the major must be at the 300-level or above.

**REQUIREMENTS FOR A MINOR IN HISTORY**

A student may minor in history by taking 15 credits: two courses in any combination from HIST 101, 102 (Western civilization), 205, 206 (American history), and the remaining 9 credits at or above the 300-level.

Many history courses fulfill Group B requirements of the College of Arts and Science. HIST 327 fulfills a Group C requirement.

**INTERNATIONAL RELATIONS**

(See Political Science)

**IRISH STUDIES**

A student may minor in Irish Studies by earning 15 credits in recommended courses, all at or above the 300-level. Required courses include ENGL 351 and HIST 373. For further information, contact Professor Bonnie Scott at (302) 831-6230.

**JEWISH STUDIES**

The College of Arts and Science offers an undergraduate minor in Jewish Studies. The minor involves the study of the texts, histories, and culture of the Jewish people which developed alongside and within Western and non-Western civilization, in every place where Jewish people and Jewish culture have existed. As an academic discipline, Jewish Studies concentrates on its own inner continuities, as well as the ways it has affected, and been affected by, its host cultures.

Telephone: (302) 831-3324

<http://www.udel.edu/jsp/index.html>

**REQUIREMENTS FOR THE MINOR IN JEWISH STUDIES**

The interdisciplinary minor in Jewish Studies requires 15 credits of Jewish Studies courses (all of which are cross-listed with other departments, such as history or philosophy or English), including the following:

JWST/ENGL 349 Introduction to Jewish Sources .....	3
JWST/PHIL 208 Introduction to Jewish Philosophy .....	3

The remaining 9 credits may be distributed among the other Jewish Studies courses, including independent studies (per approval of the Program Director). Only 3 credits of Hebrew language can count towards the minor.

**JOURNALISM**

The undergraduate journalism program is centered in the Department of English but reaches beyond it. There is no separate journalism major, but there are concentrations in journalism for English and history majors. Students majoring in other areas such as political science or communication often take journalism courses to enhance their degree programs. The journalism courses—up to 15 credits not including internships—may also be used as the organizing principle for a Bachelor of Arts in Liberal Studies degree or an Interdepartmental Major. The courses are primarily practice-oriented and are aimed at preparing the interested student to be well qualified for a position in some phase of reporting, writing, or editing for newspapers, magazines, radio, or television. For details, see English and History in this catalog.

## LATIN AMERICAN STUDIES

The undergraduate major in Latin American Studies is designed to give students a comprehensive picture of Latin American history, politics, geography, anthropology, language and literature. The program is interdisciplinary and allows certain freedom in individualizing the selection of courses to meet students' interests and needs. An undergraduate minor in Latin American Studies is also available.

Many career opportunities are open to students who major in Latin American Studies. Graduates of the program can work in governmental services and other fields in which it is important to work with Latin American topics. There is also employment in research and teaching, libraries, public relations, public administration, journalism and publishing. In addition, Latin American Studies graduates will have an unusually good background for advanced study in international business or international law.

Telephone: (302) 831-0794

E-mail: [salchon@udel.edu](mailto:salchon@udel.edu)

<http://www.udel.edu/AreaStudies/latam.html>

### DEGREE: BACHELOR OF ARTS MAJOR: LATIN AMERICAN STUDIES

#### CURRICULUM

#### CREDITS

See page 78 for University and College requirements. Note: The Foreign Language College requirement must be fulfilled in Spanish. Completion of PORT 107 is also highly recommended.

#### MAJOR REQUIREMENTS

ANTH 265	High Civilizations in the Americas	3
ANTH 375	Peoples and Cultures of Modern Latin America	3
or		
ANTH 380	Peoples and Cultures of Mexico and Central America	3
GEOG 226	Geography of Latin America	3
HIST 135	Introduction to Latin American History	3
POSC 426	Latin American Political Systems	3
SPAN 326	Latin American Civilization and Culture	3
SPAN 303	Survey of Spanish-American Literature I	3
or		
SPAN 304	Survey of Spanish-American Literature II	3
One of the following seven courses:		3
ANTH 323	Prehistory of South America	
ANTH 327	Peoples of the Caribbean	
ANTH 337	South American Indians	
ANTH 338	Arts and Crafts of Native South America	
HIST 334	History of Mexico	
HIST 430	20th Century Latin American Revolutions	
HIST 477	Studies in Latin American History	
One of the following two courses:		3
POSC 431	Latin American Politics: Countries	
POSC 450	Problems in Latin American Politics	
One of the following three courses:		3
SPAN 415	Latin American Literature in its Political Context	
SPAN 430	Latin American Novel and Cinema	
SPAN 443	Mexican Literature	

#### Suggested Course:

ECON 311	Economics of Developing Countries	3
(Prerequisites: ECON 151, ECON 152)		

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken, in consultation with the student's academic advisor, to meet the minimum credit requirement for the degree.

#### Study Abroad

Latin American Studies majors should plan to attend a semester or winter session at a Latin American site.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

### REQUIREMENTS FOR A MINOR IN LATIN AMERICAN STUDIES

**Purpose.** This is an interdisciplinary program designed to provide undergraduates with an organized focus for their interests in Latin

America. The program is designed to enhance, rather than substitute for, a student's disciplinary major.

**Program Requirements.** A minimum of 18 credits is required from the following courses, selected from at least four departments.

HIST 135, 334, 430, 477

GEOG 226

SPAN 303, 304, 326, 415, 430, 441, 443

ANTH 265, 323, 327, 330, 337, 338, 375, 380

POSC 426, 431, 450

**Language Requirement.** In addition to the 18-credit minimum, students must complete SPAN 107 or demonstrate equivalent proficiency on the placement test. Equivalent competence in Portuguese will be allowed. The study of both languages is strongly encouraged.

**Study Abroad.** Latin American Studies minors should plan to attend a semester or winter session at a Latin American site.

**Substitutions** may be made for the above specified courses, with permission from the Coordinator of the Latin American Studies Program, and only so long as the same disciplinary distribution is maintained.

## LEGAL STUDIES

The minor in Legal Studies provides undergraduate students with the opportunity to explore the law from an interdisciplinary perspective within the framework of the liberal arts curriculum. The law is an essential topic in philosophic, social science, and public policy inquiry. Courses that are substantially concerned with law are available in a variety of disciplines including political science, sociology, philosophy, history, business, communication, economics, and psychology.

The minor program supplies coherence and guidance in the study of law in at least four ways. First, each Legal Studies minor is provided with an advisor who guides the student in constructing a coherent program. Second, the minor provides students with an opportunity to examine legal phenomena from a variety of discipline perspectives. Third, the program offers both a substantive introduction to law and an interdisciplinary introductory course in legal studies. Finally, it offers an interdisciplinary culmination by way of a senior seminar that requires a research paper.

This program is designed for any undergraduate student who is interested in examining the law from a variety of perspectives. Legal studies is not a "pre-law" program, and it does not offer para-legal training. It is, however, a suitable minor for those who plan to pursue professional training. For information on Pre-Law Advisement, see page 68.

In addition to offering a minor in Legal Studies, the program offers faculty seminars, lectures, and films.

Telephone: (302) 831-8041

<http://www.udel.edu/Legal.Studies/>

### REQUIREMENTS FOR A MINOR IN LEGAL STUDIES

CURRICULUM	CREDITS
POSC 380 Introduction to Law (same as LEST 380)	3
LEST 301 Introduction to Legal Studies (same as CRJU 301)	3
LEST 401 Senior Seminar	3
Three courses from the following list. At least two of these courses must be from outside the requirements of the student's major and outside his or her major department. These two courses must be chosen from two different departments.	9

#### Accounting

ACCT 350	Business Law
ACCT 351	Business Law
ACCT 352	Law and Social Issues in Business

#### Communication

COMM 345	Legal Issues of the Mass Media (same as LEST 345)
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#### Criminal Justice

CRJU 202	Problems of Criminal Judiciary
CRJU 203	Problems of Corrections

CRJU 320	Introduction to Criminal Law
CRJU 346	Psychology and the Law (same as PSYC 346)
CRJU 347	The Jury: Guilty or Not Guilty
CRJU 375	Criminal Procedure
CRJU 425	Criminal Law and Social Policy
CRJU 428	Corporate Crime (same as SOCI 428)
CRJU 450	Prisoners and the Law
CRJU 456	Lawyers and Society (same as SOCI 456)

**Economics**

ECON 306	Economic Theory of Politics (same as POSC 306)
ECON 360	Government Regulation of Business
ECON 408	Economics of Law
ECON 461	Industrial Organization and Antitrust
ECON 463	Economics of Regulation

**History**

HIST 309	U S. Business and Political Economy
HIST 376	English Legal and Constitutional History

**Philosophy**

PHIL 202	Contemporary Moral Problems
PHIL 308	Justice and Equality
PHIL 446	Philosophy of Law

**Political Science and International Relations**

POSC 306	Economic Theory of Politics (same as ECON 306)
POSC 380	Introduction to Law
POSC 402	Civil Liberties I
POSC 404	Judicial Processes
POSC 405	Constitutional Law of the United States
POSC 406	Civil Liberties II
POSC 423	Congress and Public Policy
POSC 413	Problems in American Government: Gender, Sex and Law

**Psychology**

PSYC 346	Psychology and the Law (same as CRJU 346)
PSYC 347	The Jury: Guilty or Not Guilty (taken with CRJU 347)

**Sociology**

SOCI 330	Population, Law and Society
SOCI 345	Sociology of Law
SOCI 428	Corporate Crime (same as CRJU 428)
SOCI 456	Lawyers and Society (same as CRJU 456)

**Women's Studies**

WOMS 413	Gender, Sex, and American Law (same as POSC 413)
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**LINGUISTICS**

The Department of Linguistics offers two minors at the undergraduate level: one in Linguistics and one in Cognitive Science. The department also has course templates for individualized Bachelor of Arts in Liberal Studies degrees in Pre-professional Speech Pathology, and in Cognitive and Linguistic Science. The department offers courses in Linguistics and Cognitive Science at the introductory, intermediate, and advanced levels in both applied and theoretical areas. Many of the courses fulfill the Group A, Group C, and Group D General Education Requirement in the College of Arts and Science as well as the University's Multicultural Requirement.

Telephone: (302) 831-6806

<http://www.ling.udel.edu/ling/>

**REQUIREMENTS FOR THE MINOR IN LINGUISTICS**

The minor in linguistics requires 18 credits, distributed as follows:

LING 101	Introduction to Linguistics	3
One of the following:		3
LING 407	Phonology I	
LING 409	Syntax I	
LING 477	Structure of English	
LING 491	Semantics I	
Any four additional LING courses, two of which must be at the 300-level or above		12

Special problems courses and courses other than those specified above must have approval of the Undergraduate Studies Committee of the Department of Linguistics.

**COGNITIVE SCIENCE MINOR**

Cognitive Science studies the computational and representational structure of the mind by combining linguistics, philosophy, computer science (especially artificial intelligence), and psychology. Courses for the minor in cognitive science focus on three areas: (1) broad foundational issues in linguistics, psychology, and computing; (2) more specialized issues in mental representation, computation, theoretical linguistics, and epistemology; (3) problems in cognition, data processing, language and formal representation that are related to students' particular interests.

The minor is administered through the Department of Linguistics. It requires 18 credits, distributed as follows (most of these courses have prerequisites, as listed):

**A. All of the following:** 9

CGSC 270	Introduction to Cognitive Science
LING 101	Introduction to Linguistics
PSYC 201	General Psychology

**B. One of the following:** 3

CISC 105	General Computer Science
CISC 106	General Computer Science for Engineers
CISC 181	Introduction to Computer Science (restriction: programming experience) (coreq: MATH 115, MATH 171 or MATH 241)

**C. One of the following:** 3

LING 409	Syntax I (prereq: LING 101)
LING 491	Semantics I (prereq: LING 101)
CGSC 480	Computers and the Mind
CGSC 340	Cognition (prereq: PSYC 309)

**D. One of the following:** 3

PSYC 310	Sensation & Perception (prereq: PSYC 309)
CGSC 314	Brain & Behavior
CISC 220	Data Structures (prereq: CISC 181)
CGSC 681	Artificial Intelligence (prereq: CISC 220 & 310)
PHIL 205	Logic
EDUC 462	Language Acquisition
LING 610	Syntax II (prereq: LING 409)
OR, any of the courses not chosen under C	

**No more than 3 courses may be from a single department.**

For more information, contact: Professor Barbara Landau  
Cognitive Science Program  
(302) 831-1088  
email: [blandau@udel.edu](mailto:blandau@udel.edu)

**PRE-PROFESSIONAL SPEECH PATHOLOGY AND COGNITIVE AND LINGUISTIC SCIENCE**

Students who wish to prepare for graduate or professional work in Speech Pathology and Communication Disorders may follow a course of study drawing on linguistics, speech science, psychology, neuroscience, and biology. This will include courses in acoustics, physiology, psycholinguistics, normal and abnormal development, and a variety of other scientific and clinical fields. Those wishing to study Cognitive and Linguistic Science may follow a course of study integrating language, computing, and thinking: in particular, introductory courses in linguistics, computer science, and psychology; a formal foundations course to provide the requisite mathematical underpinnings; and courses in some area of specialization, such as language development, computational modeling, or mathematical and logical foundations of cognitive science. Students interested in these areas may pursue a Bachelor of Arts in Liberal Studies degree. Templates of courses for each of these options are available from the Department. Advisors will work with students individually to design courses of study appropriate to the students' needs and the requirements of the fields.

## CONFERENCE INTERPRETATION PROGRAM

Within the Department of Linguistics, the Conference Interpretation Program occasionally offers an intensive course in simultaneous and consecutive interpretation during the summer session. Coursework includes: basic theoretical constructs, pre-interpretation exercises, consecutive note-taking and note-reading, public speaking skills, simultaneous interpretation, self-monitoring techniques, short-term memory strategies, ethics, scenario writing and role playing. Candidates must have a good working knowledge of English and at least one other language in order to enroll. Prospective students are urged to contact Professor Nancy Schweda-Nicholson of the Department of Linguistics regarding the language combinations for future seminars.

## MATHEMATICAL SCIENCES

The Department of Mathematical Sciences offers four undergraduate degree programs: the Bachelor of Science in Mathematical Sciences, the Bachelor of Science in Statistics, the Bachelor of Arts in Mathematical Sciences, and the Bachelor of Arts in Mathematics Education, which trains students for careers in secondary school mathematics education. Minors in mathematics and in statistics are also available. *The Department is currently not accepting applications for admission to the statistics major or statistics minor.*

The Department of Mathematical Sciences provides courses for others who need to use mathematics and statistics in their careers, be it engineering, science, medicine, or management. Mathematical sciences majors must also delve deeply into the structure of their subject without neglecting its applications.

Since mathematics is a highly structured discipline, careful attention must be paid to prerequisites. The successful mathematical sciences major must complete several courses in the major each year to graduate within a reasonable time frame. Thus, the Department of Mathematical Sciences carefully monitors student progress and will drop from the major any student not making satisfactory progress in the program. A normally matriculated student majoring in the Department of Mathematical Sciences is *not* making satisfactory progress if he or she: (1) has not successfully completed a required Mathematical Science course by the beginning of the third semester; or (2) has not successfully completed MATH 245 by the end of the fourth semester; or (3) has failed to successfully complete any required Mathematical Science course for two consecutive semesters. Consistent with the program requirements, "successfully complete" means to earn a grade of C- or better. A student not making satisfactory progress may petition the department to remain as a major when there are extenuating circumstances.

Departmental requirements and course descriptions are subject to continual revision. Up-to-date statements of requirements, course descriptions and departmental policies are available at the departmental office.

Telephone: (302) 831-2653

<http://www.math.udel.edu/>

## COURSES FOR OTHER MAJORS

The three-semester calculus sequence MATH 241-242-243 is the traditional basis for programs in the physical sciences and engineering. Students with a sound preparation in calculus are encouraged to enroll in MATH 242 to avoid repetition of known material. Students with advanced placement are automatically placed in MATH 242, and others should follow the advice given during freshman orientation.

The calculus sequence MATH 221-222 and finite mathematics course MATH 230 are designed for students in the biological, behavioral, management and social sciences. Trigonometry is not a prereq-

uisite for these courses. Requirements in mathematics preparation for these programs vary greatly; thus students with preparation in trigonometry, a high aptitude for mathematics, or an expectation of pursuing more quantitative aspects might seriously consider taking MATH 241-242 as an alternative to MATH 221-222.

The sequence MATH 251-252 is designed for prospective elementary school teachers and is restricted to declared majors in the appropriate programs of the College of Human Resources, Education and Public Policy.

Students who need further preparation in algebra and trigonometry prior to a 200-level course should take MATH 115 or MATH 117. MATH 114 serves to establish minimal skill levels for students not expecting to continue at the 200-level. Students seeking mathematical electives for self-enrichment may select MATH 280 if their skills are adequate for the 200-level.

