## COLLEGE 0F arts and ScIENCE

## Undergraduate Programs

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The College of Auts 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/

## ADVISEMENT

Students who have declared majors will be assigned an advisor who is a faculty member in the appropriate department. Undeclared students are assigned an advisor from the 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; similatly, 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.

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. The interdepartmental major always leads to the Bachelor of Arts degree.

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. A grade of C - is required in all major 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 <br> CREDITS

## UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C -)
ENGL 110 will be taken by all students as treshmen, except by students who have otherwise demonstrated the skills taught in that course. A score of 710 or higher on the SAT-ll Writing Test will be a satisfactory demonstration of basic writing skills. ENGL 110 must be completed by the time a sfudent has earned 60 credits. Siudents who transfer into the College of Arts and Science with 45 credits or more must complete this requirement within two semesters.
MUITICULTURAL COURSE
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-)
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 83)

## Mathematics: (one of the following)

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 11.5 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 201, MATH 202, MATH 205, MATH 250, MATH
251, MATH 252, MATH 253, MATH 266, MATH 300 or MATH 450.
Successful performance on a proficiency test in mathematics adminis-
tered by the Department of Mathematical Sciences. ( 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:

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 128 for these requirements
GROUP A
Analysis and appreciation of the creative arts and humanities
Twelve credits of courses representing at least two departments or appropriate instructional units.

## GROUP B

The study of culture and institutions over time.
Twelve credits of courses representing at least two departments or appropriate instructional units

GROUP C
Empirically based study of human beings and their environment
Twelve credits of courses representing at least two departments or appropriate instructional units.
GROUP D.
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 laboraiory.

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 85-89.

## 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

$\mathbf{A}_{\mathrm{n}}$ 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. For requirements, see the listing under Liberal Studies in the alphabetical listing of majors in this chapter.

## 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 reqirements must be taken for a regular grade, not pass/fail. CURRICULUM

CREDITS

## UNIVERSITY REQUIREMENTS

## Writing

ENGL 110 (minimum grade $C$ )
or
Exemption
.
Multicultural Course (see p. 57) ....................................... 3
SKILL REQUIREMENTS
Mathematics (one of the following) ..... 0-4MATH 113
or
AATHMATH 115
or
Successful completion of any mathematics course at or above the 200-levelexcept MATH 201, MATH 202, MATH 205, MATH 250, MATH 251, MATH252, MATH 253, MATH 266, MATH 300 or MATH 450
or
Proficiency Test
Foreign Language ..... $0-4$
Elementary Level or
Proficiency Test ( 0 credits awarded)
BREADTH REQUIREMENTSCourses in each of the groups A-D must be taken in at least twodepartments. If all but one course in a group has been taken inone department or program, a course cross-listed with that depart-ment 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
ELECTIVESAfter required courses are completed, sufficient elective creditsmust be taken to meet the minimum credit requirement for thedegree. Students may opt to take one free elective course persemester pass/fail, but the total number of credits taken on apass/fail basis may not exceed 12, excluding courses that aregraded pass/fail only. Courses numbered below 100-level do notcount toward a degree
CREDITS TO TOTAL A MINIMUM OF ..... 60
ASSOCIATE IN SCIENCE REQUIREMENTSIf any of the course requirements are satisfied through proficiencytests or exams, elective credits must be substituted to make up 60hours Courses taken to fulfill specific group, math, or language pro-ficiency reqirements must be taken for a regular grade, not pass/failCURRICULUMCREDITS
UNIVERSITY REQUIREMENTS
Writing (one of the following) ..... $0-3$
ENGL 110 (minimum grade CExemption ( 0 credits awarded)
Multiculfural Course (see p 57) ..... 3
SKILL REQUIREMENTS
Mathematics (one of the following) ..... $6-8$
MATH 221-222orMATH 241-242
Foreign Language$0-4$
Required if there is a language requirement for the correspondingBachelor of Science degree. One of the following:Elementary LevelorProficiency Test ( 0 credits awarded)
BREADTH REQUIREMENTSCourses in each of the groups A-D must be taken in at least twodepartments. If all but one course in a group has been taken inone department or program, a course cross-listed with that depart-ment 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 musi 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

## DEAN'S SCHOLAR PROGRAM

The Dean's Scholar Program exists to setve the needs of students whose clearly defined educational goals cannot be effectively achieved by pursuing the standard curricula for all existing majors, minors, and interdepartmental majors sponsored by the University Driven by an overarching passion or curiosity that transcends typical disciplinary bounds and curricula, a Dean's Scholar's intellectual interests may lead to broad interdisciplinary explorations of an issue or to more intense, in-depth studies in a single field at a level akin to graduate work. In consultation with faculty advisors and the Associate and Assistant Dean of their college, Dean's Scholar design an imaginative and rigorous individual plan of study to meet the total credit hours required for graduation. Dean's Scholars in Arts and Science and in Agriculture and Natural Resources may qualify for Honors Degrees Contact the Assistant/Associate Dean in the college or go http://WWw.udeledu/provost/acadprog htm for more information and the application

## 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 Atts and Science-Engineering Curricula section, p. 170

## TEACHER EDUCATION PROGRAMS

The College of Atts 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.PA. for enrollment in EDUC 400, Student Teaching, a course required for the degree. The appropriate teacher education program advisor (see list on p. 184) should be consulted for the exact G.PA. requirements and other policies concerning qualifications for student teaching.

See Teacher Education Programs in the College of Human Services, 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://www.udel edu/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 prelaw 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 (302) 8312282 for information or consult the Preprofessional Programs website at http://www udel edu/Biology/premed/home html

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 the Jefferson Medical College in Philadelphia to educate men and women to deal with society's changing health care needs, this
unique premedical program provides for a balanced education in liberal arts, sciences and professional studies. The curriculum includes traditional courses in science and mathematics as well as in the humanities, ethics, social sciences, economics, political sciences and health policy. Problem-based instruction, group discussions and practicums in clinical settings are unique aspects of the program Medical Scholars work toward a Bachelor of Arts in Liberal Studies degree and receive conditional acceptance to the Jefferson Medical College as early as their sophomore year at Delaware after completing at least a year in an interest group. For more information contact Dr. Roger Wagner at (302) 831-8195 or the Medical Scholars web site is at http://www udel.edu/MedScholars,

## FIELD STUDIES OPTION

$\boldsymbol{M}_{\text {any students may benefit from a semester devoted to a carefully }}$ 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 311 Renaissance Women, Society and Art
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 310)

## Biology (BISC)

BISC 303 Honors: Genetic/Evolutionary Biology
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 CSCC 498)
Black American Studies (BAMS)
BAMS 415 Race, Class and Gender (cross-listed with SOCl 415 and WOMS 415)
BAMS 418 Race, Gender and Poverty (cross-listed with SOC.I 418 )
BAMS 432 Psychological Perspectives on the Black American (cross-listed with PSYC 416)

## Science and Culture (CSCC)

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 410 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 FLLT 311)
CMLT 312 Twentieth-Century Literature || (cross-listed with FLLT 312)
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)
CRUU 428 Corporate Crime (cross-listed with SOCI 428)
CRJU 456 Lawyers and Society (cross-listed with SOCl 456)
CRUU 460 Criminal Justice Policy
CRJU 489 Crime Victims and Victims' Rights

## English (ENGL)

ENGL 200 Approaches to Literature
ENGL 301 Expository Writing
ENGL 302 Advanced Composition
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 (crosstisted with CMLT 311)
FLIT 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)
FLIT 330 Topics: Rebels and Heroes
FLIT 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: 1.500 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 302 The World in Our Time
HIST 303 American Intellectual History
HIST 304 American Intellectual History
HIST 305 Images of Race and Eihnicity in American Culture
HIST 307 The US in the Early National Period
HIST 308 The U S in the Antebellum Period
HIST 309 U S. Business and Polifical 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

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Revolutionary America
The Old South
American Industrial Society: 1815 to Present
Peasants and Revolution in Africa
History of Mexico
History of Colonial Latin America
Ancient Rome
Renaissance Europe
Europe in the Reformation Era: 1517 to 1648
Age of Louis XIV
The French Revolution and Napoleon
History of Spain: 1479 to Present
Hispanic Societies: 1492 to Present
Contemporary European Society
Modern Germany: 1770 to 1919
Germany in 20th Century: 1914 to Present
Early Modern Intellectual History
Modern European Intellectual History
Soviet Russia: 1917 to 1990
European Business History: 1850 to Present
Modern China: 1600-1920s
China Since 1900
History of Modern Japan
Popular Culture in Urban Japan
Modern Ireland: 1534 to Present
Radicalism and Revolution: Islamic Movements in the Modern Middle East
Nationalism in the Modern Middle East
History of the Arab-Israeli Conflict
History of Biological Ideas (cross-listed with CSCC 385)
History of South Africa
Varieties of Modern Feminism (cross-listed with WOMS 409)
Seminar in American History
(cross-listed with CSCC 411)
Seminar in Twentieth-Century Latin American Revolutions
Women and Revolution in Africa (cross-listed with WOMS 439)
Seminar in Africa Under Colonial Rule
Seminar in United States Urban History
Seminar in Medieval History (cross-listed with WOMS 472)
Seminar in Early Modern European History
(cross-listed with WOMS 473)
Seminar in English History
Seminar in Modern European History
Seminar in Latin American History
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 387 American Political Thought
POSC 408 International Organizations
POSC 426 Latin American Political Systems
POSC 433 African Politics
POSC 434 Political Thought I
POSC 435 Political Thought II
POSC 436 Politics and Liferature
POSC 445 Human Rights and World Politics
POSC 448 Theories of International Relations
POSC 450 Problems of Latin American Politics
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)

SOCl 305 Social Class and Inequality
SOCI 355 Computers, Ethics and Society (cross-listed with CSCC 355)
SOCl 415 Race, Class and Gender
(cross-lisfed with BAMS 415 and WOMS 415)
SOCl 418 Race, Gender and Poverty
(cross-listed with BAMS 418)
SOCl 428 Corporate Crime (cross-listed with CRJU 428)
SOCI 456 Lawyers and Society (cross-listed with CRUU 456)

## Theatre (THEA)

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 Theaire: 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 Alternare Survey (cross-listed with MUSC 302)
WOMS 328 Topics in Japanese Literature in Translation (cross-listed with FLLT 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 41.5 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

Questions on the application of courses to group requirements may be directed to the College of Arts and Science Advisement Center and Dean's Office. The Arts and Science Advisement Center can also provide a detailed description of the ojectives of each group.

## GROUP A: Analysis and Appreciation of the Creative Arts and Humanities

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

## Anthropology (ANTH)

ANTH 205 Anthropology and Human Nature
ANTH 216 Introduction to Material Culture Studies (cross-listed with AMCS 216 and 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 101 Visual Culture
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 307 Seurat to Matisse: Art in France
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 FLLT 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 FLLT 316 )
CMLT 320 Varying Authors and Genres
(cross-listed with FLLT 320 and WOMS 320)
CMLT 322 Topics: Classical Literature in Translation (cross-listed with FLLT 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 348 Contemporary Jewish-American Literature (cross-listed with JWST 348)
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 (FLLT)
FLLT 202 Biblical and Classical Literature
(cross-listed with CMLT 202 and ENGL 202)
FLLT 316 Classical Mythology (cross-listed with CMIT 316)
FLLT $320 \quad$ Varying Authors and Genres
(cross-listed with CMLT 320 and WOMS 320)
FLLT 322 Topics: Classical Literature in Translation (cross-listed with CMLT 322)
FLIT 324 Topics: French Literature in Translation (cross-listed with WOMS 324)
FLLT 325 Topics: German Literature in Translation (cross-listed with WOMS 325)
FLIT 326 Topics: Hispanic Literature in Translation (cross-listed with WOMS 326)
FLLT 327 Topics: Russian Literature in Translation
FLLT 328 Topics: Japanese Literature in Translation (cross-listed with WOMS 328)
FLLT 329 Topics: Italian Literature in Translation
FLLT 338 Light and Shadow - Japanese Films

## French (FREN)

FREN 454 French Cinema
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 AMCS 216 and ANTH 216)

## Jewish Studies (JWST)

JWST 348 Contemporary Jewish-American Literature (cross-listed with ENGI 348)
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 I
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 $100 \quad$ 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 344 Science and Religion (cross-listed with SCEN 344)
PHIL 444 Medical Ethics (cross-listed with CSCC 444)

## Political Science (POSC)

POSC 285 Currents in Political Theory
POSC 333 Communism, Fascism, and Democracy
POSC 436 Politics and Literature

## Science (SCEN)

SCEN 344 Science and Religion (cross-listed with PHIL 344)

## Theatre (THEA)

THEA 102 Introduction to Performance
THEA 104 Introduction to Theatre and Drama
THEA 106 The Thearical 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-isted 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 FLLT 324)
WOMS 325 German Literature in Translation (cross-listed with FLLT 325)
WOMS 326 Hispanic Literature in Translation (cross-listed with FLLT 326)
WOMS 328 Topics: Japanese Literature in Translation (cross-listed with FLLT 328) WOMS 380 Women Writers (cross-listed with ENGL 380 and JWST 380)

## GROUP B: The Study of Culture and Institutions Over Time

## 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 206 introduction to Art and Architecture in Africa

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: 1607-186.5
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 311 Renaissance Women, Society and Art
ARTH 318 Hisfory 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, FLLT 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, FLLT 330 and WOMS 330)
CMLT 341 Theare/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)
CMIT 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 |
ENGL 206 British Literature II
ENGL 211 Great Writers of the Western World I (cross-listed with CMIT 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 ! (cross-listed with BAMS 313)
ENGL 345 African American Literature II
ENGL 349 Introduction to Jewish Sources (cross-listed with JWST 349)

## Foreign Languages and Liferafures (FLLT)

FLLT 330 Varying Authors, Themes, and Movements (cross-listed with CMLT 330, CSCC 330 and WOMS 330)
FLLT 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)
FREN 453 Contemporary French Civilization

## 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 in Western Civilizations
HIST 220 The American Civil Rights Movement (cross-listed with BAMS 220)
HIST 221 Film and American Society
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
$\begin{array}{ll}\text { HIST } 378 & \text { Nationalism in the Modern Middle East } \\ \text { HIST } 380 & \text { History of the Arab-Israeli Conflict }\end{array}$
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 391 History of World War II: Asia and the Pacific
HIST 393 History of Modern Viennam
HIST 397 History of South Africa
HIST 430 Seminar: Twentieth Century Latin American Revolutions
HIST 439 Women and Revolution in Africa (cross-listed with WOMS 439)

HIST 474 Seminar in English History
HIST 477 Seminar: Latin American 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

## Jewish Studies (JWST)

JWST 349 Introduction to Jewish Sources (cross-listed with ENGL 349)
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 Lifurgy 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 303 Modern Philosophy
PHIL 309 Indian Religion and Philosophy
PHIL 310 Chinese Religion and Philosophy
PHIL 311 Early Medieval Philosophy
PHIL 312 Late Medieval Philosophy

## Political Science (POSC)

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

## Russian (RU55)

RUSS 310 Introduction to Russian Literature ( 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 Liferature (to be faught 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 Thearre: American Musical Theatre
(cross-listed with MUSC 345)
THEA 346 History of Theare: 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 FLLT 330)
WOMS 439 Women and Revolution in Africa (cross-listed with HIST 439)

## GROUP C: Empirically-based Study of Human Beings and Their Environment

## 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

## 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 215 Race in Society (cross-listed with SOCl 215)
BAMS 361 Race, Power, and Social Conflict (cross-listed with SOCI 361)

## Science and Culture (CSCC)

CSCC 311 Sociology of Health Care

## 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

## Criminal Justice (CRJU)

CRUU 110 Introduction to Criminal Justice
CRJU 120 Illicit Drug Use in America
CRUU 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)