Ordinarily, credit is not given for 100-level courses that follow successful completion of 200-level courses. Credit for corresponding courses from different tracks MATH 114 and 115; MATH 210 and 230; MATH 221 and 241; MATH 222 and 242; MATH 302 and MATH 341; and, MATH 349 and MATH 342 will be given only upon approval of the chair.

## DEGREE: BACHELOR OF ARTS MAJOR: MATHEMATICAL SCIENCES

### CURRICULUM

CREDITS

See page 78 for University and College requirements.

### MAJOR REQUIREMENTS

A grade of C- or better is required for major courses and related work. Students lacking preparation for MATH 242 should begin with MATH 241.

MATH 210	Discrete Mathematics I	3
MATH 242	Analytic Geometry and Calculus B	4
MATH 243	Analytic Geometry and Calculus C	4
MATH 245	An Introduction to Proof	3
MATH 302	Ordinary Differential Equations	3
MATH 349	Elementary Linear Algebra	3
STAT 300	Statistical Methods and Theory	4
Nine credits of mathematics and/or statistics at the 300 level or above. MATH 379, MATH 380, MATH 381, MATH 555, STAT 450, and STAT 555 are not applicable.		9
ENGL 312	Written Communications in Business or suitable equivalent	3

One of the following options (A, B, or C): 6-9

#### Option A

(for students with previous experience with a programming language)

CISC 181 Introduction to Computer Science

and

CISC 220 Data Structures

#### Option B

(for students with no previous experience with a programming language)

CISC 105 General Computer Science

and

CISC 181 Introduction to Computer Science

and

CISC 220 Data Structures

#### Option C

(for students with no previous experience with a programming language)

CISC 105 General Computer Science

and

CISC 120 Object Oriented Programming in C++

and

CISC 220 Data Structures

Any substitutions must be approved by the department Undergraduate Studies Committee.

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree, with at least 79 credits outside Mathematics.

CREDITS TO TOTAL A MINIMUM OF ..... 124

**HONORS BACHELOR OF ARTS: MATHEMATICS**

The recipient must complete:

1. All requirements for the Bachelor of Arts degree in Mathematics.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).

All Mathematics and Statistics courses below the 600-level in which the student takes an Honors component may be counted toward the minimum 12 hours of Honors credits in the major required for the Honors degree. All Mathematics and Statistics courses at the 600-level or higher may be counted toward the same 12 credit Honors course requirement.

**DEGREE: BACHELOR OF SCIENCE  
MAJOR: MATHEMATICAL SCIENCES**

CURRICULUM CREDITS

**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing	multicultural, ethnic, and/or gender-related content (see p. 57)	3

**COLLEGE REQUIREMENTS**

**Writing:** (minimum grade C-) 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** 0-12

Completion of the intermediate-level course (107 or 112) in a given language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination. French, Russian, or German is recommended.

**Breadth Requirements** (See page 83)

A total of twenty-one credits from Groups A, B and C is required with a minimum of six credits in each group. The six credits from each group could be from the same area.

Group A: Understanding and appreciation of the creative arts and humanities

Group B: The study of culture and institutions over time.

Group C: Empirically based study of human beings and their environment.

**MAJOR REQUIREMENTS**

A grade of C- or better is required for major courses and related work. Students lacking adequate preparation for MATH 242 should begin with 241

MATH 210	Discrete Mathematics I	3
MATH 242	Analytic Geometry and Calculus B	4
MATH 243	Analytic Geometry and Calculus C	4
MATH 245	An Introduction to Proof	3
MATH 302	Ordinary Differential Equations	3
MATH 349	Elementary Linear Algebra	3
MATH 401	Introduction to Real Analysis	3
MATH 426	Introduction to Numerical Analysis and Algorithmic Computation	3
MATH 451	Abstract Algebra I	3
STAT 300	Statistical Methods and Theory	4
Eighteen additional credits of mathematics and/or statistics at the 300 level or above. MATH 379, MATH 380, MATH 381, MATH 555, STAT 450, and STAT 555 are not applicable.		18
ENGL 312	Written Communications in Business	3
Two-semester sequence of laboratory science (Courses designed for non-majors in a discipline are not appropriate.)		8

**One of the following options (A, B, or C):** 6-9

Option A  
(for students with previous experience with a programming language)

CISC 181	Introduction to Computer Science	
and		
CISC 220	Data Structures	

Option B  
(for students with no previous experience with a programming language)

CISC 105	General Computer Science	
and		
CISC 181	Introduction to Computer Science	
and		
CISC 220	Data Structures	

Option C  
(for students with no previous experience with a programming language)

CISC 105	General Computer Science	
and		
CISC 120	Object Oriented Programming in C++	
and		
CISC 220	Data Structures	

Any substitutions must be approved by the department Undergraduate Studies Committee

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 128**

**HONORS BACHELOR OF SCIENCE: MATHEMATICS**

The recipient must complete:

1. All requirements for the Bachelor of Science degree in Mathematics.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).

All Mathematics and Statistics courses below the 600-level in which the student takes an Honors component may be counted toward the minimum 12 hours of Honors credits in the major required for the Honors degree. All Mathematics and Statistics courses at the 600-level or higher may be counted toward the same 12 credit Honors course requirement.

**DEGREE: BACHELOR OF SCIENCE  
MAJOR: STATISTICS**

The Department of Mathematical Sciences is currently not accepting applications for admission to the major in statistics.

CURRICULUM CREDITS

**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing	multicultural, ethnic, and/or gender-related content (see p. 57).	3

**COLLEGE REQUIREMENTS****Skill Requirements**

**Writing:** (minimum grade C-) 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** 0-12

Completion of the intermediate-level course (107 or 112) in a given language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

French, Russian or German is recommended.

**Breadth Requirements** (See page 83)

A total of twenty-one credits from Groups A, B and C is required with a minimum of six credits in each group. The six credits from each group could be from the same area.

Group A: Understanding and appreciation of the creative arts and humanities.

Group B: The study of culture and institutions over time.

Group C: Empirically based study of human beings and their environment.

**MAJOR REQUIREMENTS**

A grade of C- or better is required for all major courses and related work. Students lacking adequate preparation for MATH 242 should begin with MATH 241.

MATH 210	Discrete Mathematics I	3
MATH 242	Analytic Geometry and Calculus B	4
MATH 243	Analytic Geometry and Calculus C	4
MATH 245	Concepts of Analysis	3
MATH 349	Elementary Linear Algebra	3
MATH 302	Ordinary Differential Equations	3
MATH 426	Introduction to Numerical Analysis and Algorithmic Computation	3
MATH 401	Introduction to Real Analysis	3
STAT 205	Statistical Methods	4
STAT 370	Introduction to Statistical Analysis I	3
STAT 371	Introduction to Statistical Analysis II	3
STAT 418	Sampling Methods	3
STAT 420	Data Analysis and Nonparametric Statistics	3
STAT 611	Regression Analysis	3
STAT 615	Design and Analysis of Experiments	3
One of the following:		3
STAT 616	Design and Analysis of Experiments II	
STAT 617	Multivariate Methods	
STAT 618	Sampling Techniques	
ENGL 312	Written Communications in Business	3
Two-semester sequence of laboratory science		8
(Courses designed for non-majors in a discipline are not appropriate.)		

**One of the following options (A, B, or C):** 6-9

Option A (for students with previous experience with a programming language)	
CISC 181	Introduction to Computer Science
and	
CISC 220	Data Structures
Option B (for students with no previous experience with a programming language)	
CISC 105	General Computer Science
and	
CISC 181	Introduction to Computer Science
and	
CISC 220	Data Structures
Option C (for students with no previous experience with a programming language)	
CISC 105	General Computer Science
and	
CISC 120	Object Oriented Programming in C++
and	
CISC 220	Data Structures

**Area of application:** 15  
This program requires a fifteen-credit area of application outside the department. Students must meet regularly with the advisor to develop it.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF** 128

**DEGREE: BACHELOR OF ARTS****MAJOR: MATHEMATICS EDUCATION**

CURRICULUM CREDITS

**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57).		3

**COLLEGE REQUIREMENTS****Skill Requirements**

**Writing:** (minimum grade C-) 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** 0-12

Completion of the intermediate-level course (107 or 112) in a given language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement by taking an exemption examination. French, Russian or German is recommended.

**Breadth Requirements** (See page 83)

**Group A** 12

Understanding and appreciation of the creative arts and humanities. Twelve credits representing at least two areas.

**Group B** 9

The study of culture and institutions over time. Nine credits representing at least two areas.

**Group C** 9

Empirically based study of human beings and their environment. Nine credits representing at least two areas.

**Group D** 13

The study of natural phenomena through experiment and analysis. A minimum of thirteen credits representing at least two areas including a minimum of one course with an associated laboratory.

**MAJOR REQUIREMENTS**

A grade of C- or better is required for major courses and related work. Students lacking preparation for math 242 should begin with MATH 241.

MATH 210	Discrete Mathematics I	3
MATH 242	Analytic Geometry and Calculus B	4
MATH 243	Analytic Geometry and Calculus C	4
MATH 245	An Introduction to Proof	3
MATH 349	Elementary Linear Algebra	3
MATH 389	Graph Theory	3
MATH 401	Introduction to Real Analysis	3
MATH 451	Abstract Algebra I	3
MATH 518	Mathematical Models and Applications	3

or  
another Modeling course

MATH 540	Geometry	3
STAT 300	Statistical Methods and Theory	4

One of the following: 3

CISC 105	General Computer Science
CISC 106	General Computer Science for Engineering
CISC 181	Introduction to Computer Science

PHYS 207	Introductory Physics I	4
ENGL 312	Written Communications in Business	3

EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
MATH 179	Problem Solving Strategies I	1
MATH 379	Problem Solving Strategies	1
MATH 380	Approaches to Teaching Mathematics	3
MATH 381	Practicum in Secondary Mathematics	1
EDUC 420	Reading in the Content Areas	1
EDUC 400	Student Teaching	9

To be eligible to student teach, Mathematics Education students must have a g.p.a. of 2.5 in their mathematics major and an overall g.p.a. of 2.5. Remaining in the program is subject to periodic review of satisfactory progress and, to be admitted to EDDV 400 Student Teaching, students must have completed all the mathematics courses required in the secondary mathematics education program. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree, with 79 credits outside of Mathematics.

**CREDITS TO TOTAL A MINIMUM OF** 124

**HONORS BACHELOR OF ARTS: MATHEMATICS EDUCATION**

The recipient must complete:

1. All requirements for the Bachelor of Arts degree in Mathematics Education.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).

All Mathematics and Statistics courses below the 600-level in which the student takes an Honors component may be counted toward the minimum 12 hours of Honors credits in the major required for the Honors degree. All Mathematics and Statistics courses at the 600-level or higher may be counted toward the same 12 credit Honors course requirement.

### REQUIREMENTS FOR A MINOR IN MATHEMATICS

A student seeking a minor in mathematics must obtain permission from the chairperson or his designee in the Department of Mathematical Sciences.

Course requirements consist of a total of 18 credits in MATH courses offered by the Department of Mathematical Sciences, to include 9 credits above MATH 302. In order to count toward the minor, a grade of C- or better is required.

MATH 341 and MATH 351 are not considered above MATH 302 since they are comparable courses from a different track. However, MATH 342 or MATH 352 may be counted as above MATH 302, provided MATH 349 is not included in the count.

One of STAT 300, STAT 370, STAT 450, or STAT 475 may be counted toward the 18 credits in MATH courses required for the mathematics minor, but these courses cannot count toward the 9 credits above MATH 302. Courses which are cross-listed with a Mathematical Sciences MATH course may also be counted toward the minor. Courses in mathematics education (e.g., MATH 379, 380, 381) may not be counted toward the minor.

### REQUIREMENTS FOR A MINOR IN STATISTICS

*The Department of Mathematical Sciences is not currently accepting applications for the minor in Statistics.*

A student seeking a minor in statistics must obtain permission from the chairperson or his/her designee in the Department of Mathematical Sciences. Course requirements include STAT 300 or STAT 370 and a total of at least 12 credits in statistics above STAT 370. Credit toward the minor can be obtained for both STAT 300 and STAT 370, but credit toward the minor will not be given for both STAT 300 and STAT 371.

### MEDICAL HUMANITIES

The undergraduate minor in medical humanities is an organized curriculum of study with an emphasis on the relationship between various humanistic inquiries and the practice of medicine.

Telephone: (302) 831-8195

### REQUIREMENTS FOR A MINOR IN MEDICAL HUMANITIES

CSCC/PHIL 246	Philosophical Perspectives of Medicine .....	3
CSCC/ENGL 369	Literature and Medicine .....	3
CSCC/HIST 382	History of Western Medicine .....	3
CSCC 366	Independent Study in Medical Humanities .....	1

Two courses from the following: .....

CSCC/WOMS 233	Women, Biology and Medicine .....	6
CSCC/PHIL 241	Ethical & Moral Dimensions of Health Care .....	
CSCC/SOCI 242	Society and the Health Professions .....	
CSCC/SOCI 243	Society, Politics, and Health Care .....	
CSCC 271	Comparative Medical Systems .....	
CSCC/SOCI 310	Sociology of Health Care .....	
CSCC/SOCI 311	Hospitals .....	
CSCC/ENGL 368	Literature and Science .....	
CSCC/HIST 385	History of Biological Ideas .....	
CSCC/PHIL 444	Medical Ethics .....	

Students wishing to complete a minor in Medical Humanities are encouraged to enroll as soon as possible.

### MEDIEVAL STUDIES

The College of Arts and Science offers an undergraduate minor in Medieval Studies. Students interested in the Middle Ages and Medieval Studies have the opportunity to draw on the resources of a number of departments and structure individual programs of breadth and variety. Students pursuing a minor in Medieval Studies must take a minimum of 18 credits from the following courses, selected from at least three departments.

ARTH 209	Early Medieval Art (200-1000 AD)
ARTH 210	Later Medieval Art (1000-1400 AD)
ARTH 213	Art of the Northern Renaissance
ARTH 217	Early Renaissance Art
ARTH 220	Italian Renaissance Architecture
ARTH 406/606	Seminar in Medieval Art
ARTH 408/608	Seminar in Northern Renaissance Art
ARTH 413	Seminar in Italian Renaissance Art
CMLT 320	Varying Authors and Genres (on medieval topics)
CMLT 321	Medieval Literature and Culture
ENGL 321	Medieval Literature and Culture
ENGL 322	Chaucer
FLLT 320	Varying Authors and Genres (on medieval topics)
FREN 423/623	French Medieval Literature
HIST 241	History of Christianity to 1300
HIST 245	Medieval Kings and Queens
HIST 342	Barbarian Europe
HIST 343	Medieval Europe 1050-1350
HIST 344	Renaissance Europe
HIST 471/671	Seminar in Medieval History
MUSC 311	Music History: 400 through 1600
PHIL 302	Medieval Philosophy
SPAN 435/635	Spanish Medieval Literature

Substitutions may be arranged with the permission of the faculty coordinator, provided that the required disciplinary distribution is maintained.

Telephone: (302) 831-3657

### MILITARY SCIENCE-ARMY ROTC

The mission of the Military Science – Army ROTC program for undergraduates is to produce leaders of character to serve in the nation's defense. The cornerstone of the leadership program is developing self-confidence, teamwork, responsibility, professional ethics, and the ability to "take charge."

Students at the University of Delaware can earn a commission as a Second Lieutenant in the U.S. Army upon completion of the military science program and a baccalaureate degree. The normal four-year ROTC program requires the completion of eight one-semester courses, totaling 12 credit hours, and successful completion of a five-week leadership camp during the summer prior to the senior year.

#### ROTC Program

The ROTC program consists of two major subsets – the Basic Course and the Advanced Course. Both courses are straightforward rather than conceptual and tend to be small (25 or less) with much personal interaction between the cadre and the students.

**Basic Course** – for freshmen and sophomores. A series of four 1-credit classes that are open to all students with **no military obligation**. Student instruction includes basic leadership skills, orientation to the US Army, time management and other academic skills, decision making, national security policy, and adventure training opportunities (rappelling, skiing, land navigation, etc.).



Faculty and the advanced course cadets form support groups and act as mentors to the basic course students, providing assistance and a positive environment. Students enrolled in the basic course can compete for 2- and 3-year scholarships that will pay full tuition/fees and provide stipends.

While the Army may not be for everyone, and many of the Basic Course students decide not to continue in the Advanced program, they all unequivocally state that the ROTC Basic Course instruction provided them with excellent life skills, abilities, and confidence.

**Advanced Course** – for juniors and seniors leading to a commission as a Second Lieutenant. This series of four 2-credit classes involves advanced practical leadership and military skills training, including a five-week summer training camp at Fort Lewis in the State of Washington. Students are paid and all travel, medical needs, lodging, and meals are provided while attending Advanced Camp.

No military obligation is incurred until the beginning of this phase. Once the student satisfactorily completes all ROTC requirements and graduates from the University, he/she receives a commission in the US Army (Active Duty or Reserve status).

### Army ROTC Benefits

Four, three, and two-year scholarships are awarded to deserving ROTC students each year. Scholarships provide for **total** tuition costs (in- or out-of-state rates), up to \$16,000 per year, plus a \$450 book allowance and a \$1500 stipend annually. All these benefits may be combined with other scholarship benefits. The Military Sciences Department has additional scholarship incentives worth over \$60,000 to award to sophomore through senior cadets for academic excellence. Typically, 80% of all UD ROTC students are on some type of scholarship incentive.

Many of the graduating cadets elect to go Active Duty to put their ROTC leadership training into practice. The annual salary for a new Second Lieutenant approaches \$30,000.

For those cadets who request and receive Reserve Forces duty, many receive better civilian jobs (increased pay and responsibility) because of the practical leadership training and experience they gained in the ROTC program.

All ROTC graduates serve in some capacity for up to eight years. This may be fulfilled by serving three or four years of active duty service, followed by service in the Army Reserve (USAR), the Army National Guard (ARNG), or in the Individual Ready Reserve (IRR), or by serving eight years in the Reserves or National Guard.

Most UD degree programs accept all 12 military science credits toward graduation. Exceptions are those in the College of Engineering and in the Departments of Medical Technology, Nursing, and Nutrition and Dietetics, each of which accepts 4 credits.

Telephone: (302) 831-8213

<http://www.udel.edu/armyrotc/>

## MUSIC

The curricula for undergraduate students majoring in music lead to the degrees Bachelor of Music and Bachelor of Art. The programs in the degree Bachelor of Music are directed to those who intend to become professional musicians. They offer opportunities to major in Music Education, Theory-Composition, or Applied Music (band or orchestral instruments, piano, classical guitar, and voice). The degree Bachelor of Arts offers the opportunity for professional study in music within a liberal arts context. All programs in music provide effective preparation for graduate study.

A minor in music is available in applied music, musical studies, jazz studies or music management studies.

Entering majors are expected to demonstrate a high level of musical achievement and aptitude. Placement auditions and musicality tests for those students who wish to enter in the fall semester

should be completed by June 1 of the preceding spring and must be completed before acceptance is granted. *Acceptance to the University does not indicate acceptance as a music major.* Students who transfer from accredited colleges are placed in appropriate levels of music theory, literature, and applied music according to the results of tests given at the time of transfer.

Part-time music majors must have the permission of the department chair to enroll for private study.

Credit for large ensembles, as required by various curricula, is given only for participation during the fall and spring semesters. The Department of Music requires the successful completion of a Sophomore Review before continuation as a music major. Detailed information about these and other aspects of curricular policy are published in the Department's *Student Handbook*, available online at <http://www.udel.edu/music/students/reg/stdhndbk.html>.

For the general University undergraduate, the department offers courses in the fundamentals of music, music literature, and class study of voice, organ and piano. All courses in the department are available to any University student who meets course and department prerequisites. Music courses may be taken as partial fulfillment of breadth requirements in the College of Arts and Science. Private study is also available to freshmen in the University Honors Program and to other non-majors, on a space-available basis, through the Music Merit Program. Auditions for these programs are held during the first week of the academic year by arrangement with the department office. A variety of performing organizations are available to all University students: marching band, wind and jazz ensembles, choral groups, the early music ensemble, gamelan, opera workshop, steel band, and various chamber ensembles.

The department is a leader in the development and implementation of instructional technology. It is an accredited institutional member of the National Association of Schools of Music.

Telephone: (302) 831-2577

<http://www.udel.edu/music/>

### DEGREE: BACHELOR OF ARTS MAJOR: MUSIC

#### CURRICULUM

CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

No more than 45 credits of Music courses may count toward the degree.

#### Applied Music

MUSC 100	Recital Attendance (four semesters required)	0
MUSC 161	Private Study	2
MUSC 162	Private Study	2
MUSC 175	Class Piano: Elementary I	1
MUSC 261	Private Study	2
MUSC 262	Private Study	2

#### Theory

MUSC 185/186	Ear Training and Sight Singing I and II	4
MUSC 195/196	Harmony I and II	6
MUSC 285/286	Advanced Ear Training and Sight Singing I and II	4
MUSC 295/296	Advanced Harmony I and II	6

#### Ensemble

Four Semesters	4
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Students must consult with the Department for appropriate ensemble placement. Students must be enrolled in an appropriate ensemble during all semesters in which they are enrolled in Private Study.

#### Literature

MUSC 211	Introduction to Music History	3
MUSC 311	Music History: 400-1600	3
MUSC 312	Music History: 1600-1827	3
MUSC 313	Music History: 1825 to the Present	3

#### ELECTIVES

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**



**DEGREE: BACHELOR OF MUSIC****MAJOR: APPLIED MUSIC-INSTRUMENTAL  
CONCENTRATION: PRINCIPAL INSTRUMENTS**

The concentration designates the student's principal instrument. A list of instrumental options can be found in the chart on page vi at the front of this catalog, or can be obtained from the Department or the College of Arts and Science Advisement Center.

**CURRICULUM** CREDITS**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing	multicultural, ethnic, and/or gender-related content (see p. 57).	3

**COLLEGE REQUIREMENTS**

<b>Writing:</b> (minimum grade C-)	3
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A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

<b>Mathematics:</b> One of the following	0-4
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MATH 113	Contemporary Mathematics (designed for students who do not intend to continue the study of mathematics)	
MATH 114	College Mathematics and Statistics (designed for students who do not intend to continue the study of mathematics)	
MATH 115	Pre-Calculus (designed for students who intend to continue the study of mathematics)	
MATH 221	Calculus I	
MATH 241	Analytic Geometry and Calculus A	
Successful performance on the college proficiency exam (0 credits awarded)		
English literature course (200-level – Group A or B)		3
HIST 101	Western Civilization to 1648	3
HIST 102	Western Civilization: 1648 to the Present	3

**Foreign Language**

Two semesters of the same modern foreign language	8
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**Breadth Requirements** (See page 83)

Group A	6
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Understanding and appreciation of the creative arts and humanities. (This requirement is satisfied by MUSC 195 and 196.)

Group B	15
---------	----

The study of culture and institutions over time. Fifteen credits representing at least two areas. (This requirement is satisfied by MUSC 311, 312, 313, HIST 101, and 102.)

Group C	9
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Empirically based study of human beings and their environment. Nine credits representing at least two areas.

Group D	6
---------	---

The study of natural phenomena through experiment and analysis.

**MAJOR REQUIREMENTS****Applied Music**

MUSC 100	Recital Attendance (six semesters required)	0
MUSC 161	Private Study	4
MUSC 162	Private Study	4
MUSC 261	Private Study	4
MUSC 262	Private Study	4
MUSC 361	Private Study	4
MUSC 362	Private Study	4
MUSC 461	Private Study	4
MUSC 462	Private Study	4
MUSC 175/176	Class Piano: Elementary I and II	2
MUSC 301	Junior Recital	0
MUSC 401	Senior Recital	0

**Theory**

MUSC 185/186	Ear Training and Sight Singing I and II	4
MUSC 195/196	Harmony I and II	6
MUSC 285/286	Advanced Ear Training and Sight Singing I and II	4
MUSC 295/296	Advanced Harmony I and II	6
MUSC Theory courses		4-6

**Ensemble**

Twelve credits selected from the following:	12
MUSC 113 Marching Band, MUSC 114 Symphonic Band, MUSC 115 Wind Ensemble, MUSC 116 Jazz Ensemble, MUSC 117 University	

Orchestra, MUSC 118 Percussion Ensemble, and MUSC 321 Ensemble. (All Ensembles may be repeated.)

Guitarists must complete the following:

MUSC 321	Ensemble: Guitar	8
Two semesters of any departmental ensemble		2

**Literature**

MUSC 211	Introduction to Music History	3
MUSC 311	Music History: 400-1600	3
MUSC 312	Music History: 1600-1827	3
MUSC 313	Music History: 1825 to the Present	3
Music Elective		3

**Music Electives**

Excludes private study on primary instrument	7-9
May include two credits of ensemble	

**CREDITS TO TOTAL A MINIMUM OF ..... 130**

**DEGREE: BACHELOR OF MUSIC****MAJOR: APPLIED MUSIC-PIANO****CURRICULUM** CREDITS**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing	multicultural, ethnic, and/or gender-related content (see p. 57).	3

**COLLEGE REQUIREMENTS**

<b>Writing:</b> (minimum grade C-)	3
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A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

<b>Mathematics:</b> One of the following	0-4
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MATH 113	Contemporary Mathematics (designed for students who do not intend to continue the study of mathematics)	
MATH 114	College Mathematics and Statistics (designed for students who do not intend to continue the study of mathematics)	
MATH 115	Pre-Calculus (designed for students who intend to continue the study of mathematics)	
MATH 221	Calculus I	
MATH 241	Analytic Geometry and Calculus A	
Successful performance on the college proficiency exam (0 credits awarded)		
English literature course (200-level – Group A or B)		3
HIST 101	Western Civilization to 1648	3
HIST 102	Western Civilization: 1648 to the Present	3

**Foreign Language**

Two semesters of the same modern foreign language	8
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**Breadth Requirements** (See page 83)

Group A	6
---------	---

Understanding and appreciation of the creative arts and humanities. (This requirement is satisfied by MUSC 195 and 196.)

Group B	15
---------	----

The study of culture and institutions over time. Fifteen credits representing at least two areas. (This requirement is satisfied by MUSC 311, 312, 313, HIST 101, and 102.)

Group C	9
---------	---

Empirically based study of human beings and their environment. Nine credits representing at least two areas.

Group D	6
---------	---

The study of natural phenomena through experiment and analysis.

**MAJOR REQUIREMENTS****Applied Music**

MUSC 100	Recital Attendance (six semesters required)	0
MUSC 161	Private Study	4
MUSC 162	Private Study	4
MUSC 261	Private Study	4
MUSC 262	Private Study	4
MUSC 361	Private Study	4
MUSC 362	Private Study	4
MUSC 461	Private Study	4
MUSC 462	Private Study	4

MUSC 301	Junior Recital	0
MUSC 401	Senior Recital	0

**Theory**

MUSC 185/186	Ear Training and Sight Singing I and II	4
MUSC 285/286	Advanced Ear Training and Sight Singing I and II	4
MUSC 195/196	Harmony I and II	6
MUSC 295/296	Advanced Harmony I and II	6
MUSC 393/394	Keyboard Harmony	4
MUSC	Theory courses	4-6

**Ensemble**

Two semesters of any departmental ensemble		2
MUSC 241	Accompanying Chamber Music: Piano	1
MUSC 242	Accompanying Chamber Music: Piano	1
MUSC 341	Accompanying Chamber Music: Piano	1
MUSC 342	Accompanying Chamber Music: Piano	1
MUSC 441	Accompanying Chamber Music: Piano	1
MUSC 442	Accompanying Chamber Music: Piano	1

**Literature**

MUSC 211	Introduction to Music History	3
MUSC 311	Music History: 400-1600	3
MUSC 312	Music History: 1600-1827	3
MUSC 313	Music History: 1825 to the Present	3
MUSC 363	Keyboard Literature I	3
MUSC 364	Keyboard Literature II	3
MUSC	Music Literature course	3

**Music Electives**

Excludes private study on primary instrument.	6
May include two credits of ensemble.	

**CREDITS TO TOTAL A MINIMUM OF ..... 133**

**DEGREE: BACHELOR OF MUSIC**  
**MAJOR: APPLIED MUSIC-VOICE**

CURRICULUM	CREDITS
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**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing		3
multicultural, ethnic, and/or gender-related content (see p. 57).		

**COLLEGE REQUIREMENTS**

<b>Writing:</b> (minimum grade C-)	3
------------------------------------	---

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

<b>Mathematics:</b> One of the following	0-4
--	-----

MATH 113	Contemporary Mathematics	
(designed for students who do not intend to continue the study of mathematics)		
MATH 114	College Mathematics and Statistics	
(designed for students who do not intend to continue the study of mathematics)		
MATH 115	Pre-Calculus	
(designed for students who intend to continue the study of mathematics)		
MATH 221	Calculus I	
MATH 241	Analytic Geometry and Calculus A	
Successful performance on the college proficiency exam (0 credits awarded)		
HIST 102	Western Civilization: 1648 to the Present	3
Languages courses (French, German and Italian)	24	
THEA 226	Acting I	3

**Breadth Requirements** (See page 83)

Group A	6
Understanding and appreciation of the creative arts and humanities	
(This requirement is satisfied by MUSC 195 and 196)	
Group B	12
The study of culture and institutions over time. Twelve credits representing at least two areas. (This requirement is satisfied by MUSC 311, 312, 313 and HIST 102.)	
Group C	6
Empirically based study of human beings and their environment. Six credits representing at least two areas.	
Group D	3
The study of natural phenomena through experiment and analysis.	

**MAJOR REQUIREMENTS****Applied Music**

MUSC 100	Recital Attendance (six semesters required)	0
MUSC 161	Private Study	4
MUSC 162	Private Study	4
MUSC 261	Private Study	4
MUSC 262	Private Study	4
MUSC 361	Private Study	4
MUSC 362	Private Study	4
MUSC 461	Private Study	4
MUSC 462	Private Study	4
MUSC 175	Class Piano: Elementary I	1
MUSC 176	Class Piano: Elementary II	1
MUSC 275	Class Piano: Intermediate I	1
MUSC 276	Class Piano: Intermediate II	1
MUSC 301	Junior Recital	0
MUSC 401	Senior Recital	0

**Theory**

MUSC 185/186	Ear Training and Sight Singing I and II	4
MUSC 285/286	Advanced Ear Training and Sight Singing I and II	4
MUSC 195/196	Harmony I and II	6
MUSC 295/296	Advanced Harmony I and II	6

<b>Ensemble:</b> One of the following (any 8 semesters)	8
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MUSC 108	University Singers
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or

MUSC 109	Choral Union
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or

MUSC 110	Choral
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**Literature**

MUSC 211	Introduction to Music History	3
MUSC 311	Music History: 400-1600	3
MUSC 312	Music History: 1600-1827	3
MUSC 313	Music History: 1825 to the Present	3

**Related Music Studies**

MUSC 171	Diction: English and Italian	1
MUSC 271	Diction: German	1
MUSC 272	Diction: French	1
MUSC 489	Opera Workshop	1

**Music Electives**

Nine credits from the following: (including four credits from MUSC 327, 427 and/or 428)	9
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MUSC 103	Introduction to Opera
MUSC 104	Introduction to Opera II
MUSC 327	German Lieder
MUSC 335	Basic Conducting
MUSC 395	Form Analysis
MUSC 397	Contemporary Harmony
MUSC 427	French Art Song
MUSC 428	Twentieth-Century Art Song
MUSC 480	Vocal Pedagogy

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 134**

**DEGREE: BACHELOR OF MUSIC**  
**MAJOR: MUSIC EDUCATION-INSTRUMENTAL**  
**CONCENTRATION: PRINCIPAL INSTRUMENT**

The concentration designates the student's principal instrument. A list of instrumental options can be found in the chart on page vi at the front of this catalog, or can be obtained from the Department or the College of Arts and Science Advisement Center.

CURRICULUM	CREDITS
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**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing		3
multicultural, ethnic, and/or gender-related content (see p. 57).		

**COLLEGE REQUIREMENTS****Skill Requirements**

<b>Writing:</b> (minimum grade C-)	3
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A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course

must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Mathematics:** One of the following ..... 0-4

MATH 113 Contemporary Mathematics  
(designed for students who do not intend to continue the study of mathematics)

MATH 114 College Mathematics and Statistics  
(designed for students who do not intend to continue the study of mathematics)

MATH 115 Pre-Calculus  
(designed for students who intend to continue the study of mathematics)

MATH 221 Calculus I  
MATH 241 Analytic Geometry and Calculus A

Successful performance on the college proficiency exam (0 credits awarded)

**Breadth Requirements** (See page 83)

Art or Art History course, to be selected from Group A or B ..... 3

Group A ..... 9

Understanding and appreciation of the creative arts and humanities.

Nine credits representing at least two departments. (This requirement is partially satisfied by MUSC 195 and 196.)

Group B ..... 9

The study of culture and institutions over time (MUSC 311, 312, and 313 count toward completion of this requirement.)

Group C ..... 9

Empirically based study of human beings and their environment. Nine credits representing at least two areas.

Group D ..... 4

The study of natural phenomena through experiment and analysis. One science course with an associated laboratory.