## 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

## Hisfory (HIST)

HIST 327 American Labor before Industrialization

## Linguistics (LING)

LING 101 Introduction to Linguistics |
LING 102 Language, Mind and Sociely
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 321 Philosophy of Biology
PHIL 330 Philosophy of the Mind (cross-listed with CGSC 330)

## Polifical Science (POSC)

POSC 106 Introduction to Political Science: Issues
POSC 150 The American Political System
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 SOCl 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
SOCl 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
SOCl 211 Men, Conflict, and Social Change (cross-listed with WOMS 211)
SOCI 213 Men and Women in American Sociely (cross-listed with WOMS 213)
SOCl 21.5 Race in Society (cross-listed with BAMS 215)
SOCl 308 The Family
SOCl 311 Sociology of Health Care (cross-listed with CSCC 311)
SOCI 322 Crowds, Cults, and Revolutions
SOCl 343 Sociery, Politics, and Healłh Care (cross-listed with POSC 343)
SOCI 345 Sociology of Law (cross-listed with CRU 345)
SOCl 361 Race, Power, and Social Conflict (cross-listed with BAMS 361)
SOCl 362 Sociology of Mass Communication
SOCl 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 SOCl 206)
WOMS 211 Men, Conflict, and Social Change (cross-listed with SOCl 211)
WOMS 213 Men and Women in American Society (cross-listed with SOCI 213)
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 SOCl 407)

## GROUP D: The Study of Natural Phenomena through Experiment or Analysis

## Animal Science (ANSC)

ANSC 101 Introduction to Animal Science
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 Principals in Biology
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 Geological Hazards
GEOL 115 Geological Hazards Laboratory
GEOL 107 General Geology I
GEOL 108 Volcanoes and Earthquakes
GEOL 109 Planets, Asteroids and Impacts
GEOL 110 Earth History: Evolution and Geologic Record
GEOL 111 Geology of Delaware and its Neighbors
GEOL 112 Earth Resources and Public Policy

## Linguistics (LING)

LING 253 Laboratory Phonetics

## Marine Studies (MAST)

## MAST 200 The Oceans

## Mathematical Sciences (MATH)

MATH 201 Introduction to Statistics I (duplicate credit with STAT 205)
MATH 205 Statistical Methods (duplicate credit with STAT 201)
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 (duplicare 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 Greai 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: 1
PHYS 201 Introductory Physics I
(duplicare 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 1
PLSC 140 People and Plants: Feast or Famine
PLSC 204 Introduction to Soil Science

## Psychology (PSYC)

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

## 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

## 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, 8311281, 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 and political science.

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 370 Culture of Food Production and Economic Development ......3 3
ANTH 457/657 Survey of African Art
3
-3
6 credits in History, selected from the following:
HIST 134 History of Africa ........................... . ................................................. 3
HIST 330 Peasants and Revolution in Africa ...............................

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
HIST $332 \quad$ History of the Caribbean II
$\mathbf{3}$ credits from Polifical Science, selected from the following:
POSC $433 \quad$ African Political Systems
POSC/BAMS 439 Southern African Politics

## AMERICAN MATERIAL CULTURE STUDIES

The College of Arts and Science offers an undergraduate minor in American Material Culture Studies, emphasizing hands-on research both in the classroom and the field. The minor engages students in the
documentation and interpretation of the material world from the intimate environments of the home to the historical development of regional landscapes Particular attention is paid to the international contexts shaping the American material world from the colonial period to the present. The interdisciplinary minor makes use of the University's rich resources in material culture studies including the University Gallery, Center for Historic Architecture and Design, and Museum Studies Program. The requirements for the minor include an internship and original research project

Telephone: (302) 831-2243
http://materialculture udel.edu

## REQUIREMENTS FOR THE MINOR IN AMERICAN MATERIAL CULTURE STUDIES

The minor in American Material Culture Studies requires 18 credit hours distributed as follows: Three core courses and an additional three courses must be selected in consultation with and approved by the student's minor advisor. These courses should represent major topic areas in American material culture studies. All three additional courses must be selected from outside the requirements of the student's major and outside his or her major department. All courses included within the minor must be completed with a grade of C - or better.

| Core Courses | Credits |
| :---: | :---: |
| ANTH/AMCS/HIST 216 Introduction to Material Culture Studies |  |
| AMCS 402 Research and Writing Seminar | 3 |
| AMCS/MSST 464 Internship | 3 |
| The internship must be completed no later than the student's next to last semester of study. |  |
| Area Courses | 9 |

An additional three courses ( 9 credits) to be chosen from recommended offerings in American material culture studies by the departments and programs below These courses must be at the 200 -level or above Courses must be selected from outside the student's major and represent two different departments/programs from the following
Anthropology, Art Conservation, Art History, Black American Studies, Consumer Studies, English, Geography, History, Museum Studies, Sociology, Women's Siudies.

## 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 $\mathbf{8 1}$ 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 of 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 81 for University and College requirements. MAJOR REQUIREMENTS
Social and Cultural Anthropology courses ..... 12
Biological Anthropology courses ..... 6 ..... 6
3
Archaeological Anthropology courses.
Archaeological Anthropology courses.
ANTH 486 Tutorial in Social and Cultural Anthropology ..... 3
ANTH 487 Tutorial in Archaeology ..... 3
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 aminimum of twelve credits of ANTH must be taken at the 300 -level.
Economics course ..... 3
Geography course ..... 3
History course
History course ..... 3
3
3 ..... 3
3
3
Political Science course ..... 3
PSYC 201 General Psychology ..... 3
Six additional credits selected from the departments listed above ..... 6
EDUC 413 Educational Psychology - Social Aspects ..... 3
EDUC 414 Educational Psychology - Cognitive Aspects ..... 3
EDUC 419 Diversity in the ClassroomHIST 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
Student Teaching1
Grade of C - or better required in all required EDUC and HIST courses
To be eligible to student teach, Anthropology Education majors must havea g.pa of 30 in their major and an overall g.pa of 2.75 They mustalso pass a teacher competency test as established by the University Coun-cil on Teacher Education Students should consult the teacher educationprogram coordinator (see list on p. 184) to obtain the student teachingapplication and other information concerning student teaching policies
CREDITS TO TOTAL A MINIMUM OF124

## HONORS BACHELOR OF ARTS:

ANTHROPOLOGY OR ANTHROPOLOGY EDUCATION
All Honors Degree Candidates must complete the following:

1. All requirements for the B A in Anthropology or Anthropology Education.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see pg. 43 of this catalog).

## INTERDEPARTMENTAL MAJORS

$\mathbf{A}_{\mathrm{n}}$ interdepartmental major, for students having interests in two areas, requires 21 credits each in anthropology and in one other department as well as 9 credits of related work. 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 $300-\mathrm{level}$ or above
- 3 Credits of any 48 X Tutorial

A 48 X 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 att courses A limited number of students are admitted to the B FA degree programs.

Foundation studio att 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 select a concentration in ceramics, painting, photography, printmaking, or sculpture The visual communications major may select a concentration in advertising design, applied photography, graphic design, or illustration. The courses of study are designed to prepare the student for professional practice in the student's chosen area of concentration.

The department enjoys an excellent reputation and has a Macin-tosh-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/ArtDeptHPhtml
http://DEsigners art udel.edu

## DEGREE: BACHELOR OF ARTS <br> MAJOR: ART

CURRICULUM
CREDITS
See page 78 for University and College requirements.

## MAJOR REQUIREMENTS

ART 110 Foundation Drawing I.................................................................
ART 111 Foundation 2D 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 Concentration.
Twelve credits beyond those that might have been taken as part of founda-
tion requirements. At least three credits must be at the 400 -level. (ceramics, painting, photography, printmaking, sculpture)
Art Electives ............................................................................. . .
Courses from other department concentrations outside of chosen art discipline
ART 315 Issues in Contemporary Art .................................................
Art History 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

## 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 $\ldots \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . .3$
multicultural, ethnic, and/or gender-related content (see p. 57)

## COLLEGE REQUIREMENTS

Writing: (minimum grade C-)
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 83.)

## Mathematics (one of the following).

## 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 1
MATH 241 Analytic Geometry and Calculus A
Successful performance on the college proficiency exam. $(0$ credits awarded)
Breadth Requirements (See page 85)

## Group A

Understanding and appreciation of the creative arts and humanities
Nine credits representing at least two areas.
Group B.
The study of culture and institutions over time Nine credits representing at least two areas

Group C
Empirically based study of human beings and their environment Nine credits representing at least two areas
Group D
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
ART 111 Foundation 2D Design .... ............................................... 3
ART 112 Foundation Drawing II
ART 113 Foundation 3D Design

ART 115 Foundation Colloquium (spring semester) ................................ 0
ART 114/115 Required fall and spring of freshman year
Art Electives
ART 315 Issues in Contemporary Art ............................................... 3
ART 416 Professional Practices................................................ 3
ART 417 BFA Exhibition.... ... ... .. .. ........... ...................... 0
Art History courses ....... ..... .... .... ... ................................................... 9

## Concentrations

Students must choose one of five Fine Arts concentrations: Ceramics, Painting, Photography, Printmaking, or Sculpture. Each concentration requires 42 credit hours of course work. At least nine credits must be at the 400 -level in each concentration

## Ceramics Concentration

| ART 246 | Beginning Silkscreen |
| :---: | :---: |
| ART 250 | Beginning Sculpture |
| ART 280 | Beginning Photography |
| ART 290 | Beginning Ceramics. |
| ART 350 | Intermediate Sculpture \| |
| ART 390 | Intermediate Ceramics I |
| ART 391 | Intermediate Ceramics II |
| Four additional 400-level ART courses in ceramics |  |
| One of the | lowing |
| ART 490 | Advanced Ceramics |
| ART 491 | Ceramics Studio |
| Two of the following |  |
| ART 341 | Woodcut and Etching |
| ART 342 | Introduction to Monoprinting and Papermaking Processes |
| ART 351 | Intermediate Sculpture II |
| ART 380 | Intermediate Photography: Black and White |

## Painting Concentration

ART 230 Figure Drowing .................................................................. 3

ART 231 Beginning Painting
ART 250 Beginning Sculpture ...................................................... 3
ART 331 Intermediate Painting (must be taken twice) ... .................... 6
ART 430 Drawing Studio ... ....... ... ....................................... 3

Four additional 400-level ART courses in painting ........... ............................... 12
One of the following ...................... ....................................................... 3
ART 333 Figure Studio
ART 430 Drawing Studio
Two of the following ................................... .......................... ........... .......... 6
ART 241 Beginning Lithography
ART 341 Woodcut and Etching
ART 280 Beginning Pholography
ART 290 Beginning Ceramics

## Photography Concentration

ART 231 Beginning Painting ......................................................... 3

ART 250 Beginning Sculpture .................................. 3
ART 280 Beginning Photography ... .... .. ............ .................... 3
ART 290 Beginning Ceramics ......................................................... 3
ART 380 Intermediate Photography: Black and White ................................. 3
ART 381 Intermediate Photography: Color ...................................... 3
ART 383 Photographic Facilities Management .................................... . 3
ART 481 Photography Studio ....................................... 3
ART 486 Photographic Electronic Imaging
One of the following taken for a second time.................................................... 3
ART 481 Photography Studio
ART 486 Photographic Electronic Imaging

One of the following 3
ART 241 Beginning Lithography
ART $341 \quad$ Woodcut and Etching
ART 342 Introduction to Monoprinting and Papermaking Processes
Two of the following
ART 274 Common Threads: Multicultural Survey of Fiber Processes
ART 418 Fine Arts Internship
One of ART 241, ART 341, or ART 342
One of ART 310 or ART 311
Printmaking Concentration
ART 230 Figure Drawing .................................................................... 3
ART 231 Beginning Painting ....................................................................... 3
ART 241 Beginning Lithography .............................................................................
ART 246 Beginning Silkscreen ......................................... 3
ART 250 Beginning Sculpture . ...................... . ........ . ..................... 3
ART 290 Beginning Ceramics .................................................... 3

ART 342 Introduction to Monoprinting and Papermaking Processes ........ 3
ART 441 Advanced Printmaking ... ..................................................... 3
Three additional 400-level ART courses in printmaking ................... 9
Two of the following ......................................... . . . 6
ART 280 Beginning Photography
ART 331 Intermediate Painting
ART 333 Figure Studio
ART 430 Drawing Studio
Sculpture Concentration
ART 231 Beginning Painting ....................................................... 3
ART 250 Beginning Sculpture ...................................... 3
ART 280 Beginning Photography ........... . ... . ... ...... ............... . 3
ART 290 Beginning Ceramics ....................................................... 3
ART 342 Introduction to Monoprinting and Papermaking Processes ..... 3
ART 350 Intermediare Sculpture I ................................................... 3
ART 351 Intermediate Sculpture II. .. .................................................. 3
Four additional 400-level ART courses in sculpture ... ................................ 12
One of the following .............. ..... .. ....................................... 3
ART 450 Sculpture Studio
ART 451 Advanced Sculpture
Two of the following
ART $230 \quad$ Figure Drawing
ART 331 Intermediate Painting
ART 380 Intermediate Photography: Black and White
ART 390 Intermediate Ceramics I

## 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

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

## CURRICULUM <br> CREDITS

## UNIVERSITY REQUIREMENTS

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

multicultural, ethnic, and/or gender-related content (see p 57).
COLLEGE REQUIREMENTS
Writing: (minimum grade $\mathrm{C}-$ )
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 83)
Mathematics (one of the following)
MATH 113 Contemporary Marhematics
(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 8.5)

Group A
Understanding and appreciation of the creative arts and humanities Nine credits representing at least two areas.
Group B.
The study of culfure and instifutions over time Nine credits representing at least two areas.
Group C
Empirically based study of human beings and their environment. Nine credits representing at least two areas
Group D
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 113 Foundation 3D Design .................................................. 3
ART 114 Foundation Colloquium (fall semester) ........................... 0
ART $114 / 115$ Required fall and spring of freshman year
ART $200 \quad$ Visual Communications Process !
ART 201 Visual Communications Process II ...................................... 3
ART 210 Photo Design ! ...................................................

Art Electives ............................................................................................... 9
ART 315 Issues in Contemporary Art ..................................... 3
ART 417 BFA Exhibition ................................................................................. 0
Art History courses

## Concentrations

Students must choose one of four Visual Communications concentrations: Advertising Design, Applied Photography, Graphic Design, or Illustration Each discipline requires 30 hours of course work. At least nine credits must be at the 400 -level in each discipline

## Advertising Design Concentration

ART 302 Graphic Design !