## MAJOR REQUIREMENTS

### Applied Music

MUSC 100 Recital Attendance (six semesters required) ..... 0

MUSC 161 Private Study ..... 2

MUSC 162 Private Study ..... 2

MUSC 261 Private Study ..... 2

MUSC 262 Private Study ..... 2

MUSC 361 Private Study ..... 2

MUSC 362 Private Study ..... 2

MUSC 461 Private Study ..... 2

MUSC 175 Class Piano: Elementary I ..... 1

MUSC 176 Class Piano: Elementary II ..... 1

MUSC 174 Class Voice: Beginning ..... 1

MUSC 301 Junior Recital ..... 0

### Theory

MUSC 185/186 Ear Training and Sight Singing I and II ..... 4

MUSC 285/286 Advanced Ear Training and Sight Singing I and II ..... 4

MUSC 195/196 Harmony I and II ..... 6

MUSC 295/296 Advanced Harmony I and II ..... 6

MUSC 331 Orchestration ..... 2

### Ensemble

MUSC 113 Marching Band ..... 3

An additional four credits from MUSC 113, MUSC 114, MUSC 115 ..... 4

### Literature

MUSC 211 Introduction to Music History ..... 3

MUSC 311 Music History: 400-1600 ..... 3

MUSC 312 Music History: 1600-1827 ..... 3

MUSC 313 Music History: 1825 to the Present ..... 3

### Secondary Instruments

MUSC 214 Stringed Instruments Class ..... 1

MUSC 215 High Brass Instruments Class ..... 1

MUSC 216 Low Brass Instruments Class ..... 1

MUSC 217/218 Woodwind Instruments Class I and II ..... 2

MUSC 219 Percussion Instruments ..... 1

### Music Methods

MUSC 287 Music Technology ..... 3

MUSC 335 Basic Conducting ..... 2

MUED 279 Practicum in Music Education ..... 3

MUED 337 Instrumental Conducting ..... 2

MUED 379 Music in the Elementary and Junior High (or Middle) School ..... 3

MUED 479 Secondary Music Materials and Approaches ..... 3

### Music Electives

Six music electives excluding ensemble and private study on ..... 6  
primary instrument

## Professional Studies

EDUC 201 Diversity in the Classroom ..... 3

EDUC 304 Educational Psychology – Social Aspects ..... 3

EDUC 305 Educational Psychology – Cognitive Aspects ..... 3

EDUC 400 Student Teaching ..... 9

The Music Education program requires a certain minimum G.P.A. for enrollment in EDDV 400, Student Teaching, a course required for the degree. The teacher education program advisor (see list on p. 176) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

**CREDITS TO TOTAL A MINIMUM OF ..... 129**

## DEGREE: BACHELOR OF MUSIC

### MAJOR: MUSIC EDUCATION—GENERAL/CHORAL

### CONCENTRATION: PIANO

#### CURRICULUM

CREDITS

#### UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-) ..... 3

Three credits in an approved course or courses stressing ..... 3  
multicultural, ethnic, and/or gender-related content (see p. 57).

#### COLLEGE REQUIREMENTS

**Writing:** (minimum grade C-) ..... 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Mathematics:** One of the following ..... 0-4

MATH 113 Contemporary Mathematics

(designed for students who do not intend to continue the study of mathematics)

MATH 114 College Mathematics and Statistics

(designed for students who do not intend to continue the study of mathematics)

MATH 115 Pre-Calculus

(designed for students who intend to continue the study of mathematics)

MATH 221 Calculus I

MATH 241 Analytic Geometry and Calculus A

Successful performance on the college proficiency exam (0 credits awarded)

**Breadth Requirements** (See page 83)

Art or Art History course, to be selected from Group A or B ..... 3

Group A ..... 9

Understanding and appreciation of the creative arts and humanities

Nine credits representing at least two areas. (This requirement is partially satisfied by MUSC 195 and 196.)

Group B ..... 9

The study of culture and institutions over time (MUSC 311, 312, and 313 count toward completion of this requirement.)

Group C ..... 9

Empirically based study of human beings and their environment. Nine credits representing at least two areas.

Group D ..... 4

The study of natural phenomena through experiment and analysis. One science course with an associated laboratory.

## MAJOR REQUIREMENTS

### Applied Music

MUSC 100 Recital Attendance (six semesters required) ..... 0

MUSC 161 Private Study (piano) ..... 2

MUSC 162 Private Study (piano) ..... 2

MUSC 261 Private Study (piano) ..... 2

MUSC 262 Private Study (piano) ..... 2

MUSC 361 Private Study (piano) ..... 2

MUSC 362 Private Study (piano) ..... 2

MUSC 461 Private Study (piano) ..... 2

MUSC 161 Private Study (voice) ..... 1

MUSC 162 Private Study (voice) ..... 1

MUSC 261 Private Study (voice) ..... 1

MUSC 262 Private Study (voice) ..... 1

MUSC 480 Vocal Pedagogy ..... 3

MUSC 171 Diction: English and Italian ..... 1

MUSC 271 Diction: German ..... 1

MUSC 272 Diction: French ..... 1

MUSC 301 Junior Recital ..... 0

**Theory**

MUSC 185/186	Ear Training and Sight Singing I and II	4
MUSC 285/286	Advanced Ear Training and Sight Singing I and II	4
MUSC 195/196	Harmony I and II	6
MUSC 295/296	Advanced Harmony I and II	6
MUSC 397	Contemporary Harmony	3

**Ensemble:** One of the following (any 7 semesters) 7

MUSC 108 University Singers

or

MUSC 109 Choral Union

or

MUSC 110 Choral

**Literature**

MUSC 211	Introduction to Music History	3
MUSC 311	Music History: 400-1600	3
MUSC 312	Music History: 1600-1827	3
MUSC 313	Music History: 1825 to the Present	3
MUSC 328	Choral Literature	2

**Secondary Instruments**

MUSC 214 Stringed Instruments Class 1

MUSC 215 High Brass Instruments Class 1

or

MUSC 217 Woodwind Instruments Class I

**Music Methods**

MUSC 287	Music Technology	3
MUSC 335	Basic Conducting	2
MUED 279	Practicum in Music Education	3
MUED 336	Choral Conducting	2
MUED 379	Music in the Elementary and Junior High (or Middle) School	3
MUED 479	Secondary Music Materials and Approaches	3

**Music Electives**

Three credits of music electives excluding ensemble and private study on primary instrument. (MUSC 407 recommended) 3

**Professional Studies**

EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
EDUC 400	Student Teaching	9

To be eligible to student teach, Music Education students must have a g.p.a. of 2.75 in their music major and an overall g.p.a. of 2.5. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 133****DEGREE: BACHELOR OF MUSIC****MAJOR: MUSIC EDUCATION—GENERAL/CHORAL****CONCENTRATION: VOICE****CURRICULUM CREDITS****UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing		3
multicultural, ethnic, and/or gender-related content (see p. 57).		

**COLLEGE REQUIREMENTS**

**Writing:** (minimum grade C-) 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Mathematics:** One of the following 0-4

MATH 113 Contemporary Mathematics

(designed for students who do not intend to continue the study of mathematics)

MATH 114 College Mathematics and Statistics

(designed for students who do not intend to continue the study of mathematics)

MATH 115 Pre-Calculus

(designed for students who intend to continue the study of mathematics)

MATH 221 Calculus I

MATH 241 Analytic Geometry and Calculus A

Successful performance on the college proficiency exam (0 credits awarded)

**Breadth Requirements** (See page 83)

Art or Art History course, to be selected from Group A or B 3

**Group A** 9

Understanding and appreciation of the creative arts and humanities.

Nine credits representing at least two areas. (This requirement is partially satisfied by MUSC 195 and 196.)

**Group B** 9

The study of culture and institutions over time. (MUSC 311, 312, and 313 count toward completion of this requirement.)

**Group C** 9

Empirically based study of human beings and their environment. Nine credits representing at least two areas.

**Group D** 4

The study of natural phenomena through experiment and analysis. One science course with an associated laboratory.

**MAJOR REQUIREMENTS****Applied Music**

MUSC 100	Recital Attendance (six semesters required)	0
MUSC 161	Private Study	2
MUSC 162	Private Study	2
MUSC 261	Private Study	2
MUSC 262	Private Study	2
MUSC 361	Private Study	2
MUSC 362	Private Study	2
MUSC 461	Private Study	2
MUSC 175	Class Piano: Elementary I	1
MUSC 176	Class Piano: Elementary II	1
MUSC 275	Class Piano: Intermediate I	1
MUSC 276	Class Piano: Intermediate II	1
MUSC 171	Diction: English and Italian	1
MUSC 271	Diction: German	1
MUSC 272	Diction: French	1
MUSC 480	Vocal Pedagogy	3
MUSC 301	Junior Recital	0

**Theory**

MUSC 185/186	Ear Training and Sight Singing I and II	4
MUSC 285/286	Advanced Ear Training and Sight Singing I and II	4
MUSC 195/196	Harmony I and II	6
MUSC 295/296	Advanced Harmony I and II	6
MUSC 397	Contemporary Harmony	3

**Ensemble:** One of the following (any 7 semesters) 7

MUSC 108 University Singers

or

MUSC 109 Choral Union

or

MUSC 110 Choral

**Literature**

MUSC 211	Introduction to Music History	3
MUSC 311	Music History: 400-1600	3
MUSC 312	Music History: 1600-1827	3
MUSC 313	Music History: 1825 to the Present	3
MUSC 328	Choral Literature	2

**Secondary Instruments**

MUSC 214 Stringed Instruments Class 1

MUSC 215 High Brass Instruments Class 1

or

MUSC 217 Woodwind Instruments Class I 1

**Music Methods**

MUSC 287	Music Technology	3
MUSC 335	Basic Conducting	2
MUED 279	Practicum in Music Education	3
MUED 336	Choral Conducting	2
MUED 379	Music in the Elementary and Junior High (or Middle) School	3
MUED 479	Secondary Music Materials and Approaches	3

**Music Electives**

Three credits of music electives excluding ensemble and private study on primary instrument (MUSC 407 recommended) 3

**Professional Studies**

EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
EDUC 400	Student Teaching	9

The Music Education program requires a certain minimum G.P.A. for enrollment in EDDV 400, Student Teaching, a course required for the

degree The teacher education program advisor (see list on p. 176) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

### CREDITS TO TOTAL A MINIMUM OF ..... 133

#### DEGREE: BACHELOR OF MUSIC MAJOR: THEORY/COMPOSITION CONCENTRATIONS: THEORY/COMPOSITION

##### CURRICULUM CREDITS

##### UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57)	3

##### COLLEGE REQUIREMENTS

##### Writing: (minimum grade C-) ..... 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

##### Mathematics: One of the following ..... 0-4

MATH 113 Contemporary Mathematics (designed for students who do not intend to continue the study of mathematics)	
MATH 114 College Mathematics and Statistics (designed for students who do not intend to continue the study of mathematics)	
MATH 115 Pre-Calculus (designed for students who intend to continue the study of mathematics)	
MATH 221 Calculus I	
MATH 241 Analytic Geometry and Calculus A	
Successful performance on the college proficiency exam (0 credits awarded)	

##### Modern Languages and History

Twelve credits in one of the following: French, German or Italian ..... 12

HIST 101 Western Civilization to 1648	3
HIST 102 Western Civilization 1648 to the Present	3

##### Breadth Requirements (See page 83)

Two 200-level or higher English literature courses selected from Group A or B ..... 6

Group A ..... 6

Understanding and appreciation of the creative arts and humanities  
(This requirement is satisfied by MUSC 195 and 196)

Group B ..... 15

The study of culture and institutions over time. Fifteen credits representing at least two areas. (This requirement is satisfied by MUSC 311, 312, 313, HIST 101, and 102.)

Group C ..... 9

Empirically based study of human beings and their environment. Nine credits representing at least two areas.

Group D ..... 9

The study of natural phenomena through experiment and analysis. Nine credits in at least two areas.

##### MAJOR REQUIREMENTS

##### Applied Music

MUSC 100 Recital Attendance (six semesters required)	0
MUSC 175/176 Class Piano: Elementary I and II	2
MUSC 275/276 Class Piano: Intermediate I and II	2

##### Secondary Instruments and Conducting

MUSC 214 Stringed Instruments Class	1
MUSC 215 High Brass Instruments Class	1
MUSC 217 Woodwind Instruments Class I	1
MUSC 219 Percussion Instruments	1
MUSC 335 Basic Conducting	2

##### Theory

MUSC 185/186 Ear Training and Sight Singing I and II	4
MUSC 285/286 Advanced Ear Training and Sight Singing I and II	4
MUSC 195/196 Harmony I and II	6
MUSC 295/296 Advanced Harmony I and II	6
MUSC 287 Music Technology	3
MUSC 331 Orchestration	2
MUSC 392 Contrapuntal Writing	2

MUSC 393/394 Keyboard Harmony I and II	4
MUSC 395 Form Analysis	3
MUSC 397 Contemporary Harmony	3

##### One of the following concentrations (Theory or Composition): ..... 12

##### Theory Concentration

MUSC 421 Special Projects in Music Theory	
MUSC 485 Pedagogy of Theory	
MUSC 420 Advanced Composition (two semesters)	

or

MUSC 420 Advanced Composition (one semester) and MUSC Theory, literature or applied music elective	
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##### Composition Concentration

MUSC 485 Pedagogy of Theory	
MUSC 420 Advanced Composition (three semesters required)	

##### Literature

MUSC 211 Introduction to Music History	3
MUSC 311 Music History: 400-1600	3
MUSC 312 Music History: 1600-1827	3
MUSC 313 Music History: 1825 to the Present	3
MUSC 407 Twentieth-Century Music	3

##### Ensemble

A variety of ensembles are recommended, including Chamber ensembles ..... 4

### CREDITS TO TOTAL A MINIMUM OF ..... 126

#### REQUIREMENTS FOR A MINOR IN MUSIC

A minimum grade of C is required in each course for music minors.

#### MUSIC MINOR: APPLIED MUSIC-PRINCIPAL INSTRUMENT

This title represents 19 applied music minors, the actual titles of which include the name of the instrument of study (e.g. Applied Music-Bassoon). A list of applied music minors can be found in the chart on page ix in the front of this catalog, or can be obtained from the Department or the College of Arts and Science Advisement Center.

The Applied Music minor is for nonmusic majors with some musical background who wish to continue their musical training on a more formal basis or music majors who wish to receive formal training on an additional instrument. Places in the minor program are dependent upon the total load of the applied faculty member involved. Admission into the Applied Music minor is determined by audition and musicality testing. The requirements are:

	CREDITS
MUSC 175 Class Piano	1
Not required of persons minoring in Applied Music-Piano.	
MUSC 161, 162, 261, 262 Applied Music	8
Lessons will be 1/2 hour per week and will include a repertory class.	
Ensemble	4
Ensemble and private study must be taken concurrently. (See Ensemble Policy in the Department of Music Student Handbook) Music Minors with principal instrument of piano, organ or guitar must refer to the Department for required ensembles.	
MUSC 185 and 195 Theory/Composition	5
Music Literature/History	3
(MUSC 101 and 102 do not fulfill this requirement Any other music history course will do.)	

**Total Credits..... 21**  
(For Piano minors 20)

#### MUSIC MINOR: JAZZ STUDIES

The Music Minor in Jazz Studies offers a concentrated study of the history, theory, and performance elements of the field of jazz. It is directed towards two groups of students: (1) The non-music major who desires a focused study of jazz and its performance techniques; (2) Music Majors who wish to round out their education in music with a structured study of jazz. For this group, the Minor is an important component in a comprehensive education in Music. The requirements are:

	CREDITS
MUSC 181 and 281 Jazz Styles/Tech	4
MUSC 116 (four semesters), MUSC 321 Ensemble	5

MUSC 293 and 294	Jazz Improvisation	6
MUSC 197	Jazz Harmony	3
MUSC 207	History of Jazz	3

**Total Credits**..... 21

### MUSIC MINOR: MUSIC MANAGEMENT STUDIES

The minor in music management studies examines the theory and practice of core principles in both the nonprofit and the for-profit sectors of music. The minor is intended for music majors who wish to broaden the scope of their studies and enhance their career options; and non-music majors with musical experience and understanding who wish to develop their careers or further their interest in music-related fields.

In declaring the minor, students who are not also music majors will select a music emphasis from the following areas: Music History/Literature, Music Theory/Composition, Jazz, or Applied Music and will complete between 8 and 11 credits of music courses within that area of emphasis.

All students selecting the minor, both music majors and non-music majors, will complete a core component of 10-12 credits as follows:

		CREDITS
MUSC 388	Principles of Music Industry Practice	3
MUSC 389	Elements of Music Management	3
MUSC 309	Patterns of Patronage	3
MUSC 464	Internship	1-3

**Total Credits** ..... 18-23

### MUSIC MINOR: MUSICAL STUDIES

The Musical Studies minor is for nonmusic majors who wish to increase their knowledge and understanding of the history and theory of music. No audition is required for admission into the Musical Studies minor. The requirements are:

studies minor. The requirements are:		CREDITS
MUSC 185	Ear Training and Sight Singing I	2
MUSC 195	Harmony I	3
MUSC 211	Introduction to Music History	3
MUSC 311	Music History: 400 - 1600	3
or		
MUSC 312	Music History: 1600 - 1827	
or		
MUSC 313	Music History: 1825 to Present	
MUSC Ensemble		2
MUSC History/Literature Elective (MUSC 101 and 102 do not fulfill this requirement. Any other music history course will do.)		3
MUSC Theory Elective (MUSC 186, 196, 197, 287, 385)		2-3

**Total Credits** ..... 18-19

## PHILOSOPHY

Philosophy provides training in basic methods of reasoning, both clear thinking procedures for everyday decision making and more formal techniques of logical analysis. It examines fundamental issues and ideas about our knowledge and values. It furnishes a critical perspective on the methods and results of other disciplines.

A major, a minor, or a concentration in philosophy is a useful background for many careers including the teaching of philosophy. Majors often go on to graduate work in other arts and science disciplines, as well as to further schooling in law, theology, education, data processing, or business. In general, philosophy offers all students opportunities to develop their critical and analytical skills.

Telephone: (302) 831-2359

<http://www.udel.edu/Philosophy/default.html>

The American Philosophical Association's national headquarters is on the Delaware campus (<http://www.udel.edu/apa/>).

## DEGREE: BACHELOR OF ARTS MAJOR: PHILOSOPHY

CURRICULUM CREDITS

See page 78 for University and College requirements.

### MAJOR REQUIREMENTS

PHIL 105	Critical Thinking	3
or		
PHIL 205	Logic	
PHIL 201	Social and Political Philosophy	3
or		
PHIL 203	Ethics	
PHIL 301	Ancient Philosophy	3
PHIL 303	Modern Philosophy	3
PHIL 305	Twentieth Century Philosophy	3
or		
PHIL 320	Theory of Knowledge	
PHIL 465	Senior Seminar	3
Six additional Philosophy credits at the 300-level or above		6
Six additional Philosophy elective credits		6
Six credits of multicultural courses, selected in consultation with the advisor, from suitable courses in Philosophy, Black American, Women's, Jewish, Oriental, Latin American or African Studies. The six hours may include courses in Philosophy which count toward completing the major requirements for the degree.		6

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF** ..... 124

### REQUIREMENTS FOR A MINOR IN PHILOSOPHY

A minor in philosophy requires a minimum of 15 credits, consisting of PHIL 105 or 205; PHIL 301 or PHIL 303; an additional 300-level PHIL course; and two PHIL electives.

## PHYSICAL THERAPY

The Department of Physical Therapy offers a graduate program that prepares students for professional licensure, and counsels undergraduates who are interested in pursuing a pre-physical therapy course of study. These students are admitted to the University as "physical therapy interest" and follow a program of study leading to a baccalaureate degree with a major in one of the traditional disciplines (e.g., biological sciences, psychology, or other choices). A major in a traditional discipline must be declared by the end of the fifth semester. Students receive academic advice by staff members in the advisement center or in their major department. They receive career counseling from faculty in the Physical Therapy Department. Upon graduation from their undergraduate program, students will have the necessary course work that will allow them to compete for admission to graduate programs throughout the United States, including the University of Delaware.

Telephone: (302) 831-8910

<http://www.udel.edu/PT/index.html>

## PHYSICS AND ASTRONOMY

The Department of Physics and Astronomy offers an undergraduate major program leading to the B.S. in physics, with the option of a concentration in astronomy/astrophysics, chemical physics, or materials physics. A B.S. degree program in Geophysics is offered with the Geology Department. There are also majors leading to the B.A. in physics and to the B.A. in Physics Education, as well as a minor in physics.

The department maintains a balanced program of instruction for students who wish to acquire some understanding of physics as part of their cultural background, as well as for those who require training in physics in preparation for engineering or scientific careers. Intermediate and advanced courses are offered for students who plan teaching or research careers in physics or related disciplines.

The research activity of the staff of the Physics and Astronomy Department and of the staff of the Bartol Research Institute, which is affiliated with the University of Delaware and housed in Sharp Laboratory, is diverse and substantial. Undergraduate participation in research is encouraged.

Telephone: (302) 831-2661  
http://www.physics.udel.edu/

## BACHELOR OF SCIENCE DEGREE IN GEOPHYSICS

The Geology Department, jointly with the Physics Department, offers a B.S. degree in geophysics. Geophysics involves the use of seismic, gravity, magnetic, and electrical methods to study the structure and tectonic evolution of the earth. Geophysicists may perform such diverse tasks as using ground penetrating radar to detect the presence of buried hazardous wastes to modeling seismic waves to determine the nature of the earth's core-mantle boundary. The geophysics program is designed to produce students well-grounded in both geology and physics, but specifically trained in geophysical principles and techniques.

## DEGREE: BACHELOR OF ARTS MAJOR: PHYSICS

### CURRICULUM

### CREDITS

See page 78 for University and College requirements. Note: **MATH 241 Analytical Geometry and Calculus A satisfies the Mathematics Skills College requirement and is strongly recommended as the first math course for physics majors, unless the placement exam suggests differently.**

### MAJOR REQUIREMENTS

Ordinarily, no more than four credits from among PHYS 201, and 207 may be counted toward graduation requirements; similarly no more than four from among PHYS 202, 208. Students interested in majoring in Physics who have taken an introductory sequence other than PHYS 207-8 should consult with a member of the Physics faculty to consider the need for additional introductory courses, for which some additional credit toward graduation may be given with permission of the Physics chair.

PHYS 207/208 Fundamentals of Physics I and II (strongly recommended) ..... 8

or  
PHYS 201/202 Introductory Physics I and II

Twenty-two credits in Physics, of which fifteen must be at the 300-level or higher. .... 22

One of the following ..... 6-12

MATH 241/242/243 Analytic Geometry and Calculus A, B and C (recommended)

or  
MATH 221/222 Calculus I and II

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

## DEGREE: BACHELOR OF SCIENCE MAJOR: PHYSICS

### CURRICULUM

### CREDITS

### UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-) ..... 3

Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57). .... 3

## COLLEGE REQUIREMENTS

### Skill Requirements

**Writing:** (minimum grade C-) ..... 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** ..... 0-12

Completion of the intermediate-level course (107 or 112) in a given language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

### Breadth Requirements (See page 83)

A total of twenty-one credits from Groups A, B and C is required with a minimum of six credits in each group. The six credits from each group could be from the same area. .... 21

Group A: Understanding and appreciation of the creative arts and humanities

Group B: The study of culture and institutions over time.

Group C: Empirically based study of human beings and their environment

## MAJOR REQUIREMENTS

### Within the Department

Ordinarily, no more than four credits from among PHYS 201, and 207 may be counted toward graduation requirements; similarly no more than four from among PHYS 202, 208. Students interested in majoring in Physics who have taken an introductory sequence other than PHYS 207/208 should consult with a member of the Physics faculty to consider the need for additional introductory courses, for which some additional credit toward graduation may be given with permission of the Physics chair.

PHYS 207/208/209 Fundamentals of Physics I, II and III ..... 11

PHYS 306 Computational Methods of Physics ..... 3

PHYS 313 Physical Optics ..... 4

PHYS 419 Classical Mechanics I ..... 3

PHYS 422 Quantum Mechanics ..... 3

PHYS 603/604 Electricity and Magnetism I and II ..... 6

PHYS 616 Kinetic Theory and Thermodynamics ..... 3

PHYS 620 Classical Mechanics II ..... 3

PHYS 621 Fundamentals of Modern Physics ..... 3

PHYS 645 Electronics for Scientists ..... 3

PHYS 647 Modern Physics Laboratory ..... 3

MATH 241/242/243 Analytic Geometry and Calculus A, B and C ..... 12

MATH 302 Ordinary Differential Equations ..... 3

MATH 349 Elementary Linear Algebra ..... 3

One of the following two courses: ..... 3

MATH 503 Advanced Calculus for Applications

MATH 508 Introduction to Complex Variables and Applications

CHEM 103/104 General Chemistry ..... 8

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 130**

## DEGREE: BACHELOR OF SCIENCE MAJOR: PHYSICS

### CONCENTRATION: ASTRONOMY/ASTROPHYSICS

### CURRICULUM

### CREDITS

### UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-) ..... 3

Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content (see p. 57). .... 3

## COLLEGE REQUIREMENTS

**Writing:** (minimum grade C-) ..... 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** 0-12

Completion of the intermediate-level course (107 or 112) in a given language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

**Breadth Requirements** (See page 83)

A total of twenty-one credits from Groups A, B and C is required with a minimum of six credits in each group. The six credits from each group could be from the same area.

Group A: Understanding and appreciation of the creative arts and humanities.

Group B: The study of culture and institutions over time.

Group C: Empirically based study of human beings and their environment.

**MAJOR REQUIREMENTS**

Ordinarily, no more than four credits from among PHYS 201, and 207 may be counted toward graduation requirements; similarly no more than four from among PHYS 202, 208. Students interested in majoring in Physics who have taken an introductory sequence other than PHYS 207/208 should consult with a member of the Physics faculty to consider the need for additional introductory courses, for which some additional credit toward graduation may be given with permission of the Physics chair.

PHYS 133	Introduction to Astronomy	4
PHYS 207/208/209	Fundamentals of Physics I, II and III	11
PHYS 306	Computational Methods of Physics	3
PHYS 313	Physical Optics	4
PHYS 419	Classical Mechanics I	3
PHYS 422	Quantum Mechanics	3
PHYS 449	Introduction to Research	4
PHYS 603	Electricity and Magnetism I	3
PHYS 616	Kinetic Theory and Thermodynamics	3
PHYS 620	Classical Mechanics II	3
PHYS 621	Fundamentals of Modern Physics I	3
PHYS 632	Astrophysics	3
PHYS 633	Stellar Astrophysics	3
PHYS 645	Electronics for Scientists	3
PHYS 646	Instrumentation for Scientists	3
MATH 241/242/243	Analytic Geometry and Calculus A, B and C	12
MATH 302	Ordinary Differential Equations	3
MATH 349	Elementary Linear Algebra	3
GEOL 109	Planets, Asteroids, and Impacts	3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 130**

**DEGREE: BACHELOR OF SCIENCE****MAJOR: PHYSICS****CONCENTRATION: CHEMICAL PHYSICS****CURRICULUM** CREDITS**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing		3
multicultural, ethnic, and/or gender-related content (see p. 57)		

**COLLEGE REQUIREMENTS**

<b>Writing:</b> (minimum grade C-)	3
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A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** 0-12

Completion of the intermediate-level course (107 or 112) in a given language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

**Breadth Requirements** (See page 83)

A total of twenty-one credits from Groups A, B and C is required with a minimum of six credits in each group. The six credits from each group could be from the same area.

Group A: Understanding and appreciation of the creative arts and humanities.

Group B: The study of culture and institutions over time.

Group C: Empirically based study of human beings and their environment.

**MAJOR REQUIREMENTS**

Ordinarily, no more than four credits from among PHYS 201, and 207 may be counted toward graduation requirements; similarly no more than four from among PHYS 202, 208. Students interested in majoring in Physics who have taken an introductory sequence other than PHYS 207/208 should consult with a member of the Physics faculty to consider the need for additional introductory courses, for which some additional credit toward graduation may be given with permission of the Physics chair.

PHYS 207/208/209	Fundamentals of Physics I, II and III	11
PHYS 306	Computational Methods of Physics	3
PHYS 313	Physical Optics	4
PHYS 419	Classical Mechanics I	3
PHYS 603	Electricity and Magnetism I	3
PHYS 616	Kinetic Theory and Thermodynamics	3
PHYS 621	Fundamentals of Modern Physics I	3
PHYS 645	Electronics for Scientists	3
PHYS 646	Instrumentation for Scientists	3
MATH 241/242/243	Analytic Geometry and Calculus A, B and C	12
MATH 302	Ordinary Differential Equations	3
MATH 349	Elementary Linear Algebra	3

**Natural Science**

CHEM 103/104	General Chemistry	8
CHEM 443/444	Physical Chemistry	6
CHEM 457	Inorganic Chemistry	3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 130**

**DEGREE: BACHELOR OF SCIENCE****MAJOR: PHYSICS****CONCENTRATION: MATERIALS PHYSICS****CURRICULUM** CREDITS**UNIVERSITY REQUIREMENTS**

ENGL 110	Critical Reading and Writing (minimum grade C-)	3
Three credits in an approved course or courses stressing		3
multicultural, ethnic, and/or gender-related content (see p. 57)		

**COLLEGE REQUIREMENTS**

<b>Writing:</b> (minimum grade C-)	3
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A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 81.)

**Foreign Language:** 0-12

Completion of the intermediate-level course (107 or 112) in a given language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

**Breadth Requirements** (See page 83)

A total of twenty-one credits from Groups A, B and C is required with a minimum of six credits in each group. The six credits from each group could be from the same area.

Group A: Understanding and appreciation of the creative arts and humanities.

Group B: The study of culture and institutions over time.

Group C: Empirically based study of human beings and their environment.

**MAJOR REQUIREMENTS**

Ordinarily, no more than four credits from among PHYS 201, and 207 may be counted toward graduation requirements; similarly no more than four



from among PHYS 202, 208. Students interested in majoring in Physics who have taken an introductory sequence other than PHYS 207/208 should consult with a member of the Physics faculty to consider the need for additional introductory courses, for which some additional credit toward graduation may be given with permission of the Physics chair.

PHYS 207/208/209	Fundamentals of Physics I, II and III	11
PHYS 306	Computational Methods of Physics	3
PHYS 313	Physical Optics	4
PHYS 419	Classical Mechanics I	3
PHYS 422	Quantum Mechanics	3
PHYS 603	Electricity and Magnetism I	3
PHYS 616	Kinetic Theory and Thermodynamics	3
PHYS 621	Fundamentals of Modern Physics I	3
PHYS 624	Introduction to Solid State Physics	3
PHYS 645	Electronics for Scientists	3
PHYS 646	Instrumentation for Scientists	3
PHYS 647	Modern Physics Laboratory	3
MATH 241/242/243	Analytic Geometry and Calculus A, B and C	12
MATH 302	Ordinary Differential Equations	3
MATH 349	Elementary Linear Algebra	3
CHEM 103/104	General Chemistry	8

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 130**

#### DEGREE: BACHELOR OF ARTS MAJOR: PHYSICS EDUCATION

##### CURRICULUM

##### CREDITS

See page 78 for University and College requirements. Note: **MATH 241 Analytical Geometry and Calculus A satisfies the Mathematics Skills College requirement and is strongly recommended as the first math course for physics education majors, unless the placement exam suggests differently.**

#### MAJOR REQUIREMENTS

PHYS 207/208/209	Fundamentals of Physics I, II and III	11
	Nineteen credits, fifteen of which must be at the 300-level or higher	19
MATH 241/242/243	Analytic Geometry and Calculus A, B and C	12
CHEM 103/104	General Chemistry	8
EDUC 201	Diversity in the Classroom	3
EDUC 304	Educational Psychology – Social Aspects	3
EDUC 305	Educational Psychology – Cognitive Aspects	3
SCEN 491	Teaching Science in Secondary Schools	4
EDUC 420	Reading in the Content Areas	1
EDUC 400	Student Teaching	9

To be eligible to student teach, Physics Education students must have a g.p.a. of 2.75 in their physics major and an overall g.p.a. of 2.5. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

#### REQUIREMENTS FOR A MINOR IN PHYSICS

Students in other majors can declare a physics minor, consisting of PHYS 207-208 plus 9 credits from PHYS courses at or above the 300-level. Students considering minoring in physics should consult the physics associate chair for advice or prerequisites for these courses and for assignment to an advisor.

#### POLITICAL SCIENCE AND INTERNATIONAL RELATIONS

The Department of Political Science and International Relations administers undergraduate programs in political science and an interdisciplinary major in international relations.

Telephone: (302) 831-2355

<http://www.udel.edu/POSCISR/index.html>

#### POLITICAL SCIENCE

The Department offers major programs leading to the B.A. in Political Science, the B.A. in Political Science Education, and a joint program with the Department of Foreign Languages and Literatures leading to a B.A. in French, German, or Spanish/Political Science. Honors degree options are available for all degrees. A minor in political science is also available, as well as a minor in public administration.

Political science majors acquire a broad introduction to the study of government and politics within a liberal arts tradition. Majors are required to complete at least sixty percent of their work in upper-division (300- and 400-level) courses in four of the five sub-fields in the discipline, a way to gain appreciation for non-U.S., international, and philosophical topics. Coursework typically helps students develop analytic and communication skills that have lifetime benefits as preparation for a wide array of careers (including law) and active citizenship. Beyond traditional classroom experiences, majors may also engage in several experiential learning opportunities: internships in political organizations, public agencies, and community service agencies; independent research under faculty direction; participation in a department-sponsored study abroad experience. Detailed explanations of requirements and opportunities are available in the department office.