ART 304 Advertising Design I ...................................... 3

ART 402 Advanced Applied Design I ............................................... 3
ART 403 Portfolio Preparation I........................................... 3
ART 404 Advanced Applied Design I ........................................ 3
ART 405 Portfolio Preparation II ... ... .... ... ...................... ............ 3
Two of the following ... ......................................................... 6
ART 230 Figure Drowing
ART 246 Beginning Silkscreen
ART 310 Applied Photography
ART 311 Applied Photographic Illustration

## Applied Photography Concentration

ART 250 Beginning Sculpture .......... ........................................ 3
ART 280 Beginning Photography ... ... ...... ..... ... ....... .. ............. 3
ART 310 Applied Photography ............................................. 3
ART 311 Applied Photographic llustration
ART 412 Advanced Imagemaking I .............................. 3
ART 413 Imagemaking Porffolio 1.................................................. 3
ART 414 Advanced Imagemaking II ................................. 3
ART 415 Imagemaking Porffolio II. . ...... .................... ....... ................. . . 3
Two of the following ....... ........... .......... .... ............ ........... .................... . 6
ART 303 Graphic Design II
ART 304 Advertising Design 1
ART 380 Intermediate Photography: Black and White
ART 381 Intermediate Photography: Color

## Graphic Design Concentration

ART 302 Graphic Design I .............................................. 3

ART 304 Advertising Design 1 ................................................
ART 30.5 Advertising Design II .......... ..................................... 3

ART 403 Portfolio Preparation 1........................................... 3
ART 404 Advanced Applied Design I ... ....................... . ................. 3
ART 405 Portfolio Preparation II........... ............................ . 3

Two of the following ................................................................. 6
ART 230 Figure Drawing
ART 246 Beginning Silkscreen
ART 310 Applied Photography
ART 311 Applied Photographic Illustration

## Illustration Concentration

ART 230 Figure Drawing
ART 231 Beginning Painting ..............................................
ART 312 Illustration I ..................................................... 3
ART 313 illustration il.
ART 412 Advanced Imagemaking I
ART 413 Imagemaking Portfolio I.
… 3
利
ART 415 Imagemaking Portfolio II ..................................... 3
Two of the following .......................................................... 6
ART 246 Beginning Silkscreen
ART 280 Beginning Photography
ART 331 Intermediate Painting
ART 333 Figure Studio
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

## REQUIREMENTS FOR A MINOR IN ART

The minor in art includes the fine arts concentrations of ceramics, painting, photography, printmaking, and sculpture Students 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 concentrations. 9 credits
b) Two studio art courses at the 300-400 level from one or two concentrations ............................. 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 graduatelevel 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, conserva-
tors 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.htm

## DEGREE: BACHELOR OF ARTS MAJOR: ART CONSERVATION CONCENTRATION: COLLECTIONS CARE

CURRICUIUM
CREDITS
See page 81 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) ................................... 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
ARTC 490 Studio in the Materials and Techniques of Prinimaking |
MSST 403 History, Philosophy, Functions and Future of Museums .............. 3
MSST 466 Independent Study: Museum Studies Internship ....................... 3
ART 110 Foundation Drawing ........................................................... 3
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 290 Beginning Ceramics
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, ............. . 9
from the following:
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 Sociely
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

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

CURRICULUM ..... CREDITS
See page 81 for University and College requirements.
ARTC 301 Care and Preservation of Cultural Property I................... 3
ARTC 302 Care and Preservation of Cultural Property II3
3
ARTC 464 Conservation internship (two semesters) ..... 6
ARTC 485 Color Mixing and Matching ..... 3
ARTC 488 Studio in the Materials and Techniques of Painting 1 ..... 3
ARTC 489
ARTC 480
Studio in the Materials and Techniques of Painting IIARTC 490 Studio in the Materials and Techniques of Printmaking IART 110 Foundation Drawing I 3ART 130Drawing I: Tools and TechniquesART 138 Elementary Drawing and Painting I
ART 280 Beginning Photography ..... 3
ART 250 Beginning Sculpture .....  3
ART 290 Beginning Ceramics
Two courses from the following6
ANTH 103 Introduction to Prehistoric Archaeology
ARTH 153 Introduction to Art HistoryARTH 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 ChemistryCHEM 321 Organic Chemistry
CHEM 322 Organic Chemistry
Option B (for Chemistry majors or minors) (19 credits)
CHEM 111 General Chemistry
CHEM 119 Quantitative ChemistryCHEM 120 Quantitative Chemistry IICHEM 321 Organic Chemistry

Four courses, with at least three courses at or above the 300 -level,
ANTH 216 Introduction to Material Culiure 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 il
ARTH 230 American Art: 1607-1865
ARTH 231 American Art: 1865-present
ARTH 233 Art of China
ARTH 234 Arf of Japan
ARTH 235 Art of India
ARTH 236 The Aris of Islam
ARTH 301 Research and Methodology in Art History
ARTH 302 Prints and Society
ARTH 304 Northern Baroque Art
ARTH 308 Modern Archifecture I: 1750-1900
ARTH 309 Modern Architecture Il: 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

## 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 focused 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. For the Honors Degree with Distinction, 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 history, 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://www udel.edu/ArtHistory

## DEGREE: BACHELOR OF ARTS MAJOR: ART HISTORY

CURRICULUM
CREDITS

## See page 81 for University and College requirements.

## MAJOR REQUIREMENTS

ARTH 153 Introduction to Art History I ........................................... 3

Fiffeen credits at the 200-level or above, distributed as follows:
a Ancient.

c. Renaissance .......................................................................................

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 .... .... 9 the following areas: Anthropology, Studio Art, Education, English, Histo-
ry, 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 complered, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

## CREDITS TO TOTAL A MINIMUM OF

## HONORS BACHELOR OF ARTS: ART HISTORY

The recipient must complete:

1. All requirements for the Bachelor of Arts degree in Art History.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).
3. The student's grade point average for courses in the major must be at least 350 at the time of graduation

## REQUIREMENTS FOR THE MINOR IN ART HISTORY

The minor in art history requires 18 credits of course work, including at least four courses at or above the 200 -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 concentrations in Ecology \& Organismic Biology, in Cellular \& Molecular Biology \& Genetics, and in Biotechnology. The department also 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

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
hitp://www.udeledu/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

## CONCENTRATIONS IN ECOLOGY \& ORGANISMIC BIOLOGY AND IN CELLULAR \& MOLECULAR BIOLOGY AND GENETICS

Biology is an extraordinarily broad discipline and specialization in more focused areas has become desirable for increasing numbers of students. The B.S concentrations in Ecology \& Organismic Biology and in Cellular \& Molecular Biology \& Genetics maintain large portions of the traditional B A. degree while offering the opportunity for highly motivated students to pursue a somewhat narrower curriculum. These concentrations require more credit hours in the major and there are two additional requirements. First, a student must have a GPA of 3.0 in selected courses for admission to the degree (see details at the beginning of the statement of requirements for each concentration). Students will apply in the spring of their sophomore year. Second, a senior thesis based on original research must be completed and defended. The thesis may also be used for the Degree and Distinction and Honors Degree programs.

## CONCENTRATION IN 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 usually limited to 15 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 401 and BISC 300 (or other bio course if BISC 300 is not taken).
4. Within the pool of eligible applicants, admission into the pro-
gram 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.

## 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 81 for University and College requirements. MAJOR REQUIREMENTS
Minimum grade C- required in all BISC courses for a
total of af least 33 credits in biology.
BISC 207/208 Introductory Biology I and II ......................................... 8
BISC 302 General Ecology .......... .... ....... ............... . .......................... 3
BISC 306 General Physiology ....... ... . .......... ................ . . . .... 3
BISC 305 Cell Physiology 3
or_
or
BISC 401 Molecular Biology of the Cell ............. .......................................... 3
BISC 403 Genetic and Evolotionary Biology ....................................... 3
One course in experimental biology from the following:
BISC 312 Quantitative Ecology
BISC 312 Quantitative Ecology..............................................
BISC 316 Experimental General Physiology .. ............ ............ ........... 2
BISC 315 Experimental Cell Biology ..................................................
BISC 411 Experimental Molecular Biology of the Cell .... ..................... 2
BISC 413 Experimental Genetic and Evolotionary Biology ... 2
A literature-based 600 level course ..... ..... ... ........ ... ............................. 3-4
Biology electives at the 300 -level or above to total 33 credit hours in Biological
Sciences. Students cannot take BISC 321 for credit toward the Biology B A
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

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

## DEGREE: BACHELOR OF ARTS <br> 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 81 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 302 General Ecology ........... ........................................................... 3
BISC 306 General Physiology ............................................ 3
BISC 305 Cell Physiology
$\begin{array}{lll}\text { or } \\ \text { BISC } 401 \text { Molecular Biology of the Cell } & \text { Gen................................................ } \\ 3\end{array}$
BISC 403 Genetic and Evolutionary Biology ……......................................... 3
Two courses in experimental biology
ONE of:
BISC 312 Quantitative Ecology ............................... .............. 2
BISC 316 Experimental General Physiology … .......................................... 2
And ONE of:
BISC 315 Experimental Cell Biology ......................................................... 2
BISC 411 Experimental Molecular Biology of the Cell
BISC 413 Experimental Genetic and Evolotionary Biology ......................... 2
A literature-based 600 level course ................ .................. ........................ 3-4
Biology electives at the 300-level or above to total 33 credit hours in Biological Sciences Students cannot take BISC 321 for credit toward the Biology B A
Biology electives at the 300-level or above, including
13-14
one 600-level course other than Independent Study.
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

Geology Elective ...................... ............................. ..... .... .. 3-4
EDUC 413 Educational Psychology - Social Aspects ................................... 3
EDUC 414 Educational Psychology - Cognitive Aspects ................... 3
EDUC 419 Diversity in the Classroom ................ ................................... 3


EDUC 430 Classroom Management ..... . ........................................ 1
SCEN 491 Teaching Science in Secondary Schools ............. ................... 4
Grade of $C$ - or better required in all required EDUC courses and SCEN 491
To be eligible to student teach, Biological Sciences Education students must
have a g.p a of 275 in their biology major and an overall g.p a of 2.5
They must also pass a teacher competency test as established by the Univer-
sity Council on Teacher Education. Students must consult the teacher education program coordinator (see list on p. 184) to obtain the student teaching application and other information concerning student teaching policies
CREDITS TO TOTAL A MINIMUM OF

HONORS BACHELOR OF ARTS: BIOLOGICAL SCIENCES OR BIOLOGICAL SCIENCES EDUCATION
The recipient must complete:

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

## DEGREE: BACHELOR OF SCIENCE

## MAJOR: BIOLOGICAL SCIENCES

## CONCENTRATION: ECOLOGY AND ORGANISMIC BIOLOGY

An Ecology and Organic (EOB) admission committee advises students in the program Requirements for admission are: 1) 3.0 GPA in prerequisite courses listed below; 2) support of a faculty member for the required research activity In some cases the committee may interview the student as part of its determination of admission. Application will be in the spring of the sophomore year.
CURRICULUM
CREDITS
Prerequisite courses for admission to the EOB concentration:
BISC 207/208 Introductory Biology I and II
8

CHEM 321 Organic Chemistry ..................................................... 4
MATH 241 Analytic Geometry and Calculus A .................................. 4
BISC 302 General Ecology or BISC306 General Physiology ........ ......... 3
Required lecture courses:
BISC 302 General Ecology .... .................... ................................. 3
$\begin{array}{ll}\text { BISC } 305 & \text { Cell Physiology or BISC401 Molecular Biology of the Cell } \\ \text { BISC } 306 & \text { General Physiology }\end{array}$ 3
$\ldots$

Required courses in experimental biology (two must be taken; the others can be electives)
BISC 312 Quantitative Ecology ........................................... 2
BISC 315 Experimental Cell Biology ... .............. ......... ................ 2
BISC 316 Experimental Physiology................................... 2
BISC 411 Experimental Molecular Biology of the Cell ................................. 2
BISC 413 Experimental Genetic and Evolutionary Biology ..................... 2
BISC 4XX Senior Thesis ( $3+3$ credit hours) .................................... 6
Electives from the following groups to total 43 credit hours in the major. Note that many courses have prerequisites. Courses must be taken from a minimum of two of the groups and have approval of the faculy research advisor. One of the elective courses must be from the list of approved 600 level courses based on the primary liferature
ECOLOGY:
BISC 480 Vertebrate Natural History ....................................... 3
BISC 495 Evolution ..... ....... .... ........... .... .... .......... ............. 3

BISC 641 Microbial Ecology..... ............................................................ 3
BISC 656 Evolutionary Genetics ............................................................ 3
ORGANISMIC BIOLOGY:
BISC 300 Introduction to Microbiology .............................................. 4
BISC 442 Vertebrate Morphology .................. ... ...................... 4
BISC 605/606 Advanced Mammalian Physiology .. ............................ 8
BISC 626/627 Neuroscience I and II........................................... 7
BISC 630 lchthyology .... ............................... .... .......... .............. 4
BISC 642 Advanced Vertebrate Anatomy .a................................ 4
BISC 660 Environmental Physiology ... .............................................. 3
BISC 661 Biology of Striated Muscle . ....................................... 3
BISC 675 Cardiopulmonary Physiology ................ ............................ 3
Courses in experimental biology not selected to meet the requirement in Ill:
BISC312, BISC315, BISC316, BISC411 or BISC413

## APPROVED ELECTTVES FROM OTHER DEPARTMENTS

A total of six credits from a list of approved courses can be applied towards the credits required for the major Courses on this list are approved by the Undergraduate Programs Committee of the Department of Biological Sciences

## DEGREE: BACHELOR OF SCIENCE <br> MAJOR: BIOLOGICAL SCIENCES <br> CONCENTRATION: CELL \& MOLECULAR BIOLOGY \& GENETICS

A Cell and Molecular Biology \& Genetics (CMG) admission committee advises students in the program. Requirements for admission are: 1) 3.0 GPA in prerequisite courses listed below; 2) support of a faculty member for the required research activity. In some cases the committee may interview the student as part of its determination of admission Application will be in the spring of the sophomore year.
CURRICULUM
CREDITS
Prerequisite courses for admission to the CMG concentration:
BISC 207/208 Introductory Biology | and II .....  8
CHEM 103/104 General Chemistry ..... 8
CHEM 321 Organic Chemistry .....
MATH 241 Analytic Geometry and Calculus A ..... 4
One of the following:
BISC 300 Introduction to Microbiology ..... 4
BISC 302 General Ecology ..... 3
BISC 306 General Physiology ..... 3
Required lecture courses:
BISC 305 Cell Physiology ..... 3
BISC 401 Molecular Biology of the Cell ..... 3
BISC 403 Genetic and Evolutionary Biology ..... 3
HEM 527 - Introductory Biochemistry (or equivalent) ..... 3
Required courses in experimental biology:
BISC 315 Experimental Cell Biology
BISC 411 Experimental Molecular Biology of the Cell ..... 2
BISC 413 Experimental Genetic and Evolutionary Biology ..... 6

Electives from the following groups to total 43 credit hours in the major. Note that many courses have prerequisites. Courses must be taken from a minimum of two of the groups and have approval of the faculty research advisor. One of the elective courses must be from the list of approved 600 level courses based on the primary literature.

GENETICS
BISC 491 Human Molecular Cytogenetics ......................................................... 3

BISC 656 Evolutionary Genetics ..................................... .................... 3
BISC 658 Developmental Genetics ........................................ 3

MOLECULAR BIOLOGY AND BIOCHEMISTRY
BISC 602 Molecular Biology of Animal Cells ........................................... 3
BISC 679 Virology ............................................................................................ 3
CHEM 642 Biochemistry. .................................................................. 3
CELL BIOLOGY
BISC 471 Immunology ............ ......... ................................... ........ 3
BISC 408 Histology (or BISC617 Electron Microscopy) .................... 4/3
BISC 612 Advanced Cell Biology.
PHYSIOLOGY
BISC 605/606 Advanced Mammalian Physiology ............................................ 8
BISC 626/627 Neuroscience I and II ............................................................... 7
BISC 660 Environmental Physiology ......................................................................... 3
BISC 675 Cardiopulmonary Physiology ..................................................................
BIOINFORMATICS
ANSC 644 Bioinformatics .................................................. 3
BISC 618 Computer Imaging in Biology .... ............................................ 3
A computer science course beyond the introductory level

## APPROVED ELECTIVES FROM OTHER DEPARTMENTS

A total of six credits from a list of approved courses can be applied towards the credits required for the major Courses on this list are approved by the Undergraduate Programs Committee of the Department of Biological Sciences

## DEGREE: BACHELOR OF SCIENCE <br> 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 ................................ 3
multicultural, ethnic, and/or gender-related content (see p 57)

## COLLEGE REQUIREMENTS

## Writing: (minimum grade C-)

 3A 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 83.)