Students changing their major to political science must have completed POSC 105 with a grade of C- or better and completed at least 12 additional hours of University courses. Students must have a minimum of a 2.3 average to change their major to political science. Students transferring into the major from outside the University of Delaware will have their transcripts evaluated by the Department on a case-by-case basis.

The department maintains an advisory program for prelaw students and for students interested in government service.

Except as otherwise indicated, nonmajors may enroll in any political science course without prerequisites.

#### DEGREE: BACHELOR OF ARTS MAJOR: POLITICAL SCIENCE

##### CURRICULUM

##### CREDITS

See page 78 for University and College requirements.

#### MAJOR REQUIREMENTS

POSC 105	The American Political System	3
	Eighteen credits distributed as follows:	18
	Nine credits from courses at the 400-level; nine credits from courses at the 300 or 400-level.	

A student must take at least one course numbered at the 300 or 400-level in four of the five fields listed below: (Detailed list available in department office)

- American Government and Politics
- Comparative Government and Politics
- International Relations
- Public Administration and Public Policy
- Political Theory

Political Science courses	9
including courses at the 200-level, POSC 302 Research Methods (Recommended), Independent Study (POSC 366, 466), POSC 458 Community Service Fieldwork or POSC 464 Fieldwork in Political Science (Internship)	

No more than three courses at the 200-level can be counted toward the thirty credits required for completion of the major.

#### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS**  
**MAJOR: POLITICAL SCIENCE EDUCATION**

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

POSC 105 The American Political System ..... 3

Eighteen credits distributed as follows: ..... 18

Nine credits from courses at the 400-level; nine credits from courses at the 300 or 400-level.

A student must take at least one course numbered at the 300 or 400-level in four of the five fields listed below: (Detailed list available in department office)

- American Government and Politics
- Comparative Government and Politics
- International Relations
- Public Administration and Public Policy
- Political Theory

Political Science courses ..... 9  
including POSC 302 Research Methods (Recommended)

No more than three courses at the 200-level can be counted toward the thirty credits required for completion of the major.

ECON 151 Introduction to Microeconomics ..... 3

ECON 152 Introduction to Macroeconomics ..... 3

GEOG 120 World Regional Geography ..... 3

HIST 104 World History 1648 to Present ..... 3

HIST 206 U.S. History 1865 to the Present ..... 3

Additional courses as follows ..... 12

3 credits of ECON, 6 credits of GEOG, 3 credits of HIST

EDUC 201 Diversity in the Classroom ..... 3

EDUC 304 Educational Psychology – Social Aspects ..... 3

EDUC 305 Educational Psychology – Cognitive Aspects ..... 3

HIST 491 Planning a Course of Instruction ..... 3

HIST 493 Seminar: Problems in Teaching History and Social Sciences ..... 3

EDUC 420 Reading in the Content Areas ..... 1

EDUC 400 Student Teaching ..... 9

To be eligible to student teach, Political Science Education students must have a g.p.a. of 3.0 in their major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**
**HONORS BACHELOR OF ARTS:**  
**POLITICAL SCIENCE OR POLITICAL SCIENCE EDUCATION**

A candidate for the Honors Bachelor of Arts in Political Science or Political Science Education must:

1. Fulfill all requirements for the B.A. in Political Science or Political Science Education.
2. Fulfill all the University's generic requirements for the Honors Degree (see page 43 of this catalog).

The Honors credits in the major shall come from at least two different fields within the discipline.

**DEGREE: BACHELOR OF ARTS**  
**MAJOR: FRENCH, GERMAN, OR SPANISH/POLITICAL SCIENCE**

CURRICULUM CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

French, German or Spanish/Political Science majors must complete all designated courses and any prerequisite courses (e.g. for admission to the 200-level language courses) with no grade below a C-

POSC 105 The American Political System ..... 3

(or other required intro courses)

POSC 240 Introduction to International Relations ..... 3

POSC 270 Comparative Politics ..... 3

POSC 310 European Governments ..... 3

POSC 441 Problems of Western European Politics by Country ..... 3

or

POSC 442 Problems of Western European Politics ..... 3

3 additional courses at the 300 or 400-level with at least 2 at the 400-level and at least 2 in the area of International Relations ..... 9

In addition to completing the courses listed below, students are required to participate in a semester abroad program sponsored by the Department of Foreign Languages and Literatures (in Paris, or the equivalent, for French; in Bayreuth, or the equivalent, for German; in Granada, or the equivalent, for Spanish).

**One of the following language options:****French**

FREN 2xx, 3xx, 4xx (Prior to semester abroad; FREN 255 recommended) ..... 6

FREN 3xx, 4xx ..... 12

FREN 4xx (literature) (Newark campus only) ..... 3

**German**

GRMN 2xx, 3xx, 4xx (Prior to semester abroad; GRMN 255 recommended) ..... 6

GRMN 3xx, 4xx ..... 12

GRMN 4xx (literature) (Newark campus only) ..... 3

**Spanish**

SPAN 2xx, 3xx, 4xx (Prior to semester abroad; SPAN 255 recommended) ..... 6

SPAN 3xx, 4xx ..... 12

SPAN 4xx (literature) (Newark campus only) ..... 3

The following courses taken abroad count toward the French, German, or Spanish/Political Science major:

**Political Science**

POSC 441

**French**

FREN 306 or FREN 406

FREN 308

FREN 355 or FREN 455

HIST 339

**German**

GRMN 306 or GRMN 406

GRMN 308

GRMN 355 or GRMN 455

HIST 339

**Spanish**

SPAN 306 or SPAN 406

SPAN 308

SPAN 355 or SPAN 455

HIST 339

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**Admission and Financial Aid.** The departments of Political Science and International Relations and Foreign Languages and Literatures will jointly make decisions regarding admission of students to the program and recommendations for financial aid.

**HONORS BACHELOR OF ARTS:**  
**FRENCH, GERMAN, OR SPANISH/POLITICAL SCIENCE**

Students wishing to complete an Honors B.A. in French, German, or Spanish/Political Science must:

1. Complete all requirements of the B.A. in French, German, or Spanish/Political Science.
2. Complete all the University's generic requirements for the Honors Degree (see page 43 of this catalog).

The Honors credits in the major shall come from both participating departments, and shall include at least two courses at the 300-level or above.

3. Achieve a cumulative grade point average for all courses in the major of at least 3.400.

**REQUIREMENTS FOR A MINOR IN POLITICAL SCIENCE**

The required 15 credits for a minor are distributed as follows:

*Lower-division courses:* POSC 105.

*Field requirements:* Three courses numbered 300 or above are required and must be taken in two of the five fields of political science, as indicated under requirements for the major. Two of these courses must be at the 400-level. Students are required to take one additional political science course.

**REQUIREMENTS FOR A MINOR IN PUBLIC ADMINISTRATION**

The required 18 credits for this minor are distributed as follows:

*Lower-division course:* POSC 105, 302, 303.

*Field requirements:* Any two of three courses numbered 400 or above in Public Budgeting and Financial Management, Organization Theory, and Public Personnel Administration are required. Students are also required to take one additional course from a list of nine political science electives.

**INTERNATIONAL RELATIONS**

International Relations (IR) is an interdisciplinary major in the College of Arts and Science with core (24 credits), concentration (18 credits), and regional specialization (9 credits) requirements. Students must choose one of four concentrations and one of six regional specializations, as detailed in the curriculum below. An honors degree option is available.

**Area Studies Programs:** Students whose regional specialization is Africa, East Asia, or Latin America should give serious consideration to adding one of the university's Area Studies programs: African Studies, East Asian Studies, and Latin American Studies. Course work in these area studies programs will allow students to develop much richer and deeper knowledge of these regions. Moreover, most of the courses approved for the Regional Specialization within the International Relations major are also approved as fulfilling the Area Studies requirements thereby facilitating a minor or double major with an area studies program.

**Study Abroad, Internships, and Undergraduate Research:** International Relations majors are strongly encouraged to consider a study abroad experience as a part of their program. Students participating in study abroad programs not only enrich their education through exposure to foreign cultures, but often have the opportunity to take courses, internships, and undertake other educational experiences abroad not otherwise offered in University of Delaware course lists. In many instances, these courses may count towards IR Concentration and Regional Specialization requirements. Similarly, internships and undergraduate research experiences offered from the Newark campus may be applied to IR Concentration and Regional Specialization requirements. Students should check with the IR Program Director when enrolling in study abroad courses and programs, internships, and undergraduate research programs to determine if the specific course, program, or educational experience meets a particular IR major requirement, or, if some major requirement might be waived by means of study abroad, internships, or undergraduate research programs.

**Transfer Students:** Students changing their major to international relations must have completed POSC 240 with a grade of C or better and completed at least 12 additional hours of university courses. Students must have a minimum of a 2.3 average to change their major to international relations. Students transferring to the major from outside the University of Delaware will have their transcripts evaluated by the director on a case-by-case basis.

**DEGREE: BACHELOR OF ARTS****MAJOR: INTERNATIONAL RELATIONS****CURRICULUM**

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

The core consists of 24 hours of course work:

POSC 240	Introduction to International Relations	3
ECON 151	Introduction to Microeconomics	3
ECON 152	Introduction to Macroeconomics	3
ECON 340	International Economics	3
GEOG 120	World Regional Geography	3
One Foreign Languages and Literatures course beyond the intermediate level taught in the relevant language		3

One course from:

HIST 102	Western Civilization 1648 to Present	3
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or

HIST 104	World History 1648 to Present	3
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And one history course from:

HIST 131	Islamic Near East 1500 to Present	3
HIST 134	History of Africa	
HIST 135	Introduction to Latin American History	
HIST 137	East Asian Civilization: China	
HIST 138	East Asian Civilization: Japan	

**Concentrations**

Students must choose one of four IR concentrations: (1) Development, (2) Diplomacy and World Order, (3) International Political Economy, or (4) U.S. Foreign Policy. Each concentration requires 18 hours of course work. **At least three courses must be taken at the 400-level in each concentration.**

**Development Concentration**

Required		
POSC 311	Politics of Developing Nations	3

At least two (6 credits) from:

POSC 316	International Political Economy	6
POSC 341	Environment of Multinational Corporations	
POSC 362	Diplomacy	
POSC 408	Problems of International Relations	
POSC 414	Problems of U.S. Foreign Policy	
POSC 444	Seminar in World Politics	
POSC 445	Human Rights and World Politics	
POSC 448	Theories of International Relations	
POSC 463	The United Nations and World Affairs	
POSC 465	Model OAS	
POSC 640	International Development Policy and Administration	

At least one (3 credits) from:

ECON 305	Comparative Economic Systems	3
ECON 311	Economics of Developing Countries	
ECON 341	Environment of Multinational Corporations	
ECON 405	Planned Economies	
ECON 411	Economic Theory of Developing Countries	
ECON 443	International Monetary Economics	

Other courses approved to fulfill the 18 credit minimum in addition to courses listed above

ANTH 222	Technology and Culture	0-6
ANTH 225	Peasant Societies	
ANTH 230	Peoples of the World	
ANTH 231	Personality and Culture	
ANTH 330	Development and Underdevelopment	
ANTH 363	Women in Cross-Cultural Development	
ANTH 370	Culture/Food Production and Economic Development	
ANTH 377	Ecological Anthropology	
ANTH 408	The Idea of Race	
GEOG 210	Economic Geography	
GEOG 236	Conservation: Global Issues	
GEOG 422	Resources Development and the Environment	
GEOG 460	Women in International Development	
HIST 395	Pan Africanism	
SOCI 210	Population Problems	
SOCI 360	Sociology of Religion	
SOCI 361	Race, Power and Social Conflict	
SOCI 380	Development and Modernization	
SOCI 460	Women in International Development	
FREC 410	International Agricultural Trade	
FREC 420	Agriculture in Economic Development	
PHIL 204	World Religions	

**Diplomacy and World Order Concentration**

Required:

POSC 362 Diplomacy ..... 3

At least two (6 credits) from: ..... 6

POSC 313 American Foreign Policy  
 POSC 316 International Political Economy  
 POSC 330 Political Terrorism  
 POSC 333 Communism Fascism and Democracy  
 POSC 341 Environment of Multinational Corporations  
 POSC 363 International Law and Organization  
 POSC 365 Model United Nations  
 POSC 408 International Organization  
 POSC 409 Problems of International Relations  
 POSC 414 Problems of U.S. Foreign Policy  
 POSC 415 Force and World Politics  
 POSC 444 Seminar in World Politics  
 POSC 445 Human Rights and World Politics  
 POSC 448 Theories of International Relations  
 POSC 463 The United Nations and World Affairs  
 POSC 465 Model OAS  
 POSC 604 International Law

At least one (3 credits) from: ..... 3

ECON 305 Comparative Economic Systems  
 ECON 341 Environment of Multinational Corporations  
 ECON 443 International Monetary Economics

Other courses approved to fulfill the 18 credit concentration minimum in addition to courses listed above ..... 0-6

ANTH 222 Technology and Culture  
 ANTH 230 Peoples of the World  
 ANTH 377 Ecological Anthropology  
 ANTH 408 The Idea of Race  
 GEOG 102 Human Geography  
 GEOG 203 Introduction to Cultural Geography  
 GEOG 210 Economic Geography  
 GEOG 236 Conservation: Global Issues  
 GEOG 422 Resources Development and the Environment  
 GEOG 426 World Cities in Comparative Perspective  
 HIST 210 War and Society  
 HIST 254 Jewish Holocaust 1933-1945  
 HIST 302 The World in Our Time  
 HIST 306 History of U.S. Foreign Policy  
 HIST 351 Europe in Crisis 1919-1945  
 HIST 481 Seminar in Military History  
 HIST 483 Seminar in Comparative History  
 SOCI 210 Population Problems  
 SOCI 306 Personality and Society  
 SOCI 320 Personality and Politics  
 SOCI 360 Sociology of Religion  
 SOCI 361 Race, Power and Social Conflict  
 SOCI 460 Women in International Development  
 FREC 410 International Agricultural Trade  
 FREC 420 Agriculture in Economic Development  
 PHIL 204 World Religions

**Political Economy Concentration**

Required:

POSC 316 International Political Economy ..... 3

At least two (6 credits) from: ..... 6

POSC 333 Communism, Fascism, and Democracy  
 POSC 341 Environment of Multinational Corporations  
 POSC 362 Diplomacy  
 POSC 409 Problems of International Relations  
 POSC 414 Problems of U.S. Foreign Policy  
 POSC 444 Seminar in World Politics  
 POSC 448 Theories of International Relations  
 POSC 640 International Development and Policy Administration

At least one (3 credits) from: ..... 3

ECON 305 Comparative Economic Systems  
 ECON 311 Economics of Developing Countries  
 ECON 341 Environment of Multinational Corporations  
 ECON 405 Planned Economies  
 ECON 411 Economic Theory of Developing Countries  
 ECON 443 International Monetary Economics

Other courses approved to fulfill the 18 credit concentration minimum in addition to courses listed above ..... 0-6

ANTH 222 Technology and Culture  
 ANTH 230 Peoples of the World  
 ANTH 370 Culture/Food Production and Economic Development  
 ANTH 401 The Idea of Race

GEOG 203 Introduction to Cultural Geography  
 GEOG 210 Economic Geography  
 GEOG 236 Conservation: Global Issues  
 GEOG 422 Resources Development and the Environment  
 GEOG 426 World Cities in Comparative Perspective  
 GEOG 460 Women in International Development  
 HIST 210 War and Society  
 HIST 302 The World in Our Time  
 HIST 306 History of U.S. Foreign Policy  
 HIST 351 Europe in Crisis 1919-1945  
 SOCI 210 Population Problems  
 SOCI 380 Development and Modernization  
 SOCI 460 Women in International Development  
 FREC 410 International Agricultural Trade  
 FREC 420 Agriculture in Economic Development

**U.S. Foreign Policy Concentration**

Required:

POSC 313 American Foreign Policy ..... 3

At least two (6 credits) from: ..... 6

POSC 330 Political Terrorism  
 POSC 333 Communism, Fascism, and Democracy  
 POSC 341 Environment of Multinational Corporations  
 POSC 362 Diplomacy  
 POSC 363 International Law and Organization  
 POSC 408 International Organization  
 POSC 409 Problems of International Relations  
 POSC 414 Problems of U.S. Foreign Policy  
 POSC 415 Force and World Politics  
 POSC 444 Seminar in World Politics  
 POSC 445 Human Rights and World Politics  
 POSC 448 Theories of International Relations  
 POSC 463 The United Nations and World Affairs  
 POSC 465 Model OAS  
 POSC 604 International Law

At least one (3 credits) from: ..... 3

ECON 305 Comparative Economic Systems  
 ECON 311 Economics of Developing Countries  
 ECON 341 Environment of Multinational Corporations  
 ECON 405 Planned Economies  
 ECON 411 Economic Theory of Developing Countries  
 ECON 443 International Monetary Economics

Other courses approved to fulfill the 18 credit concentration minimum in addition to courses listed above ..... 0-6

ANTH 222 Technology and Culture  
 ANTH 230 Peoples of the World  
 ANTH 401 The Idea of Race  
 GEOG 102 Human Geography  
 GEOG 210 Economic Geography  
 GEOG 422 Resources Development and the Environment  
 GEOG 426 World Cities in comparative Perspective  
 HIST 210 War and Society  
 HIST 302 The World in Our Time  
 HIST 306 History of U.S. Foreign Policy  
 HIST 351 Europe in Crisis 1919-1945  
 HIST 481 Seminar in Military History  
 HIST 483 Seminar in Comparative History  
 SOCI 210 Population Problems  
 SOCI 306 Personality and Society  
 SOCI 320 Personality and Politics  
 SOCI 361 Race, Power and Social Conflict  
 PHIL 204 World Religions

**Regional Specializations**

Students must choose one of six regional specializations: (1) Africa, (2) Asia, (3) Europe, (4) Latin America, (5) Middle East, (6) Russia/Central Europe. Specializations require 9 hours of course work. At least one course must be at the 400-level in each specialization.

**African Specialization**

At least one course (3 credits) from: ..... 3

POSC 270 Comparative Politics  
 POSC 311 Politics of Developing Countries  
 POSC 433 African Politics  
 POSC 439 Southern African Politics

Any two courses from: ..... 6

ANTH 225 Peasant Societies  
 ANTH 260 Sociocultural History of Africa  
 ANTH 330 Development and Underdevelopment  
 ANTH 333 Peoples of Africa

HIST 134	History of Africa
HIST 330	Peasants and Revolution in Africa
HIST 394	Africa Since 1960
HIST 395	Pan Africanism
HIST 397	History of South Africa
HIST 439	Women and Revolution in Africa
HIST 440	Africa Under Colonial Rule

**Asian Specialization**

At least one course (3 credits) from: 3

POSC 270	Comparative Politics
POSC 311	Politics of Developing Countries
POSC 312	East Asian Political Systems
POSC 427	Politics in China
POSC 428	Politics in Japan
POSC 443	China and the World

Any two courses from: 6

ANTH 225	Peasant Societies
ANTH 330	Development and Underdevelopment
ECON 305	Comparative Economic Systems
ECON 311	Economics of Developing Countries
ECON 341	Environment of Multinational Corporations
ECON 405	The Planned Economies
ECON 411	Economic Theory of Developing Countries
HIST 137	East Asian Civilization: China
HIST 138	East Asian Civilization: Japan
HIST 270	History of Modern Asia
HIST 368	History of China 1600-1920
HIST 369	History of Japan Since 1900
HIST 370	History of Modern Japan
HIST 390	History of Modern Southeast Asia
HIST 393	History of Modern Vietnam
HIST 479	Studies in Asian History
PHIL 309	Indian Religion and Philosophy
PHIL 310	Chinese Religion and Philosophy

**European Specialization**

At least one course (3 credits) from: 3

POSC 270	Comparative Politics
POSC 310	European Government
POSC 339	Britain and Europe
POSC 441	Problems of European Politics: Countries
POSC 442	Problems of Western European Politics

Any two courses from: 6

ANTH 225	Peasant Societies
ANTH 325	Peoples of Europe
ECON 305	Comparative Economic Systems
ECON 318	Economic History of France
ECON 341	Environment of Multinational Corporations
ECON 344	The Making of the European Economy
ECON 348	Industrial Policies of France
ECON 444	Analysis of European Economic Performance
GEOG 454	New Europe: Culture, Geopolitics, Milieu
HIST 264	The Jewish Holocaust, 1933-1945
HIST 313	Modern Germany, 1770-1919
HIST 339	Topics in Modern Europe History
HIST 350	Europe in the Nineteenth Century
HIST 351	Europe in Crisis, 1919-1945
HIST 352	Contemporary European Society
HIST 354	Germany in the Twentieth Century
HIST 373	Modern Ireland, 1534 to Present
HIST 374	History of England to 1715
HIST 375	History of England 1715 to Present
HIST 376	English Legal and Constitutional History
HIST 474	Studies in English History
HIST 475	Seminar in Modern European History
SPAN 308	Contemporary Spain II
GRMN 308	Contemporary Germany II
ITAL 308	Contemporary Italy II
FREN 308	Contemporary France II

**Latin American Specialization**

At least one course (3 credits) from: 3

POSC 270	Comparative Politics
POSC 311	Politics of Developing Nations
POSC 426	Latin American Political System
POSC 431	Latin American Politics: Country

Any two courses from: 6

ANTH 225	Peasant Societies
ANTH 327	Peoples of the Caribbean
ANTH 330	Development and Underdevelopment

ANTH 375	Peoples Cultures of Modern Central America
ANTH 380	Peoples Cultures of Mexico Central America
ECON 305	Comparative Economic Systems
ECON 311	Economics of Developing Countries
ECON 341	Environment of Multinational Corporations
ECON 411	Economic Theory of Developing Countries
GEOG 226	Geography of Latin America
HIST 135	Introduction to Latin American History
HIST 331	Caribbean History I
HIST 332	Caribbean History II
HIST 334	History of Mexico
HIST 335	Colonial Latin America
HIST 430	Seminar in 20th Century Latin America
HIST 477	Studies in Latin American History

**Middle East Specialization**

At least one course (3 credits) from: 3

POSC 270	Comparative Politics
POSC 311	Politics of Developing Nations
POSC 377	Arab-Israeli Politics

Any two courses from: 6

ANTH 330	Development and Underdevelopment
ECON 305	Comparative Economic Systems
ECON 341	Environment of Multinational Corporations
HIST 131	Islamic Near East 1500 to Present
HIST 377	Islamic Movement
HIST 380	Arab-Israeli Conflict

**Russia/Central European Specialization**

At least one course (3 credits) from: 3

POSC 270	Comparative Politics
POSC 372	East Central European Politics
POSC 412	Foreign Policy of Post-Soviet Union
POSC 432	Political System Post-Soviet Union

Any two courses from: 6

ANTH 225	Peasant Societies
ECON 305	Comparative Economic Systems
ECON 405	The Planned Economies
GEOG 454	New Europe: Culture, Geopolitics, Milieu
HIST 358	Russian History, 1801-1917
HIST 359	Soviet Russia, 1917-1990

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124****HONORS BACHELOR OF ARTS: INTERNATIONAL RELATIONS****A** candidate for the Honors Bachelor of Arts in International Relations must:

1. Fulfill all requirements for the B.A. in International Relations.
2. Fulfill all the University's generic requirements for the Honors Degree (see page 43 of this catalog).

The Honors credits in the major shall come from at least three different departments represented in the International Relations curriculum.

**PSYCHOLOGY****T**he department of Psychology offers a B.A. degree with a major in psychology, a B.A. degree with a major in Psychology Education, and a minor in Psychology. In addition, an interdepartmental major between psychology and biology with an emphasis on neuroscience is also available.

Psychology is a biological, behavioral, social, and applied science, whose theories are integral to an understanding of ourselves and our place in the world. Students first learn the fundamentals of biology and psychology and then concentrate on courses that examine the structure and function of the nervous system and its relationship to behavior. Detailed instructions regarding an interdepartmental major are available from the Department or the Arts and Science Advisement Center and Dean's Office.

The courses offered by the Department of Psychology provide students with an understanding of the principles of behavior, of the scientific methods used to derive and add to those principles, and of appropriate ways in which to apply such knowledge. Experimental psychology seeks to isolate in the laboratory the basic processes involved in neural systems, learning, perception, social behavior, personality development, thinking, etc. Applied psychology focuses on methods used to approach problems in settings such as industry, government, and the general community, as well as in the field of mental health. The many aspects of theoretical, experimental and applied psychology are represented in the introductory and 300-level courses, and more advanced courses enable students to pursue special interests in greater depth. Many courses offer experience in laboratory or field research. Laboratory experiences include the study of cognitive, learning, perceptual, physiological, and social processes, and the investigation of clinically interesting phenomena. Facilities are also available, both on campus and at nearby institutions, for computer modeling of psychological processes and for data analysis.

Telephone: (302) 831-2271

<http://www.udel.edu/skeen/PSY/PSYhome.html>

## DEGREE: BACHELOR OF ARTS MAJOR: PSYCHOLOGY

### CURRICULUM

### CREDITS

See page 78 for University and College requirements.

### MAJOR REQUIREMENTS

PSYC 201 General Psychology ..... 3  
Note that PSYC 201 is a prerequisite for all of the required higher level PSYC courses.

PSYC 309 Measurement and Statistics ..... 3  
Note that PSYC 309 must be taken after the MATH requirement is fulfilled; PSYC 309 is a prerequisite for PSYC 350, 370, 380, 390, 310, 312, 340.

PSYC 415 History and Systems of Psychology ..... 3  
PSYC 415 must be taken after the student has completed the 300-level course requirements.

One of the following four courses: ..... 3

PSYC 301 Personality  
PSYC 303 Introduction to Social Psychology  
PSYC 325 Child Psychology  
PSYC 334 Abnormal Psychology

One of the following four courses: ..... 3

PSYC 350 Developmental Psychology  
PSYC 370 Research in Personality  
PSYC 380 Psychopathology  
PSYC 390 Social Psychology

Credit for the lower (e.g., PSYC 325) and higher (PSYC 350) level versions of these courses may not both be counted toward the 30 credit major. Both versions may be counted toward the 124 credits for the B.A., but if both are taken only credit for the lower numbered version will count toward the major.

#### FOR EXAMPLE:

If PSYC 325 is taken, PSYC 350 cannot count towards the major  
If PSYC 301 is taken, PSYC 370 cannot count towards the major  
If PSYC 334 is taken, PSYC 380 cannot count towards the major  
If PSYC 303 is taken, PSYC 390 cannot count towards the major

Two of the following four courses: ..... 6

PSYC 310 Sensation and Perception  
PSYC 312 Learning and Motivation  
PSYC 314 Brain and Behavior  
PSYC 340 Cognition

Two courses at or above the 400-level ..... 6

however, PSYC 466 and 468 may not be used to fulfill this requirement

Three credits of any Psychology course ..... 3  
(except PSYC 301, 303, 325 and 334)

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

## DEGREE: BACHELOR OF ARTS MAJOR: PSYCHOLOGY EDUCATION

### CURRICULUM

### CREDITS

See page 78 for University and College requirements.

### MAJOR REQUIREMENTS

PSYC 201 General Psychology ..... 3

Note that PSYC 201 is a prerequisite for all of the required higher level PSYC courses.

PSYC 309 Measurement and Statistics ..... 3

Note that PSYC 309 must be taken after the MATH requirement is fulfilled; PSYC 309 is a prerequisite for PSYC 350, 370, 380, 390, 310, 312, 340.

PSYC 415 History and Systems of Psychology ..... 3

PSYC 415 must be taken after the student has completed the 300-level course requirements.

One of the following four courses: ..... 3

PSYC 301 Personality  
PSYC 303 Introduction to Social Psychology  
PSYC 325 Child Psychology  
PSYC 334 Abnormal Psychology

One of the following four courses: ..... 3

PSYC 350 Developmental Psychology  
PSYC 370 Research in Personality  
PSYC 380 Psychopathology  
PSYC 390 Social Psychology

Credit for the lower (e.g., PSYC 325) and higher (PSYC 350) level versions of these courses may not both be counted toward the 30 credit major. Both versions may be counted toward the 124 credits for the B.A., but if both are taken only credit for the lower numbered version will count toward the major.

#### FOR EXAMPLE:

If PSYC 325 is taken, PSYC 350 cannot count towards the major.  
If PSYC 301 is taken, PSYC 370 cannot count towards the major.  
If PSYC 334 is taken, PSYC 380 cannot count towards the major.  
If PSYC 303 is taken, PSYC 390 cannot count towards the major.

Two of the following four courses: ..... 6

PSYC 310 Sensation and Perception  
PSYC 312 Learning and Motivation  
PSYC 314 Brain and Behavior  
PSYC 340 Cognition

Two courses at or above the 400-level ..... 6

however, PSYC 466 and 468 may not be used to fulfill this requirement.

Three credits of any Psychology course ..... 3  
(except PSYC 301, 303, 325 and 334)

Twenty-four credits in the social sciences with

at least three credits in each of the following departments: ..... 24

Anthropology course  
Economics course  
Geography course  
History course  
Political Science course  
Sociology course

Six additional credits selected from the social science departments listed above ..... 6

EDUC 201 Diversity in the Classroom ..... 3

EDUC 304 Educational Psychology – Social Aspects ..... 3

EDUC 305 Educational Psychology – Cognitive Aspects ..... 3

HIST 491 Planning a Course of Instruction ..... 3

HIST 493 Seminar: Problems in Teaching History and Social Sciences ..... 3

EDUC 420 Reading in the Content Areas ..... 1

EDUC 400 Student Teaching ..... 9

To be eligible to student teach, Psychology Education students must have a g.p.a. of 3.0 in their major and an overall g.p.a. of 2.75. Students should consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**REQUIREMENTS FOR A MINOR IN PSYCHOLOGY**

A minor in psychology requires 18 credits including PSYC 201; PSYC 309; one course chosen from PSYC 301, 303, 325, or 334; one course chosen from PSYC 310, 312, 314, or 340; one course chosen from PSYC 350, 370, 380, or 390; AND any three credits in psychology (with the following restrictions):

If PSYC 301 is taken, PSYC 370 may not be counted for the minor.

If PSYC 303 is taken, PSYC 390 may not be counted for the minor.

If PSYC 325 is taken, PSYC 350 may not be counted for the minor.

If PSYC 334 is taken, PSYC 380 may not be counted for the minor.

**RELIGIOUS STUDIES**

The Religious Studies undergraduate minor is described as "inter-disciplinary" because it involves work in three or more different departments. The general requirements include 15 credits from a list of approved courses. These must include PHIL 204 (World Religions) and at least two courses at the 300-level or higher in any of the three departments listed. For enrollment forms, course substitutions or exemptions, or a list of the approved courses, contact Professor Alan Fox, Department of Philosophy.

Telephone: (302) 831-8077

E-mail: AFOX@udel.edu

<http://www.udel.edu/Philosophy/RelStud/>

**SOCIOLOGY AND CRIMINAL JUSTICE**

The Department of Sociology and Criminal Justice administers separate undergraduate programs in Sociology and in Criminal Justice.

Telephone: (302) 831-2581

<http://www.udel.edu/soc/homepage.htm>

**SOCIOLOGY**

The sociology major is designed to provide students with a broad understanding of the dynamics of society and social relations. The curriculum include core courses in social theory and research methods and emphasizes flexibility by allowing students to design a program that fits their particular needs and objectives. There are also concentrations in Data Analysis, Health Services, Law and Society, and Social Welfare. Students changing to the Sociology major from other programs at UD must have a G.P.A. of 2.0 or better.

**Field Experience:** One important feature of the sociology major program is a field experience in the data analysis, health services, law and society, and social welfare concentrations. Each field experience involves placement of students in various organizations and departments related to their area of interest, including city offices and agencies, hospitals and other health care organizations, human services and welfare agencies, and law offices and research bureaus. These field placement programs are offered during the winter session and involve four hours of pass/fail course credit. This credit is considered part of the student's related studies requirement.

Over a five-week period students are placed in the field between 120 and 180 hours, depending upon the nature of the work and the need of the student. In addition, students in each field placement meet in a two-hour weekly seminar (for five weeks) to discuss and analyze their experiences.

**Advantages of the Field Experience Program**

- Provides preprofessional training within selected areas of the student's choice.
- Offers future job-related experience with academic supervision and for academic credit.

- Includes certification of these concentrations by the department, which may be beneficial in obtaining employment.
- Offers increased flexibility for the student by allowing choices among various focused, directed concentrations.