## Foreign Language:

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 85)
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 CURRICULUM

Required lower level Biology courses
BISC 280 Fundamentals of Biotechnology ....................................................... 1

BISC 208 Introductory Biology II ....... ... ................................................................ 4
BISC 401 Molecular Biology of the Cell ............................................. 3
Genetic and Evolutionary Biology
BISC 305 Cell Physiology ............. ........................ .. .. .............. . 3

BISC $300 \quad$| Introduction to Microbiology |
| :--- |
| Total credits |

BIOLOGY BREADTH REQUIREMENT

## HONORS BACHELOR OF SCIENCE:

BIOLOGICAL SCIENCES - BIOTECHNOLOGY
The recipient must complete:

1. All requirements for the Bachelor of Science degree in Biological Sciences - Biotechnology.
2. All of the University's generic requirements for the Honors degree (see page 43 of this catalog)

## REQUIREMENTS FOR A MINOR IN BIOLOGY

The required courses for the Minor in Biological Sciences are: BISC207 and 208
Two courses from BISC300, 302 (or 321) 306 (or 276), 401, 403
Additional BISC courses at the 300 level or above to total 19 credits in biology CHEM 103 and 104 (or CHEM 101 and 102)
CHEM 213 (or 321)
The requirements include any of the necessary prerequisites for the required courses A grade of C - or better is required in all biology courses taken for the minor, and a $D$ (not a $D$-) is required for all non-biology courses for the minor

## BLACK AMERICAN STUDIES

Black 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. It explores the social, political, and economic roots of contemporary problems, seeking to relate them 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. 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

$\mathbf{S t u d e n t s}_{\text {applying for the minor in Black American Studies must have }}$ 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

The 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 Chemistry, 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
CURRICUIUMSee page $\mathbf{8 1}$ for University and College requirements.
MAJOR REQUIREMENTS
A minimum grade C - is required in each CHEM course required for theB. A. degree in Chemistry
CHEM 103/104 General Chemistry ..... 8
CHEM 220/221 Quantitative Analysis and Laboraiory. ..... 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 Laboratoryor
CHEM 443/444/445 Physical Chemistry and Laboratory. ..... 7

| One of the following eight courses: |  |
| :---: | :---: |
| CHEM 457 In | Inorganic Chemistry |
| CHEM 527 In | Introductory Biochemistry |
| CHEM 610 History of Chemistry | History of Chemistry |
| CHEM 620 Analytical Spectrosco |  |
| CHEM 622 Electroanalytical Chemis |  |
| CHEM 623 Chemometrics |  |
| CHEM 633 Advanced Organic Chemistry: Phy |  |
| CHEM 634 Advanced Organic Chemistry: Synhesis |  |
| MATH 241 A | Analytic Geomerry and Calculus A |
| $\begin{array}{ll}\text { MATH } \\ \text { MATH } 242 & \text { Analytic Geometry and Calculus } A \\ \text { Analytic Geometry and Calculus B (strongly recommended) }\end{array}$ |  |
| PHYS 201/202 Introductory Physics I and lior |  |
|  |  |
| PHYS 207/208 Fundamentals of Physics I and II |  |
| ELECTIVES |  |
| Afier 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 |  |
| See page 81 for University and College requirements. |  |
| MAJOR REQUIREMENTS |  |
| CHEM courses to total 30 credits minimum CHEM 111/112 General Chemistry |  |
|  |  |
| CHEM 119/120 Quantitative Chemistry |  |
| CHEM 103/104 General Chemistry .i.............................. 8 |  |
|  |  |
| CHEM 220/221 | /221 Quantitative Analysis and Laboratory |
|  |  |
| CHEM 213 Elementary Organic Chemistry CHEM 321/322 Organic Chemistry |  |
|  |  |
| CHEM 331/332/333 Organic Chemistry and Laboratory |  |
| CHEM 437/438 Instrumental Methods and Laboration |  |
| CHEM 418/445 Introductory Physical Chemistry and Laor |  |
| CHEM 443/445 Physical Chemistry and Laboratory |  |
| CHEM 214/216 Elementary Biochemistry and Laboratory Chemistry courses selected with consent of advisor |  |
|  |  |
| BISC 207 Int | Introductory Biology 1 |
| GEOL 105/115 Geological Hazards and Laboratory ..... |  |
| MATH 241/242 | /242 Analytic Geometry and Calculus A and B ....... ......... 8 |
| PHYS 201/202 Introductory Physics I and II..................... .............. 8 |  |
| PHYS 207/208 Fundamentals of Physics I and II |  |
| EDUC 413 Ed | Educational Psychology - Social Aspects |
| EDUC 414 Ed | Educational Psychology - Cognitive Aspects .................. 3 |
| EDUC 419 Div | Diversity in the Classroom |
| EDUC 420 Re | Reading in the Content Areas ................ ..... .......... 1 |
| EDUC 400 Stud | Student Teaching ...... ......... .... ........ ........... .......... 9 |
| EDUC 430 Cla | Classroom Management |
| SCEN 491 Tec | Teaching Science in Secondary Schools |

Grade of C - or better required in all required CHEM and EDUC courses and SCEN 491
To be eligible to student teach, Chemistry Education students must have a g p.a of 2.75 in their chemistry maior and an overall g pa. 2.5 They must also pass a teacher competency test as established by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on $p$ 185) to obtain the student application and other information concerning student teacher policies

CREDITS TO TOTAL A MINIMUM OF

## 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 <br> UNIVERSITY REQUIREMENTS

CREDITS

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-)
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 83)

## Foreign Language:

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 85)
A total of twenty-one credits from Groups A, B and C i
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
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

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

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..................................
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

## DEGREE: BACHELOR OF SCIENCE <br> MAJOR: CHEMISTRY CONCENTRATION: ENVIRONMENTAL CHEMISTRY

## CURRICULUM

CREDITS

## 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:
BISC 207/208 Introductory Biology I/II
GEOG 152/220 Climate and Life/Meteorology
GEOL 105/115 Geological Hazards and Laboratory and
GEOL 107 General Geology
Two of the following three-credit courses:
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

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 calculafion of the chemistry course GPA ( 200 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 <br> MAJOR: BIOCHEMISTRY

CURRICULUM

## UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade $C$ )
Three credits in an approved course or courses stressing ..........

## COLLEGE REQUIREMENTS

## Writing: (minimum grade C-)

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 83.)

## Foreign Language:

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 85)
A total of twenty-one credits from Groups A, B and C is

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 333/334 Organic Chemistry Majors Laboratory I and II .... 4
CHEM 342 Introduction to Biochemistry ........ ...................................... 3

or
CHEM 443 Physical Chemistry
CHEM 437/438 Instrumental Mehods and Laboratory ... ......................... 4
CHEM 641 Biochemistry..............................................................
CHEM 419 Introductory Physical Chemistry .................................................. 3
CHEM 444 Physical Chemistry
CHEM 445 Physical Chemistry Laboratory ....................................... 1

Advanced Chemistry or Biochemistry course at 600-level ................ 3
Two Advanced Biochemistry courses at 600-level 6.8

Two Biology courses selected from the following:
BISC 301 Molecular Biology of the Cell (4)
BISC 303 Genetic and Evolutionary Biology (4)
BISC 601 Immunochemistry (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

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 Immunochemistry (4)

## Related Work

MATH 241 Analytic Geometry and Calculus A ........................................... 4
MATH 242 Analytic Geometry and Calculus B (strongly recommended)... 4
BISC 207/208 Introductory Biology I and II .......... ................................ 8
PHYS 201/202 Introductory 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

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:
CHEM 103, 104, for 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 coutse 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/johnc/udcomm html

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

## CURRICULUM

## See page 81 for University and College requirements.

 MAJOR REQUIREMENTSNOTE: 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 250 Electronic Communication Skills 1
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 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
C.ommunication course

One additional 400 -level COMM course, not COMM 466 or COMM $464 \ldots . . .3$
Six to 15 COMM elective credits................................................. 6-15
for a total of not less than 37 nor more than 45 COMM credits. These
may be taken from the other concentration or from the following:
Interpersonal Communication Electives
COMM 200 Topics: Human Communication Systems
COMM 251 The Development of Verbal Communication
COMM 343 Topics: Interpersonal Communication
COMM 438 Speech, Language and Communication
COMM 440 Topics in Interpersonal Communication
COMM 452 Communication and Persuasion

## Political Communication

COMM 319 Topics: Polifics and Broadcast Journalism
COMM 340 Politics and the Media
COMM 425 Advanced Topics: Politics and Broadcast Journalism

## 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
COMM 401 Careers in Communication
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

## DEGREE: BACHELOR OF ARTS <br> MAJOR: COMMUNICATION <br> CONCENTRATION: MASS COMMUNICATION

## CURRICULUM

CREDITS

## See page 81 for University and College requirements. <br> \section*{MAJOR REQUIREMENTS}

NOTE: All $4 X X$ 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 250 Electronic Communication Skills...
COMM 256 Principles of Communication Theory
COMM 301 Introduction to Communication Research Methods............................ 3
COMM 330 Communication and Interpersonal Behavior … ............................ 3
COMM 345 Legal Issues of the Mass Media
COMM 350 Public Speaking
COMM 370 Theories of Mass Communication
COMM 424 Media Message Analysis......

One additional 400-level COMM course, not COMM 466 or COMM $464 \ldots \ldots 3$
Six to 15 COMM elective credits .... ....... . ................................
for a total of not less than 37 nor more than 45 COMM credits. These
may be taken from the other concentration or from the following:
Interpersonal Communication Electives
COMM 200 Topics: Human Communication Systems
COMM 251 The Development of Verbal Communication
COMM 343 Topics: Interpersonal 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

## Political Communication

COMM 319 Topics: Politics and Broadcast Journalism
COMM 340 Politics and the Media
COMM 425 Advanced Topics: Politics and Broadcast Journalism
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
COMM 401 Careers in Communication
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

## 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. Nine of the Honors credits in the major must be at the 300 -level or above and must include at least one 400 -level COMM course.

## COMPARATIVE LITERATURE

$\mathbf{B}_{\text {oth }}$ 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.

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

> Coordinator: Professor Judy P McInnis
> Foreign Languages and Literatures
> Telephone: (302) 831-2597

E-mail: imcinnıs@udel.edr

## DEGREE: BACHELOR OF ARTS

## MAJOR: COMPARATIVE LITERATURE

CURRICULUM CREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS
CLMT 202 Biblical and Classical Literature ....................................................
(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 ............. 9 approved by the advisor.
Nine credits in each of two national literatures studied in ..................... 18
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 fouryear 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 coursework and research

Telephone: (302) 831-2712
E-mail: ugradprgm@cis udel edu
nlp://Www.cis udel.edu

## DEGREE: BACHELOR OF ARTS MAJOR: COMPUTER AND INFORMATION SCIENCES

CURRICULUM
See page 81 for University and College requirements. MAJOR REQUIREMENTS
CISC 181 Introduction to Computer Science............ .... ............
(Assumes some prior rrogramming exxerience. Students without
arsir experience should first take CISC rios)

| CISC 220 | Data Structires |  |
| :--- | :--- | :--- | :--- |
| CISC 200 | Machine Organization and Assembly Language | 3 |

CISC 280 Program Development Techniques ..... .................... 3
Eighteen credits of Computer Science numbered 301 or ............................. 18
above, approved by the student's advisor.
MATH 210 Discrete Mathematics I...... ................................. 3
MATH 241 Analytic Geometry and Calculus A .................. 4

## 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 <br> MAJOR: COMPUTER AND INFORMATION SCIENCES

Three credits in an approved course or courses stressing ...................
multicultural, ethnic, and/or gender-related content (see p 57 )
COLLEGE REQUIREMENTS
Writing: (minimum grade $\mathrm{C}-1$
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 83.)
Breadth Requirements (See page 85)
Six credits from each of the following groups
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 Science3
(Assumes some prior programming experience Students without
prior experience should first take CISC 10.5)
CISC 220 Data Structures
CISC 260 Machine Organization and Assembly Language
Machine Organization and Assembly Language ....................
CISC 280 Program Development Techniques3

CISC 301 Elements of Logic and Automata Theory
CISC 320 Introduction to Algorithms ............................................................ 3
CISC 360 Computer Architecture … ........................................................ 3

CISC 475 Object-oriented Software Engineering .................... ........... 3
Twelve credits of Computer Science numbered 301 or above, .................... 12 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 12 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. In order to graduate with a B.S. in Computer and Information Sciences, a student must have a minimum grade of C- in the following courses: CISC 181, CISC 220, CISC 260 and CISC 280
MATH 205 Statistical Methods ................................. . ........................... 4

MATH 241 Analytic Geometry and Calculus A ............. ........................ 4
ENGL 312 Written Communications in Business ............. . ................. 3
ONGL 410 Technical Writing
CSCC 355 Computers, Ethics and Society.......................................................... 3
CPEG 210 Introduction to Combinational Logic .................................... 2
CPEG 211 Introduction to Sequential Circuits ..................... 2
CPEG 202 Introduction to Digital Systems ..................................................... 4
One of the following sequences of laboratory science courses: ......... .......... 8
PHYS 207/208 Fundamentals of Physics
or
CHEM 103/104 General Chemistry
or
BISC 207/208 Introductory Biology
GEOL 105/115 Geological Hazards and taboratory
and
GEOL 107 General Geology
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: <br> COMPUTER AND INFORMATION SCIENCES <br> HONORS BACHELOR OF SCIENCE: <br> COMPUTER AND INFORMATION SCIENCES

The recipient must complete:

1. All requirements for the Bachelor of Arts degree in Computer and Information Sciences or the Bachelor of Science in Computer and Information Sciences
2. All of the University's generic requirements for the Honors Degree (see page 43 of this catalog).
Note: Certain graduate courses approved for this purpose by the Department (e.g., CISC 601, 621, 662, 663) will count as Honors courses in the major
3. The student must have a cumulative grade point index of at least 3.4 at the time of registration for UNIV 401.

## 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. Coordinator: Professor Theodore E. D Braun
> Foreign Languages and Literatures
> Telephone: (302) 831-2038
> E-mail: braun@udel.edu
> http://www.udel edu/fllt/lang/french/euro html

## DEGREE: BACHELOR OF ARTS

## MAJOR: CONTINENTAL EUROPEAN STUDIES

A minimum grade of $C$ - is required in all courses CURRICULUM
See page 81 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 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
One of the following two courses: ...... .... ........ .... ... ...... ............. ............. 3
POSC 310 European Governments
POSC 372 East Central European Politics
Two of the following:
POSC 432 Political Systems of the Post-Soviet Union
POSC 441 Problems of Western European Politics by Country
POSC 442 Problems of Western European Politics
POSC 300 - or 400 -level topics courses with European content,
as approved by the program advisor

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

## 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

$\mathbf{S}_{\text {ee Geology }}$

## 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
CURRICULUMCREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS ( $\mathbf{3 1}$ or 32)
A minimum grade of $C$ - is required in all courses.
One of the following options (A or B):
A. Concentration in China or Japan - (7 credits total)
One of the following two courses:4
CHIN 107 Chinese III-Intermediate
APN 107 Japanese Ill-Intermediate
Plus 3 credit hours at the 200 -level or above in3
Chinese or in Japanese (including JAPN 200, 205, 206, or 209)or
B. Joint Chinese/Japanese Concentration (8 credits total)
4
JAPN 107 Japanese III - Intermediate ..... 4
For both concentrations:
HIST 137 East Asian Civilization: China ..... 3
HIST 138 East Asian Civilization: Japan
PHIL 310 Chinese Religion and Philosophy3
POSC 312 East Asian Political Systems ..... 3
Choose one of the following three courses: ..... 3
ARTH 155 Asian Art
JAPN 204 The Art of Japanese Calligraphy
MUSC 206 Music of China, Korea, and Japan
Nine credits of major electives in the Humanities and ..... 9consuliation with the student's Advisor
These courses include, among others: ARSC 130 (may be repeated when topic differs), ARTH 155 (if not selected as a required course), ARTH 156, ARTH 233, ARTH 234, ARTH 237, FLLT 328 (may be repeated when topic differs), FLLT 380 (may be repeated when topic differs), FLLT 338, HIST 270, HIST 333 HIST 368 (restricted to sophomores and above), HIST 369 (restricted to sopho mores 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

## 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 coutses at the 300 -level or above
3. The cumulative grade point average for all courses in major must be at least 3.400 .
4. For the Honors Degree with Distinction in East Asian Studies, the six credit hours of thesis would be in addition to the 31 or 32 credit hours required for the major, to yield a total of 37 or 38 credit hours.