**DEGREE: BACHELOR OF ARTS  
MAJOR: SOCIOLOGY****CURRICULUM**

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

SOCI 201	Introduction to Sociology	3
SOCI 301	Introduction of Sociological Research	4
SOCI 312	Theories of Society	3
Seven Sociology courses with no more than 12 credits at the 200-level		21
At least 6 credits must be at the 400-level or higher, but cannot be fulfilled with 400-level directed study courses (466).		
Five courses in related subjects chosen in consultation with the advisor, normally from among the following departments: Economics, Black American Studies, Criminal Justice, Geography, History, Philosophy, Political Science and International Relations, Psychology, and Statistics.		15

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS  
MAJOR: SOCIOLOGY  
CONCENTRATION: DATA ANALYSIS****CURRICULUM**

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

SOCI 201	Introduction to Sociology	3
SOCI 301	Introduction of Sociological Research	4
SOCI 312	Theories of Society	3
SOCI 401	Advanced Sociological Methods	3
SOCI 411	Techniques of Demographic Analysis	3
SOCI 414	Data Analysis	3
Any five other courses in Sociology, with no more than 12 credits at the 200-level. At least 6 credits must be at the 400-level or higher, but cannot be fulfilled with 400-level directed study courses (466).		15
SOCI 412	Practicum	4
This course is required but does not count as part of the thirty-four Sociology credits for the major.		
STAT 201	Introduction to Statistics I	3
STAT 202	Introduction to Statistics II	3
Three courses chosen from the following:		9-11
GEOG 250	Computer Methods in Geography	
GEOG 470	Computer Cartography	
PHIL 245	Ethical Issues in Scientific Research	
PHIL 320	Theory of Knowledge	
ECON 422	Econometric Methods and Models I	
STAT 418	Sampling Methods	
STAT 420	Data Analysis and Nonparametric Statistics	

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS  
MAJOR: SOCIOLOGY  
CONCENTRATION: HEALTH SERVICES****CURRICULUM**

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

SOCI 201	Introduction to Sociology	3
SOCI 301	Introduction of Sociological Research	4
SOCI 310	Sociology of Health Care	3

SOCI 311	Hospitals .....	3
SOCI 312	Theories of Society .....	3
Any five additional Sociology courses with no more than 12 credits at the 200-level. At least 6 credits must be at the 400-level or higher, but cannot be fulfilled with 400-level directed study courses (466). (SOCI 341 and 348 recommended for those interested in medical social work)		15

SOCI 410	Health Services Practicum and Seminar .....	4
This course is required but does not count as part of the thirty-one Sociology credits for the major.		
Eleven additional credits of related work are required and will be selected in consultation with the student's advisor. Departments offering courses filling the needs of health concentration students include Anthropology, Business Administration, Science and Culture, Economics, Individual and Family Studies, Philosophy, Psychology, and Women's Studies.		11

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: SOCIOLOGY****CONCENTRATION: LAW AND SOCIETY****CURRICULUM**

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

SOCI 201	Introduction to Sociology .....	3
SOCI 301	Introduction of Sociological Research .....	4
SOCI 312	Theories of Society .....	3
SOCI 345	Sociology of Law .....	3
SOCI 456	Lawyers and Society .....	3
SOCI 495	Law and Society Practicum and Seminar .....	4
This course is required but does not count as part of the thirty-one Sociology credits for the major.		

Any five other courses in Sociology, with no more than 12 credits at the 200-level. At least 6 credits must be at the 400-level or higher, but cannot be fulfilled with 400-level directed study courses (466).

Suggested courses for the study of family/gender include:

SOCI 202	Social Deviance
SOCI 213	Men and Women in American Society
SOCI 303	Juvenile Delinquency
SOCI 308	The Family
SOCI 330	Population, Law and Society
SOCI 407	Sociology of Sex and Gender

Suggested courses in the organization/work area:

SOCI 327	Sociology of Organizations
SOCI 330	Population, Law and Society
SOCI 355	Computers, Ethics and Society
SOCI 428	Corporate Crime
SOCI 450	Political Sociology

Twelve credits from the following courses are recommended: ..... 12

CRJU 320	Introduction to Criminal Law
CRJU 347	The Jury: Guilty or Not Guilty
CRJU 357	Seminar on the Police
CRJU 425	Criminal Law and Social Policy
CRJU 4xx	Contemporary Debates
POSC 402	Civil Liberties I
POSC 404	The Judicial Process
POSC 405	Constitutional Law of the U.S.
POSC 406	Civil Liberties II
PHIL 201	Social and Political Philosophy
PHIL 446	Philosophy of Law
HIST 301	The Worker in American Life
HIST 309	U.S. Business and Political Economy

A second writing course in any department .....	3
A course in oral communication is suggested .....	3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: SOCIOLOGY****CONCENTRATION: SOCIAL WELFARE****CURRICULUM**

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

SOCI 201	Introduction to Sociology .....	3
SOCI 301	Introduction of Sociological Research .....	4
SOCI 312	Theories of Society .....	3
SOCI 341	Welfare and Society .....	3
SOCI 348	Theories of Social Work Practice .....	3
SOCI 441	Social Welfare Practicum and Seminar .....	4

This course is required but does not count as part of the thirty-one Sociology credits for the major

Any five courses in Sociology, no more than 12 credits at the 200-level. At least 6 credits must be at the 400-level or higher, but cannot be fulfilled with 400-level directed study courses (466). The following courses are recommended:

SOCI 202 Social Deviance  
SOCI 204 Urban Communities  
SOCI 303 Juvenile Delinquency  
SOCI 304 Criminology  
SOCI 305 Social Class and Inequality  
SOCI 308 The Family  
SOCI 346 Sociology of Aging  
SOCI 361 Race, Power and Social Conflict  
SOCI 448 Community Based Treatment

Eleven additional credits of related work are required ..... 11

POSC 411	Politics and Poverty
PSYC 301	Personality
PSYC 322	Psychology of Adjustment
PSYC 325	Child Psychology
PSYC 334	Abnormal Psychology
EDCE 334	Experiential Education
IFST 235	Survey in Child and Family Services

or  
Other courses chosen with the approval of the advisor.

and may include the following:

POSC 411	Politics and Poverty
PSYC 301	Personality
PSYC 322	Psychology of Adjustment
PSYC 325	Child Psychology
PSYC 334	Abnormal Psychology
EDCE 334	Experiential Education
IFST 235	Survey in Child and Family Services

or  
Other courses chosen with the approval of the advisor.

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

**DEGREE: BACHELOR OF ARTS****MAJOR: SOCIOLOGY EDUCATION****CURRICULUM**

CREDITS

See page 78 for University and College requirements.

**MAJOR REQUIREMENTS**

SOCI 201	Introduction to Sociology .....	3
SOCI 301	Introduction of Sociological Research .....	4
SOCI 312	Theories of Society .....	3

Seven Sociology courses, with no more than 12 credits ..... 21

at the 200-level. At least 6 credits must be at the 400-level or higher, but cannot be fulfilled with 400-level directed study courses (466).

Twenty-four credits in the social sciences with at least three credits in each of the following departments: ..... 24

Anthropology course	
Economics course	
Geography course	
History course	
Political Science course	
PSYC 201	General Psychology

Six additional credits selected from the social science departments listed above ..... 6

EDUC 201	Diversity in the Classroom .....	3
EDUC 304	Educational Psychology – Social Aspects .....	3
EDUC 305	Educational Psychology – Cognitive Aspects .....	3
EDUC 420	Reading in the Content Areas .....	1
HIST 491	Planning a Course of Instruction .....	3
HIST 493	Seminar: Problems in Teaching History and Social Sciences .....	3
EDUC 400	Student Teaching .....	9

To be eligible to student teach, Sociology Education students must have a g.p.a. of 3.0 in their major and an overall g.p.a. of 2.75. Students should



consult the teacher education program coordinator (see list on p. 176) to obtain the student teaching application and other information concerning student teaching policies.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

# **REQUIREMENTS FOR A MINOR IN SOCIOLOGY**

The minor in sociology requires SOCI 201 plus 15 credits in sociology, with at least 9 credits at or above the 300-level. SOCI 301 or 312 is required or an equivalent course in another social science discipline, such as PSYC 309, 405, ECON 422, 426, STAT 205, POSC 302, 434 or 435.

# **CRIMINAL JUSTICE**

The Criminal Justice major program is structured around a core of criminal justice courses on such topics as law enforcement, the judicial process, juvenile justice, corrections, and the criminal law. The Criminal Justice curriculum includes courses in political science, psychology, and at least one foreign language, as well as in sociology.

Students may become criminal justice majors in one of two ways. First, any incoming freshman or transfer student may choose criminal justice as a major. These students are expected to demonstrate both the ability and the commitment to perform well in all of their course work. Those who do not should meet with their advisor to discuss ways to improve their study skills and/or the possibility of selecting another major. Second, matriculated students who have already declared another major or who presently are undeclared may transfer into the Criminal Justice Program after they have completed a minimum of 30 credit hours and if their overall cumulative average at the University of Delaware is at least 2.3.

**Double Major:** With the permission of the dean of the college and the department chair a student may elect to fulfill requirements for two majors such as criminal justice and English (for a career in journalism), criminal justice and chemistry (for a career in forensic science), criminal justice and political science (for a career in court administration), criminal justice and psychology (for a career in corrections), or criminal justice and sociology (for a career in related fields).

# **DEGREE: BACHELOR OF ARTS MAJOR: CRIMINAL JUSTICE**

CURRICULUM CREDITS

See page 78 for University and College requirements.

## **MAJOR REQUIREMENTS**

CRJU 110	Introduction to Criminal Justice	3
CRJU 201	Problems of Law Enforcement	3
CRJU 202	Problems of Criminal Judiciary	3
CRJU 203	Problems of Corrections	3
Criminal Justice courses at the 300 or 400-level		18
SOCI 201	Introduction to Sociology	3
SOCI 301	Introduction to Sociological Research	4
POSC 105	The American Political System	3
PSYC 201	General Psychology	3
One of the following four courses:		3
PSYC 301	Personality	
PSYC 303	Introduction to Social Psychology	
PSYC 325	Child Psychology	
PSYC 334	Abnormal Psychology	
One of the following three courses:		3
POSC 402	Civil Liberties I	
POSC 405	Constitutional Law of the United States	
POSC 406	Civil Liberties II	

## **ELECTIVES**

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

# **STATISTICS**

(See Mathematical Sciences)

# **THEATRE**

The B.A. in Theatre Production is designed for those students who are interested in learning about the production areas of the theatre, i.e., Costume Production, Stage Management and Technical Production, and who desire the opportunity to explore these production areas through the prescribed course work and laboratory experiences of a major. Students' practical experiences in the production areas described above will include participating in the production of plays of the Professional Theatre Training Program (a graduate-level conservatory).

The Theatre Department also offers a theatre minor designed to deepen the student's appreciation of the theatre as a liberal art. The courses are designed to give the student a foundation in the viewing of theatre, as well as the art and craft of the theatre.

The Theatre Department also provides the University with a variety of general education courses in theatre designed to expand appreciation for, and future participation in, theatre. Students interested in performance opportunities should contact one of the amateur theatre groups on campus: E-52, Harrington Theatre Arts, Bacchus Players, or Black Student Theatre.

Telephone: (302) 831-2201  
<http://www.udel.edu/theatre/>

# **DEGREE: BACHELOR OF ARTS MAJOR: THEATRE PRODUCTION**

CURRICULUM CREDITS

See page 78 for University and College requirements.

## **MAJOR REQUIREMENTS**

THEA 102	Introduction to Performance	3
THEA 104	Introduction to Theatre	3
THEA 200	Introduction to Theatre Production	3
THEA 202	Introduction to Theatre Design	3
THEA 203	Introduction to Costuming for the Stage	3
THEA 407	Theatre Practicum for Majors	10
Two of the following:		6
THEA 300	Fundamentals of Stagecraft	
THEA 302	Fundamentals of Stage Lighting	
THEA 305	Fundamentals of Costume Production	
Or other courses as approved by advisor		
Two of the following:		6
ENGL 208	Introduction to Drama	
ENGL 324	Shakespeare	
Or other courses as approved by advisor		

## **ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree. Additional credits in the major may be taken, not to exceed a total of 45 credits in the major.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

# **REQUIREMENTS FOR MINOR IN THEATRE**

THEA 104	Introduction to Theatre	3
THEA 226	Fundamentals of Acting	3
Theatre Electives at the 200-level		6
Theatre Electives at the 300-level		6

**TOTAL CREDITS ..... 18**

# **WOMEN'S STUDIES**

The Women's Studies Interdisciplinary Program is designed to foster in undergraduate students a knowledge of the rich heritage, challenges, and concerns of women. The program offers a B.A.

degree in Women's Studies, with an Honors Degree option and a minor in Women's Studies. In addition to being a unique field of study with its own philosophies, methodologies, and materials, both the major and the minor in Women's Studies provide vehicles for reexamining the traditional scholarly disciplines in order to identify and correct misinformation and unexamined assumptions about "women's place" in human history. In the process, Women's Studies challenges disciplinary boundaries, encourages research on women within existing disciplines, and requires an understanding of the interplay among gender, culture, race, sexual orientation and class in human experience.

This program offers introductory core courses, upper-division courses, seminars, and colloquia. An internship is also available that provides students an opportunity to integrate what they have learned in the classroom with the practical competencies that can only be gained from actual experience. Both the courses and the internship introduce and analyze areas of scholarship and knowledge that have largely been excluded from conventional disciplines.

Interdepartmental majors and double majors are also options. No minimum grade point average is required to begin, but students must not be on probation at the time.

Telephone: (302) 831-8474

<http://www.udel.edu/WomensStudies/index.html>

## DEGREE: BACHELOR OF ARTS MAJOR: WOMEN'S STUDIES

### CURRICULUM

### CREDITS

See page 78 for University and College requirements.

### MAJOR REQUIREMENTS

WOMS 201	Introduction to Women's Studies	3
WOMS/PHIL 216	Introduction to Feminist Theory	3
Six credits in Women's Studies courses cross-listed with History and/or humanities departments chosen from the following list (only sections cross-listed with WOMS):		6
WOMS 203/PHIL 202	Contemporary Moral Problems	
WOMS/PHIL 210	Women and Religion	
WOMS/ENGL 214	Literature and Gender	
WOMS 242/ARTH 240	Women and Art	
WOMS/EDST/HIST 290	History of Women and Education	
WOMS/ARSC 293	Honors Short Course	
WOMS/HIST 300	Women in American History	
WOMS/ENGL 318	Studies in Film	
WOMS/FLIT 320	Varying Authors and Genres	
WOMS/FLIT 324	Topics: French Literature in Translation	
WOMS/FLIT 325	Topics: German Literature in Translation	
WOMS/FLIT 326	Topics: Hispanic Literature in Translation	
WOMS/FLIT 328	Topics: Japanese Literature in Translation	
WOMS/FLIT 330	Varying Authors, Themes, and Movements	
WOMS/PHIL 338	Topics in Philosophy and Gender	
WOMS/ENGL 353	Twentieth Century British Literature	
WOMS/ENGL 380	Women Writers	
WOMS/ENGL 381	Women in Literature	
WOMS/ENGL 382	Studies in Multicultural Literature in English	
WOMS/HIST 409	Varieties of Modern Feminism	
WOMS/ENGL 465	Studies in Literature Genres, Types, and Movements	
WOMS/HIST 475	Seminar in Modern European History	
WOMS/ENGL 480	Seminar	

Six credits in Women's Studies courses or courses cross-listed with social science departments chosen from the following list: 6

WOMS/SOCI 206	Women and Work
WOMS/SOCI 211	Men, Conflict, and Social Change
WOMS/SOCI 213	Men and Women in American Society
WOMS/LING 222	Language and Gender
WOMS 240	Women and Violence
WOMS/POSC 323	Introduction to Women and Politics
WOMS/PSYC 333	Psychology of Women
WOMS/CRJU 350	Women and Criminal Justice
WOMS/ANTH 363	Women in Cross-cultural Perspective
WOMS/IFST 401	Foundations of Human Sexuality
WOMS/SOCI 407	Sociology of Sex and Gender
WOMS/POSC 413	Problems in American Government
WOMS/SOCI 415	Race, Class, and Gender
WOMS/IFST 430	Teaching Family Life
WOMS/POSC 436	Politics and Literature
WOMS/SOCI/GEOL/IFST 460	Women in International Development
WOMS/SOCI 607	Sociology of Sex and Gender

Three credits in WOMS science-related courses chosen from the following list: 3

WOMS/CSCC 233 Women, Biology, and Medicine

WOMS/ANTH 305 The Evolution of Human Sex Roles and Reproduction

WOMS/CSCC/PHIL 389 Topics: Women and Health Issues

Nine additional credits in courses in Women's Studies or cross-listed with Women's Studies. These may include, but are not limited to, courses listed under Women's Studies Humanities, Social Sciences, and Science-Related Courses, which have not been used to satisfy those requirements. 9

### ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

**CREDITS TO TOTAL A MINIMUM OF ..... 124**

## HONORS BACHELOR OF ARTS: WOMEN'S STUDIES

The recipient must complete:

1. All requirements for the Bachelor of Arts degree in Women's Studies.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).

The Honors credits required in the major must be in courses in Women's Studies or courses cross-listed with Women's Studies.

## REQUIREMENTS FOR A MINOR IN WOMEN'S STUDIES

A minimum of 18 credit hours is required, which must include the following:

WOMS 201	Introduction to Women's Studies	3
Two courses in WOMS or cross-listed with WOMS at or above the 300-level		6
Three elective courses in WOMS or cross-listed with WOMS		9

**Note:** No more than 9 credits may be taken in any one department. No more than 6 credits in WOMS experimental courses (x67-numbered) may be counted toward the 18-credit requirement.

A minimum grade of C- is required in each course.