## 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, 224 John Munroe Hall, dpong@udel.edu, (302) 831-2371.

## EAST ASIAN STUDIES MINOR WITHOUT LANGUAGE

## Number of credits required:

A minimum grade of C - is required in all cousses.
$\mathbf{6}$ 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
$\mathbf{6}$ 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 polifical 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 $3 x x \quad$ 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. Students in the Economics major have the option of selecting a concentration in Applied Economics or in Economic Theory and Econometrics. In addition, students may choose a major in Mathematics and Economics leading to the Bachelor of Science degree; see separate listing in this chapter.

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

## DEGREE: BACHELOR OF ARTS <br> MAJOR: ECONOMICS

CURRICULUM
CREDITS
See page 81 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 301 Quantitative Microeconomic Theory

ECON 303 Intermediate Macroeconomic Theory
Five Economics courses, at least two of which are at or above ........ .......... 15 the 400 -level
MATH 201 Introduction to Statistics I. ... ........ ... ... ........ ... .... ........ .. .... 3
MATH 202 Introduction to Statistics II. .. ......................... .................... 3
Nine credits chosen from any 300 -level or higher course in ... ...... ... ............. 9
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.
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
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 slatements of requirements, course descriptions, and departmental policies are available in the department office

## DEGREE: BACHELOR OF ARTS

MAJOR: ECONOMICS

## CONCENTRATION: APPLIED ECONOMICS

The requirements for the major in Economics must be met The following requirements must be met in place of the requirement for five economics courses, with at least two at the 400 -level:
ECON 422/423 Econometric Methods and Models I and II
ECON 822/823 Econometric Theory/Seminar in Econometrics
Two Economics courses at the 300 - or 400 -level
One Economics course at the 400 -level
(but nof ECON 403, ECON 405, ECON 408, or ECON 411)
One Economics course at the 400 -level, or at the 600 -level by approval (but not ECON 403, ECON 405, ECON 408, or ECON 411)
Twelve credits of course work in the quantitative area, including the following 12 ACCT 261 Introduction to Business Information Systems II (prerequisite ACCT 160)
Six credits in MATH at or above the 200-level (except MATH 201, MATH
202, MATH 205, MATH 250, MATH 251, MATH 252, or MATH 253)
Any one of the following: ACCT 208, BUAD 306, BUAD 346, BUAD
446 , BUEC 430 , BUEC 431 , ECON 415 , ECON 422, ECON 423 ,
ECON 426, MATH 300, CISC courses at or above the 300 -level

## DEGREE: BACHELOR OF ARTS <br> MAJOR: ECONOMICS <br> CONCENTRATION: ECONOMIC THEORY AND ECONOMETRICS

The requirements for the major in Economics must be met The following requirements must be met in place of the requirement for five economics courses, with at least two at the 400 -level:

ECON 422/423 Econometric Methods and Models I and II ............... . 6 Or 8 EON 822/823 Econometric Theory/Seminar in Econometrics
Three Economics courses af the 300 - or 400 -level 9
One Economics course at the 400 -level, or a Mathematics course at the 300-level (but not ECON 406, ECON 426, ECON 430, ECON 441, ECON 443, ECON 461, or ECON 463)
One Economics course at the 400 -level, or at the 600 -level by approval (but not ECON 403, ECON 40.5, ECON 408, or ECON 411 ).
Twelve credits of course work in the quantitative area, including the following ... 12
ACCT 261 Introduction to Business Information Systems II (prerequisite ACCT 160)
Six credits in MATH at or above the 200-level (except MATH 201, MATH
202, MATH 205, MATH 250, MATH 251, MATH 252, or MÁTH 253)
Any one of the following: ACCT 208, BUAD 306, BUAD 346, BUAD 446, BUEC 430, BUEC 431, ECON 415 , ECON 422, ECON 423, ECON 426, MATH 300, CISC courses at or above the 300-level

## DEGREE: BACHELOR OF ARTS MAJOR: ECONOMICS EDUCATION

CURRICULUM CREDITS

See page 81 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

Or 301 Quantitative Microeconomic Theory .............................. 3

ECON 303 Intermediate Macroeconomic Theory
Five Economics courses, at least two of which are at or above ............ 15 the 400 -level
POSC 150 The American Political System ...... ..... ......... ... .............. 3

HIST 104 World History II ...... ... ....... ..................... ..... .... ........ . . 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 413 Educational Psychology - Social Aspects .............................. . 3
EDUC 414 Educational Psychology - Cognitive Aspects .................... 3
EDUC 419 Diversity in the Classroom ........... .............. ......................... 3
HIST 491 Planning a Course of Instruction................................. 3
HIST 493 Seminar: Problems in Teaching History and..................... 3
EDUC 420 Reading in the Content Areas
EDUC 400 Student Teaching ……............................................................ 9
EDUC 430 Classroom Management ..... ................................... 1
Grade of C - or better required in all required EDUC and HIST courses
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 . They must also pass a teacher competency test as established by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on $p$ 184) to obtain the student teaching application and other information concerning student teaching policies.
CREDITS TO TOTAL A MINIMUM OF .

## 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 creative writing, 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

Students may declare or withdraw from a concentration at any time To be eligible to take News Writing and Editing (ENGL 307) students must have received a B or better in ENGL 110. Admission to the Creative Writing concentration is contingent upon successful completion of an introductory level writing workshop in poetry, fiction, or script writing, submission of a dossier demonstrating the quality of writing in at least one genre (poetry, fiction, script writing), and recommendation from a creative writing faculty member. To be eligible to student teach in the English Education program, students must maintain a minimum overall grade point index of 2.75 and 30 in the major

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 English education program

Telephone: (302) 831-2361
http://www.english udel.edu/

## DEGREE: BACHELOR OF ARTS MAJOR: ENGLISH

CURRICULUM
CREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS
Five of the following seven courses:
ENGL 202 Biblical and Classical Literature
ENGL 205 British Literature ]
ENGL 206 British Literature ॥
ENGL 300 Texts and Contexts
ENGL 324 Shakespeare
NGL 340 or ENGL 341 American Literature

Twelve credits at the 300 -evel or above distributed as follows:
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
English courses at or above the 200 -level
All English majors must take at least one ENGL 480 seminar and can count only one 200-level elective course lexcluding 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

## DEGREE: BACHELOR OF ARTS

MAJOR: ENGLISH
CONCENTRATION: BUSINESS/TECHNICAL WRITING

## CURRICULUM

See page 81 for University and College requirements.

## MAJOR REQUIREMENTS

Five of the following seven courses: ... ................................................... 15
ENGL 202 Biblical and Classical Literature
ENGL 205 British Literature I
ENGL 206 British Literature ll
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
ENGL 464 Internship in Business/Technical Writing ........................... 3

## Optional:

ENGL 413 Topics in Technical Writing or one other EBT course .................. 3
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

## DEGREE: BACHELOR OF ARTS <br> MAJOR: ENGLISH <br> CONCENTRATION: CREATIVE WRITING

CURRICULUM
See page 81 for University and College requirements.
MAJOR REQUIREMENTS

Five of the following seve cous
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

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 liferature 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. 3

One course at the 200 -level or above in a literary genre
(novel, short story, poetry, drama) to be chosen in consultation with the concentration advisor
At least three courses chosen from among the following courses, in two genres: .. 9
ENGL 304 Poetry Writing
ENGL 305 Fiction Writing
ENGL 306 Topics in Writing: Scriptwriting
ENGL 404 Advanced Poetry Writing
ENGL 405 Advanced Fiction Writing
Note: The above courses all require permission of the instructor
Requirements for entrance into the concentration:
Contact Professor Cruce Stark (302) 831-3652
ENGL 307, 308, 309, 310, 407, 408, 409 count toward the English major only as part of the concentration in Journalism; ENGL 312, 410, $411,412,413,414,415,464$ 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

## DEGREE: BACHELOR OF ARTS <br> MAJOR: ENGLISH <br> CONCENTRATION: DRAMA

CURRICULUM
CREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS
ENGL 324 Shakespeare
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 fallowing 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
Three additional courses (approved by the Faculty Advisor), ........................ 9 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
DEGREE: BACHELOR OF ARTS
MAJOR: ENGLISH
CONCENTRATION: ETHNIC AND CULTURAL STUDIES
CURRICULUM
CREDITS
See page 81 for University and Coilege requirements.
MAJOR REQUIREMENTS
ENGL 300 Texts and Contexts ..... 3
Four of the following six courses: ..... 12
ENGL 202 Biblical and Classical Literature
ENGL 205 British LiteratureENGL 206 British Literature II
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 liter-ature 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
ENGL 379 Introduction to Ethnic and Cultural Studies. ..... 3
ENGL 382 Studies in Multicultural Literature (may be repeated for credit when topics differ) ..... 3
Two other courses at the 300 -level or above, to be chosen in consultation with the student's concentration advisor. ..... 6
All English/Ethnic and Cultural Studies majors must take at least one ENGL480 seminar and can count only one 200 -level course toward the minimumnumber of credits for the major.
CREDITS TO TOTAL A MINIMUM OF ..... 124
DEGREE: BACHELOR OF ARTS
MAJOR: ENGLISH ..... CONCENTRATION: FILM
CURRICULUM
CREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS
Five of the following seven courses: ..... 15British literatura
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 liter-
ature or a course in literature between 1700 and 1900b. A course in Modern literature or a course in culfural and theoreticalstudies.
c A literature course.
ENGL 217 Introduction to Film ..... 3
ENGL 317 Film History .....  3
ENGL 318 Studies in Film (variable content, may be repeated once) ..... 3
ENGL 417 Film Theory and Criticism ..... 3
All English/Film majors must take at least one ENGL 480 seminar andcan count only one 200 -level course toward the minimum number ofcredits for the major.
ELECTIVES
After required courses are completed, sufficient elective credits musi betaken 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
See page $\mathbf{8 1}$ for University and College requirements. MAJOR REQUIREMENTS

Five of the following seven courses:
NGL 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 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

ENGL 307 News Writing and Editing
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:
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

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

See page 81 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 206 British Literature II ........ ................. . ................... 3
ENGI 300
ENGL 302 Advanced Composition
ENGL 324 Shakespeare
ENGL 340 American Literature to the Civil War
ENGL 341 American Literature: Civil War to World War II ........................... 3
ENGL 390 English Linguistics
British literature before 1900 ( 300 -level or above)
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
LING 101 Introduction to Linguistics ............................................. 3
EDUC 413 Educational Psychology - Social Aspects ... ... ................... 3
EDUC 414 Educational Psychology - Cognitive Aspects ................... 3
EDUC 419 Diversity in the Classroom.
ENGL 183 Grammar for English Teachers
ENGL 481 Seminar in Teaching English
ENGL 482 Seminar in Teaching English I
ENGL 483 Seminar in Teaching English II
EDUC 400 Student Teaching
EDUC 420 Reading in the Content Areas
EDUC 430 Classroom Management
Grade of C- or better required in all required EDUC and ENGL courses.
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 275 . They must also pass a feacher competency test as estabilished by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on p. 184) 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

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. To earn an Honors B A. Degree in English (all concentrations) or in English Education, the recipient must complete:

1. All of the requirements for the B A. degree in English (and, where appropriate, concentration requirements) or in English Education.
2. All of the University's generic requirements for the Honors Degree
3. Nine of the Honors credits in the major must be in ENGL courses at the 300 level or above, and these must include at least one ENGL 480 seminar course

## 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

$\mathbf{S}_{\text {ee }}$ 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.

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 hightech 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.filt.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 (including a concentration in Classics), and Spanish in grades $\mathrm{K}-12$ 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 107level. 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 100level 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 London, Paris, Granada (Spain), and Edinburgh (Scotland), some programs 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 Costa Rica, Germany (Bayreuth) and Italy (Siena) Begin-
ning and intermediate-level students may participate in winter and/or summer session programs in Argentina, Costa Rica, France, Germany, Greece, Italy, Japan, Martinique, Mexico, 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

$S_{\text {pecial }}$ 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 up to 6 credits by examination for language courses at the 200 -level and above, including but not exceeding one "conversation" class. 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 (including Classics concentration)
- Spanish Education
- History/Classics, French, German, Russian, or Spanish
- French, German, or Spanish/Political Science


## Honors Degree Requirements

To receive the B.A. Honors degree, 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 Lan-
guages and Literatures or the B A. in Foreign Language Education must be at the 300 -level or above
2. For the Honors Degree with Distinction, the Honors thesis for the B A in Foreign Language Education 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.
3. For the joint degree with History, at least six of the Honors credits in the major must be at the 300 -level or above
4. 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

(This program can now be pursued as a concentration of the BA in Liberal Studies.)

## DEGREE: BACHELOR OF ARTS <br> MAJOR: FOREIGN LANGUAGES AND LITERATURES CONCENTRATION: CLASSICS

CURRICULUM
CREDITS
See page 81 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......... 18
at or above the 300 -level, and at least six credits in each language.
Biblical and Classical Literature


Six credits from 200, 300-, or 400-level courses (including ....... ........... ... 6
courses in translation) in Foreign Languages and Literatures, Comparative Literature, Linguistics, or other departments, selected in consultafion with 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 

## DEGREE: BACHELOR OF ARTS <br> MAJOR: FOREIGN LANGUAGES AND LITERATURES CONCENTRATION: FRENCH STUDIES

For the different options available under the French Studies concentrafion (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 81 for University and College requirements. MAJOR REQUIREMENTS
Twelve credits in FREN electives at the 200-level and above
Twelve credits in FREN literature of the 300 or 400 -level
(at least six credits must be at the 400 -levell
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 His-
tory, Comparative Literature, English, Foreign Languages and Litera-
tures, 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

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
See page 81 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:
FREN 308 Contemporary France II
FREN 32.5 French Civilization I
FREN 326 French Civilization II
FREN 4.53 French Civilization III
One of the following courses: 3
FREN 401 Advanced French Grammar
FREN 402 Advanced French Composition
FREN 406 Advanced French Language
LING 440 Structure of French
Six credits in French Literature at the 400-level .......................... 6
EDUC 413 Educational Psychology - Social Aspects ... ................... 3
EDUC 414 Educational Psychology - Cognitive Aspects ... ........... ...... 3
EDUC 419 Diversity in the Classroom .................................... 3
EDUC 400 Student Teaching ............
EDUC 430 Classroom Management
FIT/ING 421 Methods of Teaching Foreign
FLIT/ING 422 Language Syllabus Design
LING/FLLT 424 Second Language Testing
Grade of C- or better required in all required EDUC, FLLT, and LING courses
For Foreign Language in Elementary School (K-12 certification) option, required courses in addition to above:
FLLT/EDUC 429 Merhods of Teaching Foreign/Second Languages in Elementary Schools.
EDUC/LING 476 Second Language Acquisition and Bilingualism .............
EDUC 202 Human Development I: Grades K-4 ................... ......... 3
To be eligible to student teach, Foreign Language Education students must have a g.pa. of 3.0 in their French Education major and an overall g p.a of 275 . They must also pass a teacher competency test as established by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on $p$ 184) 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

## DEGREE: BACHELOR OF ARTS <br> 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
See page 81 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 ............. 12
(at least six credits must be at the 400 -level)
A total of twelve to fifteen credits at the 200 -level or above,

## ELECTIVES

 taken to meet the minimum credit requirement for the degree
## CREDITS TO TOTAL A MINIMUM OF

 which may be more stringent than those listed above
## DEGREE: BACHELOR OF ARTS <br> MAJOR: GERMAN EDUCATION

CURRICULUM$12-15$
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

After required courses are completed, sufficient elective credits must be

Note: See the associate chair of the department for detailed requirements The faculty of each program shall determine specific course requirements,

CREDITS
See page 81 for University and College requirements. MAJOR REQUIREMENTS
GRMN 200 German Grammar Review ................................................... 3
RMN 205 German Conversation
GRMN 211 German Reading and Composition: Short Fiction
GRMN 212 German Reading and Composition: Drama
GRMN 305 German Conversation and Composition3
or
GRMN 306 Practical Oral/Written Expression
GRMN 311/312 Introduction to German Literature I and II6
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:
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 413 Educational Psychology - Social Aspects ................... 3
EDUC 414 Educational Psychology - Cognitive Aspects ... ........................... 3
EDUC 419 Diversity in the Classroom
FLLT/LING 421 Methods of Teaching Foreign Languages
FLIT/LING 422 Language Syllabus Design
LING/FLLT 424 Second Language Testing

400 Student leaching ........................
EDUC 430 Classroom Management ... ................................ 1
Grade of C- or better required in all required EDUC, FLIT, and LING courses
For Foreign Language in Elementary School (K-12 certification) option,
required courses in addition to above:
FLLT/EDUC 429 Methods of Teaching Foreign/Second
Languages in Elementary Schools
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 30 in their German Education major and an overall g pa. of 2.75. They must also pass a teacher competency test as established by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on $p$. 184) to obfain 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 OF124

## DEGREE: BACHELOR OF ARTS <br> MAJOR: FOREIGN LANGUAGES AND LITERATURES CONCENTRATION: ITALIAN STUDIES

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

## See page 81 for University and College requirements.

## MAJOR REQUIREMENTS

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

## 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
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 $\mathbf{8 1}$ for University and College requirements.
MAJOR REQUIREMENTS
ITAL 200 Italian Grammar Review .... ..... ..... ... ...... . ........................... 3
or
ITAL 250 Introduction to Business Italian
ITAL 205 Italian Conversation
ITAL 206 Culture through Conversation
ITAL 211 Italian Reading and Composition: Short Fiction ....... .. ........ 3
$\begin{array}{ll}\text { ITAL } 212 & \text { Italian Reading and Composition: Drama and Prose } \\ \text { ITAL } 305 & \text { Advanced Italian Conversation and Composition }\end{array}$
ITAL 306 Practical Oral/Written Expression
ITAL 3xx Literature.
6

ITAL 4xx Literature ................................................................... 6

EDUC 413 Educational Psychology - Social Aspects ............................... 3
EDUC 414 Educational Psychology - Cognitive Aspects ............................. 3

EDUC 400 Student Teaching
EDUC 430 Classroom Management.
FLIT/LING 421 Methods of Ting Foreign La
FLLT/LING 422 Language Syllabus Design .................................................... 3
LING/FLIT 424 Second Language Testing ................................... 3
Grade of C- or better required in all required EDUC, FLLT, and LING courses
For Foreign Language in Elementary School (K-12 certification) option,
required courses in addition to above:
FLLT/EDUC 429 Methods of Teaching Foreign/Second
Languages in Elementary Schools
EDUC/LING 476 Second Language Acquisition and Bilingualism $\quad . \quad 3$
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 . They must also pass a teacher competency test as established by the University Council on Teacher Education Students should consult the teacher education program coordinator (see list on p 184) to obtain the student feaching application and other information concerning student feaching policies.
ELECTIVES
After required courses are complefed, sufficient elective credits must betaken 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 concentra-tion (language and literature, area studies, period studies), studentsshould see their advisor or the associate chair of the departmentCURRICULUMCREDITS
See page 81 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 ..... 12
at least six credits must be at the 400 -levelA total of twelve to fifteen credits at the 200-level or above,2-15
chosen with prior approval of the advisor and according to optionrequirements, from the following areas: Latin, Anthropology, Art History,Comparative Literature, English, Foreign Languages and Literatures, His-tory, Linguistics, Music, Philosophy, Political Science, Theatre
ELECTIVESAfter required courses are completed, sufficient elective credits must betaken to meet the minimum credit requirement for the degree
CREDITS TO TOTAL A MINIMUM OF124
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 ARTSMAJOR: LATIN EDUCATION
CURRICULUM
See page 81 for University and College requirements. MAJOR REQUIREMENTSCREDITS
6
LATN 2xx
9
9
LATN $3 x x$ and/or LATN $4 x x$
LATN $3 x x$ and/or LATN $4 x x$
3
LATN 431 ..... 3
LATN $4 x x$ ..... 9
EDUC 413 Educational Psychology - Social Aspects .....  3
EDUC 414 Educational Psychology - Cognitive Aspects
EDUC 419 Diversity in the Classroom
Student TeachingEDUC 430 Classroom Management.
FLLT/LING 421 Methods of Teaching Foreign Languages
FLIT/LING 422 Language Syllabus Design3
LING/FLLT 424 Second Language Testing1For Foreign Language in Elementary School (K-12 certification) option,required courses in addition to above:
FLLT/EDUC 429 Merhods of Teaching Foreign/SecondLanguages in Elementary Schools3
EDUC/LING 476 Second Language Acquisition and Bilingualism ..... 3
To be eligible to student teach, Foreign Language Education students musthave a g.p a of 30 in their Latin Education major and an overall g pa.of 275 . They must also pass a teacher competency test as established bythe University Council on Teacher Education. Students should consult theteacher education program coordinator (see list on p. 184) to obtain thestudent teaching application and other information concerning studentteaching policies
ELECTIVESAfter required courses are completed sufficient elective credits must be takento meet the minimum credit requirement for the degree.CREDITS TO TOTAL A MINIMUM OF124
DEGREE: BACHELOR OF ARTSMAJOR: LATIN EDUCATIONCONCENTRATION: CLASSICS
CURRICULUMCREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS
GREK 101/102 Elementary Ancient Greek ..... 6
One additional GREK course at the 200 -, 300 -, or 400 -level ..... 3
LATN 214 Vergil (prerequisite: LATN 213 or permission of instructor) ..... 3
Two additional LATN courses at the 200 - or 300 -level (excluding LATN 213 ..... 6
Three additional LATN courses at the 300- or 400-level3
FLLT 202 Biblical and Classical Literature
FLIT 316 Classical MythologyFLIT 322 Topics: Classical Literature in Translation
EDUC 413 Educational Psychology - Social Aspects ..... 3
EDUC 414 Educational Psychology - Cognitive Aspects ..... 3
EDUC 419 Diversity in the Classroom ..... 3
EDUC 400 Student Teaching ..... 9
EDUC 430 Classroom Management
3
FILT/LING 421 Methods of Teaching Foreign Languages ..... 3
FLIT/LING 422 Language Syllabus Design ..... 3
Grade of C- or better required in all required EDUC, FLIT, and LING courses.
For Foreign Language in Elementary School (K-12 certification) option,required courses in addition to above:FLLT/EDUC 429 Methods of Teaching Foreign/SecondLanguages in Elementary Schools3
EDUC/LING 476 Second Language Acquisition and Bilingualism ..... 3
EDUC 202 Human Development I: Grades K-4 ..... 3To be eligible to student teach, Foreign Language Education students musthave a g.p.a. of 30 in their Latin Education major and an overall g p a.of 275 . They must also pass a teacher competency test as established bythe University Council on Teacher Education. Students should consult theteacher education program coordinator (see list on $p$ 184) to obtain thestudent teaching application and other information concerning studentteaching policies
ELECTIVES
After required courses are completed sufficient elective credits must be takento 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), studentsshould see their advisor or the associate chair of the department
CURRICUUUMCREDITSSee page 81 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 ..... 12
(at least six credits must be at the 400 -level)
FLLT 327 Topics: Russian Literature in Translation ..... 3
FLLT 375 Topics: Russian and Soviet Culture in Translation ..... 3
A total of nine credits at the 200-level or above, chosen ..... 9
with prior approval of the advisor and according to option require-ments, from the following areas: Russian, Art History, Comparative Liter-ature, English, Foreign Languages and Literatures, History, Linguistics,Music, Political Science

## 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

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

## DEGREE: BACHELOR OF ARTS <br> MAJOR: FOREIGN LANGUAGES AND LITERATURES CONCENTRATION: SPANISH STUDIES

For the different options available under the Spanish Studies concentration (language and literature, civilization and culture, Spanish area studies, Latin American area studies, period studies, linguistics), students should see their advisor or the associate chair of the department CURRICULUM
See page 81 for University and College requirements. MAJOR REQUIREMENTS
Twelve to fifteen credits in SPAN electives at the 200-level and above
Twelve credits in SPAN literature at the 300 or 400 -level (at least six credits must be at the 400 level)
A total of twelve to fifteen credits at the 200 -level or above,12
chosen with prior approval of the advisor and according to option require ments, from the following areas: Spanish, 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

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 <br> MAJOR: SPANISH EDUCATION <br> CURRICULUM

See page 81 for University and College requirements.
MAJOR REQUIREMENTS
SPAN 201 Spanish Reading and Composition ...................................... 3
(SPAN 200 is a prerequisite)
SPAN 305 Oral Communication 3

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:
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:
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 413 Educational Psychology - Social Aspects .......................................... 3
EDUC 414 Educational Psychology - Cognitive Aspects ... ................. 3
EDUC 419 Diversity in the Classroom ....... ......... ... ... ... .... . ............ 3
EDUC 400 Student Teaching …………...........................................................
EDUC 430 Classroom Management........................... ............................ 1



Grade of C- or better required in all required EDUC, FLLT, and LING courses.
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

## EDUC/LING 476 Second Language Acquisition and Bilingualism ................... 3 <br> EDUC 202 Human Development I: Grades K-4 .... ...................

To be eligible to student teach, Foreign Language Education students must have a g.pa. of 30 in their Spanish Education major and an overall g pa of 275 . They must also pass a teacher competency test as estab-
lished by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on $p$ 184) 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

## DEGREE: BACHELOR OF ARTS <br> MAJOR: FOREIGN LANGUAGES AND LITERATURES CONCENTRATION: THREE LANGUAGES

CURRICULUM

## See page 81 for University and College requirements. MAJOR REQUIREMENTS

## First Language

Six first-language elective credits at the 200-level and above ......................... 6

(at least three credits at each level)
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 ........................... 9
(at least three credits at each level)
Three additional credits at the 400-level.... ............. ......... ... ................... 3

## Third Language

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

## Related Work

Six credits from 200-, 300-, or 400-level courses ................................... 6
(including courses in translation) in Foreign Languages and Literatures,
Comparative Literature, or Linguistics, selected in consultation with 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: HISTORY/CLASSICS, FRENCH, GERMAN, RUSSIAN, OR SPANISH
CURRICULUM ..... CREDITS
See page 81 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 ..... 3
(excluding HIST 491 and 493 and Independent Study)
One of the following language options:

## Classics

Civilization: Two classical civilization (or culture) courses: e g, FLLT 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 above12

## French

Civilization: FREN 325 (French Civilization I), or FREN 326
(French Civilization II) or FREN 453 (French Civilization III)3
iferature: FREN 301 (Introduction to French Literature: Prose)

Two courses at the 200,300 , or 400 -level. ..... 3
German
(ivilization: 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
6
Two courses at the 200,300 , or 400 -level
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 theLatin American $(326,303,304)$ track
Civilization: SPAN 325 (Spanish Civilization and Culture) orSPAN 326 (Latin American Civilization and Culture)3
Literature: SPAN 301 (Survey of Spanish Literature) and SPAN 302 (Survey of Spanish Literature) ..... 6
SPAN 303 (Survey of Spanish-American Literature) andSPAN 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
CREDITS TO TOTAL A MINIMUM OF124
DEGREE: BACHELOR OF ARTS MAJOR: FRENCH, GERMAN, OR SPANISH/POLITICAL SCIENCE CURRICULUM ..... CREDITS
See page 81 for University and College requiremenfs.MAJOR REQUIREMENTSFrench, German, or Spanish/Political Science majors must complete alldesignated courses and any prerequisite courses e g for admission tothe 200 -level language courses) with no grade below a $C$
POSC 150 The American Political System ..... 3
Introduction to International Relations ..... 3
Comparative Politics ..... 3
POSC 310 European Governments3
3
3
POSC 441 Problems of Western European Politics by Country
POSC 442 Problems of Western European Politics
3 additional courses at the 300 or 400 -level with atleast 2 at the 400 -level and at least 2 in the area ofInternational Relations9
One of the following language options:
French
FREN 2xx, 3xx, 4xx (prior to semester abroad) ..... 6
FREN $3 x x$, $4 x x$ ..... 12
FREN 4xx (literature) (Newark campus only) ..... 3
German
GRMN 2xx, $3 x \mathrm{x}, 4 \mathrm{xx}$ (prior to semester abroad) ..... 6
GRMN 3xx, 4xx ..... 12
GRMN 4xx (liferature) (Newark campus only) ..... 3
Spanish
SPAN $2 x x, 3 x x, 4 x x$ (prior to semester abroad)6
12
SPAN $3 x x, 4 x x$12
+3
SPAN 4xx |literature) (Newark campus only)In addition to completing one of the language options above, studentsare required to participate in a semester abroad program sponsoredby the Department of Foreign Languages and Literatures (in Paris, orthe 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 4.55
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/Polifical Science.

CREDITS TO TOTAL A MINIMUM OF

## 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 $300-\mathrm{level}$.

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



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 308..

Minors in German Studies are required to take at least one literature course at the 300 -level or above
Note: A student cannot teceive both a German Minor and a German Studies Minor.

## SPANISH STUDIES MINOR

SPAN 2xx, 3xx 4xx ..... .... ...................................... 6
SPAN 306 or 406 ........................................................................................ 3
SPAN 308
Three of: ARTH 339, SPAN 355, SPAN 455, HIST 339, POSC $441 \ldots \ldots . . \frac{. . .9}{21}$
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.

## FOREIGN LANGUAGE AND <br> 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 eatn 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

Delaware Campus:
FREN 211 (or higher) French Reading and Composition ...................... 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: Short Fiction .... 3
GRMN 3xx
3

## Italian Certificate Courses

Winter Session in Siena, Italy:
CREDITS
ITAL 206 Culture through Conversation ............................................. 3

Delaware Campus:
ITAL 211 (or higher) Italian Reading and Composition: Short Fiction ........... 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

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

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

Delaware Campus:
SPAN 201 (or higher, excluding 205) Spanish Reading and Composition .... 3
SPAN $3 x x$

## 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. Skills in Geographic Information Science (GIS), cattography, and spatial data analysis are also 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
nttp://www.udel.edu/Geography:

## 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 occupance 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 <br> MAJOR: GEOGRAPHY

CURRICULUM
CREDITS
See page 81 for University and College requirements. MAJOR REQUIREMENTS

Two of the following physical geography courses: ...... .... ...................... 6-7
GEOG 101 Physical Geography: Climatic Processes
GEOG 106 Physical Geography: Land Surface Processes
GEOG 1.52 Climate and Life
GEOG 220 Meteorology
GEOG 230 Humans and the Earth Ecosystem
GEOG 23.5 Conservation of Nałural Resources
GEOG 255 Applied Climatology
Two of the following human geography courses
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:
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 OF124

## DEGREE: BACHELOR OF ARTS <br> MAJOR: GEOGRAPHY EDUCATION

CURRICULUM
CREDITS
See page 81 for University and College requirements. MAJOR REQUIREMENTS
Two of the following physical 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 .. ....... ................................... 3
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 -leve
ECON 151 Introduction to Microeconomics ....... ...................................... 3
ECON 152 Introduction to Macroeconomics .....................................................

HIST 104 World History II .....................................................................
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
Educational Psychology - Social Aspects 413 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 ................................................
EDUC 400 Student Teaching ................................................................... 9

Grade of C - or better required in all required EDUC and HIST courses.
To be eligible to student teach, Geography Education students must have a g.p.a. of 30 in their major and an overall g.p.a of 2.75 . They must also pass a teacher competency test as established by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on p. 184) to obtain the student teaching application and other information concerning student feaching policies

CREDITS TO TOTAL A MINIMUM OF

## HONORS BACHELOR OF ARTS:

## GEOGRAPHY OR GEOGRAPHY EDUCATION

## The recipient must complete:

1. All requirements for the Bachelor of Arts degree in Geography or Geography Education.
2. All of the University's generic requirements for the Honors Degree (see page 43 of this catalog)
3. Of the twelve Honors credits in Geography, at least six must be beyond those used to satisfy the minimum Geography or Geography Education major requirements. These six must be chosen from 400/600 level courses and one of these courses must be GEOG 445/645, if it was not already used to satisfy the major requirement

## 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 (Physical 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-1
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-)
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 83)

## Foreign Language:

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 85)

## Group A

Understanding and appreciation of the creative arts and humanities. At least two areas must be represented.
Group B
The study of culture and institutions over time. At least two areas must be represented.
Group C
Empirically based study of human beings and their environment. At least two areas must be represented.

## MAJOR REQUIREMENTS

GEOL 107 General Geology
BISC 207/208 Introductory Biology I and II ..................................... 8
GEOG 220 Meteorology 3
GEOG 250 Computer Methods in Geography ............................................... 4
BISC 302 General Ecology
GEOG 412 Physical Climatology .................................................................................
GEOL 303 Earth Surface I: Surficial Processes .................................... 4
BISC/GEOG/GEOL 450 Proseminar in Environmental Science . ......... .... 3
One course from among the following courses. (GEOL 306 or GEOL
451 may be applied to this field course requirement or to a concentra-
tion below, but not to both simultaneously)
BISC 312 General Ecology Lab
GEOL 306 Earth's Lithosphere II: Field Geology
GEOG/GEOL 425 Environmental Field Methoos
GEOG 451 Microclimatology
Two additional courses from within
one of the following three areas of concentration: .............. ......... 6-8

## Atmospheric Environment

GEOG 343 Climatic Geomorphology
GEOG 420 Atmospheric Physics
GEOG 423 Atmospheric Dynamics
GEOG 451 Microclimatology
GEOG 453 Synoptic Climatology
GEOG 456 Hydroclimatology

## Biological Environment

BISC 306 General Physiology
BISC 371 Introduction to Microbiology
BISC 495 Evolution

BISC 637
BISC 641
Geology
GEOL 300 Earth's Materials 1: Minerals
GEOL 302 Earth's Materials II: Rocks
GEOL 304 Earth's Surface II: Stratigraphy
GEOL 305 Earth's Lithosphere I: Structural
GEOL 306 Earth's Lithosphere II: Field Geology
GEOL 307 Earth's History I: Paleobiology
GEOL 308 Earth's History II: Earth System Science
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 geology courses
BISC 301 Molecular Biology of the Cell
BISC 321 Environmental Biology
BISC 324 Invertebrate Zoology
BISC 608 Genetic Toxicology
BISC 660 Environmental Physiology
CHEM 213 Elementary Organic Chemistry
CIEG 331 Introduction to Environmental Engineering
ENTO 620 Behavioral Ecology of Insects
FREC 450 Topics in Environmental Law
GEOG 230 Humans and the Earth Ecosystem
GEOG 235 Conservation of Natural Resources
GEOG 236 Conservation: Global Issues
GEOG 255 Applied Climatology
GEOG 272 Map and Air Photo Interpretation
GEOG 320 Water and Society
GEOG 330 Biogeography
GEOG 357 Paleoclimatology
GEOG 372 Geographic Information Systems
GEOG 422 Resources, Development, and the Environment
GEOG 449 Environment and Society
GEOG 455 Water Budget in Environmental Analysis
GEOG 471 Advanced Geographic Information Systems
GEOG 474 Infroduction to Environmental Remote Sensing
GEOG 681 Remote Sensing of Environment
GEOL/GEOG 385 Geomorphology
GEOL 407 Igneous and Metamorphic Petrology
GEOL/GEOG 411 Fluvial Geomorphology
GEOL 412 Geological Approaches to Archeology and History
GEOL 414 Quaternary Geology and Geochronology
GEOL 416 Paleoecology
GEOL 421 Environmental and Applied Geology
GEOL 428 Hydrogeology
GEOL 431 Marine Geology
GEOL 434 The Geology of Coasts
GEOL 446 General Geochemistry
GEOL 453 Elementary Geophysics I
GEOL 454 Elementary Geophysics II
GEOL/GEOG 482 Physical Geography of Cold Environments
MAST 482 Introduction to Ocean Sciences
PHYS 208 Fundamentals of Physics II
PLSC 204 Introduction to Soil Science
POSC 350 Politics and the Environment
With the exception of related work, all courses in the major require a grade of $C$ or better
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 five courses:
MATH 302 Ordinary Differential Equations
MATH 349 Elementary Linear Algebra
MATH 450 Statistics for Engineering \& Physical Sciences
STAT/GEOG $475 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . i s t i c s ~ f o r ~ E n v i r o n m e n t a l ~ S c i e n c e s ~$
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

## GEOLOGY

The Department of Geology offers major programs leading to B A degrees in Geology and in Earth Science Education. The Department offers major programs leading to B.S. degrees in geology (including concentrations in Geophysics and in Paleobiology), and a minor in geology Environmental Science majors can earn a minor 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, petrology, micropaleontology, mineralogy, stratigraphy, and structural geology. As an additional resource, the Department maintains close ties with the Delaware Geological Survey, the College of Marine Studies, and the Department of Geography through collaboration in the Environmental Science major Student projects and employment opportunities are often available through the Delaware Geological Survey (http://www.udel.edu/dgs).

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: for example, geochemistry, geophysics, or paleobiology.

Telephone: (302) 831-2569
http://www geology udel.edu

## DEGREE: BACHELOR OF ARTS <br> MAJOR: GEOLOGY

CURRICULUM
CREDITS
See page 81 for University and College requirements. MAJOR REQUIREMENTS

GEOL 107 General Geology
GEOL $105 / 115$ Geological Hazards and their Human Impact and Laboratory GEOL 113 Earth Science
GEOL 300 Earth's Materials I: Minerals ...................................... 4
GEOL 302 Earth's Materials II: Rocks .. 4
GEOL 303 Earth's Surface l: Sufficial Processes ...................... 4
GEOL 304 Earth's Surface II: Strotigraphy ......................... 4
GEOL 305 Earth Lithosphere : Structural Geology and Plate Tectonics .. 4
GEOL 306 Earth's Lithosphere Il: Field Geology
GEOL 307 Earth's History l: Paleobiology … .... ............. 4
GEOL 308 Earth's History ll: Earth Sysiem Science .............. 4
CHEM 103/104 General Chemistry ..................... 8
PHYS 201/202 Introductory Physics ...................................
Mathematics courses through college-level frigonometry .............................. 3-4

## 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: GEOLOGY

cURRICUIUM
CREDITS

## UNIVERSITY REQUREMENTS

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

## COLLEGE REQUIREMENTS

## Writing: (minimum grade C-1

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 83 .)

## Foreign Language:

Completion of the intermediatelevel 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 85)
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

One of the following
GEOL 107 General Geology
GEOL 107 General Geology
GEOL 105/115 Geologic Hazards and their Human Impact and Laboratory GEOL 113 Earth Science
GEOL 300 Earth's Materials I: Minerals ... ..... .................................. 4

GEOL 303 Earth's Surface I: Surficial Processes ........................................... 4
GEOL 304 Earth's Surface II: Stratigraphy ........................................... 4
GEOL 305 Earth Lithosphere I: Structural Geology and Plate Tectonics ........ 4
GEOL 306 Earth's Lithosphere II: Field Geology
GEOL 307 Earth's History I: Paleobiology .................... . .................. 4
GEOL 308 Earth's History II: Earth System Science ....... ................. 4
MATH 241/242 Analytic Geomerry and Calculus A and B ..................... 8
CHEM 103/104 General Chemistry......... ................................... 8
PHYS 201/202 Introductory Physics I and II ...................................... 8
Geology Electives (GEOL 385 or any 400-level or other ...................... 9-10
GEOL courses approved in writing by depariment,
including field courses taken as transfer work)
A minimum grade of $C$ - is required for any $G E O L$ courses that count for the major
Two of the following:
GEOG 250 Computer Methods in Geography
GEOG 372 Geographic Information Systems
GEOG 471 Advanced Geographic Information Systems
FREC 480 Geographic Information Systems in Natural Resource Management
MATH 243 Analytic Geometry and Calculus C
MATH 302 Ordinary Differential Equations
Other courses as approved in writing.

## 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

## DEGREE: BACHELOR OF SCIENCE <br> MAJOR: GEOLOGY <br> CONCENTRATION: GEOPHYSICS

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 -)
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 83.)

## Foreign Language:

Completion of the intermediatelevel 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 85)

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

One of the following4
GEOL 107 General Geology

GEOL 105/115 Geologic Hazards and their Human Impact and Laboratory GEOL 113 Earth Science
GEOL 300 Earth's Materials I: Minerals ......... ............................................ 4

GEOL 303 Earth's Surface I: Surficial Processes .................................. 4
GEOL 304 Earth's Surface II: Stratigraphy ....
GEOL 305 Earth Lithosphere I: Structural Geology and Plate Tectonics $\quad 4$
GEOL 306 Earth's Lithosphere Il: Field Geology .......... ............ . 4
GEOL 307 Earth's History I: Paleobiology ............................................ 4
GEOL 308 Earth's History II: Earth System Science .................................. 4
GEOL 453 Geophysics I 3
GEOL 454 Geophysics II ...................................................................... 3
GEOL 405 Introduction to Research .... ............. .................................. 3
PHYS 207/208/209 Fundamentals of Physics I, II, and III .................. 11
PHYS 645 Electronics for Scientists ........................................................
MATH 241/242/243 Analytic Geometry and Calculus A, B and C ......... 12
MATH 302 Ordinary Differential Equations I ......... ... .................. 3

## One of the following

GEOG 250 Computer Methods in Geography

CISC 106 General Computer Science for Engineers

CREDITS TO TOTAL A MINIMUM OF 125

## DEGREE: BACHELOR OF SCIENCE <br> MAJOR: GEOLOGY <br> CONCENTRATION: PALEOBIOLOGY

## CURRICULUM

CREDITSSee page 81 for University and College requirements.MAJOR REQUIREMENTS
One of the following4
GEOL 107 General Geology
GEOL 105/115 Geologic H
GEOL 300 Earth's Materials I: Minerals ..... 4
GEOL 302 Earth's Materials II: Rocks ..... 4
GEOL 303 Earth's Surface I: Surficial Processes ..... 4
GEOL 304 Earth's Surface II: StratigraphyGEOL 305 Earth Lithosphere I: Structural Geology and Plate TectonicsGEO 306GEOL 306 Earth's Lithosphere II: Field Geology4
4
4GEOL 307 Earth's History I: Paleobiology...
GEOL 308 Earth's History II: Earth System Science4
GEOL 405 Introduction to Research. ..... 3
Geology Electives. ..... 6
(GEOL 385 or any 400-evel GEOL or other GEOL courses approved inwriting by the department, including field courses taken as transfer work.)
BISC 207/208 Introductory Biology I and II. .....  8
BISC 495 Evolution ..... 3
CHEM 103/104 General Chemistry ..... 8
One of the following ..... 3
BISC 302 General EcologyBISC 321 Environmental BiologyTwo of the following8BISC 303 Genetic and Evolutionary Biology
BISC 371 Introduction to MicrobiologyBISC $480 \quad$ Vertebrate Natural History
One of the following.3MATH 210 Discrete Mathematics IMATH 230 Finite Mathematics with Applications
MATH 241 Analytic Geometry and Calculus A ..... 4
MATH 205 Statistical Methods. ..... 4

## 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

## REQUIREMENTS FOR THE MINOR IN GEOLOGY

The minor consists of at least 18 credit hours in geology. The requirements are: GEOL 107 or GEOL 105 and 115, or GEOL 113; plus additional courses at the $300-400-$ level to obtain the remaining credits to reach a total of 18 .

For Environmental Science majors, the requirements for the minor in Geology are GEOL 107, or GEOL 105 and 115, or GEOL 113; GEOL 303 ; at least one other GEOL course at the 300 -level; plus additional courses at the 300 -and 400 -level to obtain the remaining credits to reach a total of 18 .

## DEGREE: BACHELOR OF ARTS <br> MAJOR: EARTH SCIENCE EDUCATION

## CURRICULUM CREDITS

See page 78 for University and College requirements.
MAJOR REQUIREMENTS
GEOL 105/115 Geologic Hazards and their Human Inpact and Laboratory..... 4
GEOL 107 General Geology ........................................................... 4
GEOL 300 Earth's Materials I: Minerals
GEOL 303 Earth's Surface I: Surficial Processes ................................................ 4

GEOG 101 Physical Geography ........................................... 3
GEOG 220 Meteorology …....... .................... .......................... 3
GEOG 235 Conservation of Natural Resources ............................ 3
One of the following ... ........................ . ......... ... ............................... . 3
GEOG 343 Climatic Geomorphology
GEOG 255 Applied Climatology
PHYS 133 Introduction to Astronomy .................................................... 4
PHYS 201/202 Introductory Physics ! and II ........................................... 8
CHEM 103 General Chemistry
BISC 195 Biological Evolution................................................................ 3
MATH 221 Calculus
MAST 200 The Oceans
3
A grade of $C$ - or better is required in all the required EDUC, GEOL,
GEOG, BISC, MAST, PHYS, and SCEN courses.
EDUC 413 Educational Psychology - Social Aspects ............................... 3
EDUC 414 Educational Psychology - Cognitive Aspects .................. 3
EDUC 419 Diversity in the Classroom .........................................................
EDUC 420 Reading in the Content Area .................................................. 1
EDUC 430 Classroom Management in Schools. .......................................
EDUC 400 Student Teaching ........................................................... 9
SCEN 491 Teaching Science in Secondary Schools ................................. 4
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 25 . They must also pass a teacher competency test as established by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on $p$ 184) to obtain the student teaching application and other information concerning student teaching policies.
CREDITS TO TOTAL A MINIMUM OF

## 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 Services, 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 Histo-
ry/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 ARTSMAJOR: HISTORY
CURRICULUM ..... CREDITSSee page 81 for University and College requirements.MAJOR REQUTREMENTS
HIST 101 Western Civilization to 1648 .....  3
HIST 102 Western Civilization: 1648 to the Present3
HIST 268 Seminar
3
History course on the history of Asia, Africa, Latin America, or the Ancient World
12
History couses at above he 300 level ..... 3
(excluding HIST 491 and 493 and Independent Study) History course ..... 3
ELECTIVES
After required courses are completed, sufficient elective credits must betaken to meet the minimum credił requirement for the degree.
CREDITS TO TOTAL A MINIMUM OF ..... 124
DEGREE: BACHELOR OF ARTS MAJOR: HISTORY CONCENTRATION: AMERICAN HISTORY
CURRICULUM ..... CREDITS
See page 81 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 ofthese courses outside the Department of History ...... 2History seminar at the 400-level or above21
(excluding HIST 491 and 493 and Independent Study)
ELECTIVES
After required courses are completed, sufficient elective credits must betaken to meet the minimum credit requirement for the degree
CREDITS TO TOTAL A MINIMUM OF ..... 124
DEGREE: BACHELOR OF ARTS MAJOR: HISTORYCURRICUIUMCREDITSSee page 81 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 HistoryHistory seminar at the 400 -level or above(excluding HIST 491 and 493 and Independent Study)
ELECTIVES
After required courses are completed, sufficient elective credits must betaken to meet the minimum credit requirement for the degree
CREDITS TO TOTAL A MINIMUM OF124
DEGREE: BACHELOR OF ARTS
MAJOR: HISTORY
CONCENTRATION: GLOBAL HISTORY
CREDITS
See page 81 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
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)
ELECTIVESAfter required courses are completed, sufficient elective credits must betaken 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
CURRICULUMCREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS
HIST 101 Western Civilization to 1648 .....  3
HIST 102 Western Civilization: 1648 to the Present ..... 3
3
History course on the history of Asia, Africa, Latin America,or the Ancient World3
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)
ELECTIVESAfter required courses are completed, sufficient elective credits must betaken to meet the minimum credit requirement for the degree124
DEGREE: BACHELOR OF ARTS
MAJOR: HISTORY
CONCENTRATION: JOURNALISM
CURRICULUM ..... CREDITS
See page 81 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) ..... 3
ENGL 307 News Writing and Editing ..... 3
Nine credits chosen from the following courses: ..... 9
ENGL 308 Reporter's PracticumENGL 309 Feature and Magazine WritingENGL 310 Copy Editing and Layout
ENGL 407 Advanced Reporting
ENGL 408 Sports Writing
ENGL 409 Topics in Journalism
ENGL 466 Independent Study
ELECTIVES
After required courses are completed, sufficient elective credits must betaken to meet the minimum credit requirement for the degreeCREDITS TO TOTAL A MINIMUM OF124

## DEGREE: BACHELOR OF ARTS <br> MAJOR: HISTORY EDUCATION <br> CURRICULUM

CREDITS
See page 81 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 I .............. ..................................................... 3
HIST 104 World History II ... ............... .... . .... ..... ... ........................... 3
HIST 268 Seminar
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
History courses on the history of the United States ..... 12
History courses on the history of Asia, Africa, or Latin America ..... 6the 400 level (excluding HIST 491, 493, and independent study) andtwelve additional credits at or above the 300 level.
ECON 151 Introduction to Microeconomics ..... 3
ECON 152 Introduction to Macroeconomics ..... 3
POSC 150 The American Political System ..... 3
3
3
GEOG 120 World Regional Geography ..... 15
Additional credits as follows
3 credits in Economics, 6 credits in Political Science, 6 credits in Geography153
EDUC 414 Educational Psychology - Cognitive Aspects ..... 3
EDUC 419 Diversity in the Classroom ..... 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
EDUC 430 Classroom Management ..... 1
Grade of C - or better required in all required HIST and EDUC. courses.
o be eligible to student teach, History Education students must have ag pa of 30 in their major and an overall g.p.a. of 2.75 . They must alsopass a teacher competency test as established by the University Councilon Teacher Education. Students should consult the teacher education pro-gram coordinator (see list on p. 184) to obtain the student teaching appli-cation and other information concerning student teaching policies
CREDITS TO TOTAL A MINIMUM OF124
DEGREE: BACHELOR OF ARTS
MAJOR: HISTORY/CLASSICS, FRENCH, GERMAN, RUSSIAN, SPANISH
CURRICULUM ..... CREDITS
See page $\mathbf{8 1}$ 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 ..... 3
(excluding HIST 491 and 493 and Independent Study)
One of the following language options:
ClassicsCivilization: Two classical civilization (or culture) courses:e g., FLIT 202 (Biblical and Classical Literature)and FLLT 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 FrenchLiterature: Prose) and FREN 302 (Introductionto 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 ..... 6
6
Two courses of the 200,300 , or 400 -level
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
6
Two courses at the 200,300 , or 400 -level ..... 6
Spanish
Students must choose either the Peninsular $(325,301,302)$ or theLatin 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
SPAN 303 (Survey of Spanish-American Literature) andSPAN 304 (Survey of Spanish-American Literature)6
400 -level literature course3
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

## HONORS BACHELOR OF ARTS: <br> HISTORY (ALL CONCENTRATIONS); HISTORY EDUCATION; HISTORY/FOREIGN LANGUAGE

To receive the $\mathrm{B} \mathbf{A}$. 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 as follows:
Any two of the following.
HIST 101 Western Civilization to 1648
HIST 102 Western Civilization: 1648 to the Present
HIST 103 World History I
HIST 104 World History II
HIST 205 United States History
HIST 206 United States History
Three HIST courses at or above the 300-level ................................................ 9
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 Itish 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 John Montano at (302) 831-0804

## JEWISH STUDIES

The Jewish Studies Program administers the undergraduate minor in Jewish Studies. The minor examines the impact of Jewish thought and culture in all fields of Western and non-Western civilization. This involves the study of the texts, language, history, and culture of the Jewish people in a variety of environments and in historical and contemporary contexts. 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
E-mail: cjs@udel.edu
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) The following two courses are required courses for the minor:
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 courses from philosophy, English, sociology, history, and political science. Only 3 credits of Hebrew language can count towards the minor. Only 3 credits of the Israeli winter session course can count toward the minor Three credits of independent course credit can be counted, with approval of the Director of the Program.

## 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) 831-8270
E-mail: rees@udel edu
http://www udel edu/AreaStudies/latam html

## DEGREE: BACHELOR OF ARTS MAJOR: LATIN AMERICAN STUDIES

CURRICULUM
CREDITS
See page 81 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 ......................
NTH 380 Peoples and Cultures of Mexico and Central America


POSC 426 Latin American Political Systems ...... ........................... 3
SPAN 326 Latin American Civilization and Culture ... .............. . .... ............ 3

SPAN 304 Survey of Spanish-American Literature II
One of the following seven courses:
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:
POSC 431 Latin American Politics: Countries
POSC 450 Problems in Latin American Politics
One of the following three courses:
SPAN 415 Latin American Literature in its Political Contexi
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

## HONORS BACHELOR OF ARTS: LATIN AMERICAN STUDIES

All Honors degree candidates must complete the following:

1. All requirements for the B A in Latin American Studies.
2. All of the University's generic requirements for the Honors Baccalaureate degree (see page 43 of this catalog).

## 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 cuniculum. The law is central to theories and research in philosophy, social sciences, business, and public policy. 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 interdisciplinaty 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 83.

In addition to offering a minor in Legal Studies, the program offers faculty seminars, lectures, and films.

Telephone: (302) 831-1909
http://www.udel edu/Legal.Studies/

## REQUIREMENTS FOR A MINOR IN LEGAL STUDIES

CURRICULUM
CREDITS

Three courses from the following list. At least two of
these courses must be from outside the requirements of the stu-
dent's major and outside his or her major department.. These two
courses must be chosen from two different departments.

## 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)

## Criminal Justice

CRJU 202 Problems of Criminal Judiciary
CRJU 203 Problems of Corrections
CRUU 320 Introduction to Criminal Law
CRJU 324 American Constitutional History (same as HIST 324)
CRJU 345 Sociology of Law (same as SOCI 345)
CRJU 346 Psychology and the Law (same as PSYC 346)
CRUU 347 The Jury; Guilly or Not Guilty (taken with PSYC 347)
CRJU 375 Criminal Procedure
CRJU 425 Criminal Law and Social Policy
CRUU 428 Corporate Crime (same as SOCl 428 )
CRJU 446 Judging the Jury

CRUU 450 Prisoners and the Law
CRUU 457 Criminal Evidence
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 US Business and Political Economy
HIST 324 American Constitutional History (same as CRU 324)
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 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
SOCl 330 Population, Law and Sociely (same as CRUU 330)
SOCl 345 Sociology of Law (same as CRJU 345)
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)

## LIBERAL STUDIES

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 BALS project and a minimum grade of $C$ - must be earned in these core courses. Course templates are available for students interested in creating programs in Classical Studies, and in selected other areas. Students who are accepted into the Medical Scholars program complete a major in Liberal Studies using the Medical Scholars template

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 .

## HONORS BACHELOR OF ARTS: LIBERAL STUDIES

The recipient must complete:

1. All requirements for the Bachelor of Arts in Liberal Studies degree
2. All the University's generic requirements for the Honors Degree (see page 43 of this catalog).
3. The student's B A.L.S advisor will designate Honors Courses that will count as courses in the major

## LINGUISTICS AND COGNITIVE SCIENCE

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 Linguistics3
One of the following: ..... 3

LING 407 Phonology 1
UING 409 Syntax 1
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

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:
PSYC 201 General Psychology
```

B. One of the following:

CISC 181 Introduction to Computer Science (restriction: programming experience) (coreq: MATH 115, MATH 171 or MATH 241)
C. One of the following:

LING 409 Syntax I (prereq: LING 101 )
LING 491 Semantics 1 (prereq: LING 101)

CGSC 480 Computers and the Mind
CGSC 340 Cognition (prereq: PSYC 309)
D. One of the following:

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 $\mathbf{3}$ courses may be from a single department.
For more information, contact the Department of Linguistics.
Telephone: (302) 831-6806
Website: http://sun ling udel.edu/cogsci

## 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

$\mathbf{W}$ ithin 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 administers major programs in Mathematical Sciences leading to the Bachelor of Arts or the Bachelor of Science, as well as a major program in Mathematics Education leading to the Bachelor of Arts for those students preparing for careers teaching secondary school mathematics. A minor in mathematics is also available. The Department also participates in a B.S degree program in Mathematics and Economics (see separate listing in this chapter).

The Department of Mathematical Sciences also provides courses for others who need to use mathematics and statistics in their careers, be it engineering, science, medicine, or management

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. 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 new student 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 prerequisite 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 altemative to MATH 221-222.

The sequence MATH 251-252-253 is designed for prospective elementary school teachers and is restricted to declared majors in the appropriate programs of the College of Human Services, 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 113 and MATH 114 serve 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 will be given only upon approval of the chair: eg,

- MATH 114 and MATH 115
- MATH 210 and MATH 230
- MATH 221 and MATH 241
- MATH 222 and MATH 242
- MATH 302, MATH 341, and MATH 351
- MATH 342, MATH 349, and MATH 352


## DEGREE: BACHELOR OF ARTS <br> MAJOR: MATHEMATICAL SCIENCES

CURRICULUM
See page $\mathbf{8 1}$ 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 1................................................................
MATH 242 Analytic Geometry and Calculus B .............................. 4
MATH 243 Analytic Geometry and Calculus C......................................... 4
MATH 302 Ordinary Differential Equations
MATH 349 Elementary Linear Algebra

- ....................
heory
Nine credits of mathematics at the 300 .......................................... 9
level or above MATH 379, MATH 380, MATH 382, and MATH 450 are not applicable.
ENGL 312 Written Communications in Business ................ 3
or suitable equivalent
One of the following options (A, B, or C):
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 Commillee


## 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 Marhematics.

CREDITS TO TOTAL A MINIMUM OF

## 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 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 courses at the 600 -level or higher may be counted toward the same 12 credit Honors course requirement.

## DEGREE: BACHELOR OF SCIENCE <br> MAJOR: MATHEMATICAL SCIENCES

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CURRICULUM CREDITS
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## UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-) $\ldots \ldots . . . . . . . . .$.

multicultural, ethnic, and/or gender-related content (see p. 57).

## COLLEGE REQUIREMENTS

Writing: (minimum grade $C$-)
A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended facully critique of both composition and content. This course musi 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 83.)

## Foreign Language:

Completion of the intermediate-level course (107 or 112) in a given language. Number of credits needed and initial placement will depend on num-
ber 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, German or Spanish is recommended
Breadth Requirements (See page 85)
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. Stu dents lacking adequate preparation for MATH 242 should begin with 241


Two-semester sequence of laboratory science
(Courses designed for non-majors in a discipline are not appropriate.)
One of the following options (A, B, or C): ...............................
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 substifutions 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

## 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 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 courses at the 600 -level or higher may be counted toward the same 12 credit Honors course requirement.

## DEGREE: BACHELOR OF ARTS

MAJOR: MATHEMATICS EDUCATION
CURRICULUM CREDITS
UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing (minimum grade C-) $\ldots \ldots . .$.
Three credits in an approved course or courses stressing ... ...................... 3 multicultural, ethnic, and/or gender-related content (see p 57).

## 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 83)
Foreign Language:
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 85)
Group A
Understanding and appreciation of the creative arts and humanities. Twelve credits representing of least two areas
Group B
The study of culture and institutions over fime Nine credits representing at least two areas

Empirically based study of human beings and their environment. Nine credits representing at least two areas
Group D
The study of natural phenomena through experiment and analysis. A minimum of thirfeen 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 EDUC courses and related work. Students lacking preparation for math 242 should begin with MATH 241
MATH 210 Discrete Mathematics I.... ... .......................................... 3

MATH 243 Analytic Geometry and Calculus C ........................................
MATH 245 An Introduction to Proof .. ........ .... ...... .. ................ 3
MATH 349 Elementary Linear Algebra ...................................................... . 3
MATH 401 Introduction to Real Analysis .............................................. 3

MATH 518 Mathematical Models and Applications.... .............................. 3 or
another Modeling course
MATH 540 Geometry ...................................................... 3
MATH 300 Statistical Methods and Theory
One of the following Mathematics Courses ...................... .................. 3
MATH 302 Ordinary Differential Equations
MATH 389 Graph Theory
MATH 508 Introduction to Complex Variables and Applications
One of the following Computer Science Courses
CISC 105 General Computer Science
CISC 106 General Computer Science for Engineering
CISC 181 Introduction to Computer Science
PHYS 207 Introductory Physics I
ENGL 312 Written Communications in Business .....................................................
EDUC 413 Educational Psychology - Social Aspects .... .................... 3
EDUC 414 Educational Psychology - Cognitive Aspects .................... 3
EDUC 419 Diversity in the Classroom.................................................. 3
MATH 179 Problem Solving Strategies I ....... .............................. 1
MATH 379 Problem Solving Strategies........................................................... 1

MATH 382 Student Teaching Seminar: Secondary Math ... ....... ...... 2
EDUC 400 Student Teaching ...................................................... . 9

EDUC 430 Classroom Management

To be eligible to student teach, Mathematics Education students must have a g. pa of 2.5 in their mathematics major and an overall g pa of 2.5 They must also pass a teacher competency test as estabilished by the University Council on Teacher Education. Remaining in the program is subject to periodic review of satisfactory progress and, to be admitted to EDUC 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 .18 .5 ) 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

## 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 courses below the 600 -level in which the student takes an Honots component may be counted toward the minimum 12 hours of Honors credits in the major required for the Honors degree All Mathematics 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 MATH 300 or MATH 450 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, 382) may not be counted toward the minor

## MATHEMATICS AND ECONOMICS

The College of Arts and Science administers an interdisciplinary major program in Mathematics and Economics leading to the Bachelor of Science degree. The major, with courses taught by faculty in the Departments of Economics and of Mathematical Sciences, provides a strong background in mathematics for students in economics. Students graduating with this degree will be well prepared for graduate studies in economics or in mathematics.

## DEGREE: BACHELOR OF SCIENCE

## MAJOR: MATHEMATICS AND ECONOMICS

CURRICULUM<br>\section*{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 $C$-)
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 83)
ENGL 312 Written Communications in Business (to be taken after 60 credits-)
Breadth Requirements (See page 85)
A total of eighteen credits from Groups A, B and C is ............................. 18
required with six credits from 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 instifutions 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 MATH 241. Students must take a minimum of 39 credits in Mathematics and Economics at the 300 -level or above

| ECON 301 | Quantitative Microeconomic Theory (prerequisites: ECON 151 and MATH 221) |
| :---: | :---: |
| ECON 303 | Intermediate Macroeconomic Theory............ (prerequisites: ECON 302 and ECON 151) |
| ECON 422 | Econometric Methods and Models I |

ECON 422 Econometric Methods and Models I ................................ 3


ECON 406 Markets: Information and Uncertainty
ECON 426 Mathematical Economic Analysis
One of the following
ECON 302 Banking and Monetary Policy
$\begin{array}{ll}\text { ECON } 302 & \text { Banking and Monetary Policy } \\ \text { ECON } 430 & \text { Advanced Macroeconomic Theory }\end{array}$
ECON 443 International Monetary Economics
ECON 471 Futures and Options Markets
FINC 311 Principles of Finance
MATH 242 Analytic Geometry and Calculus B .............................. 4



MATH 530 Optimization and Game Theory
One of the following ............................................ ... .... ................................... 3
MATH 210 Discrete Mathematics I
MATH 230 Finite Mathematics with Applications
One of the following (minimum grade $C$-)
CISC 106 General Computer Science for Engineers
CISC 120 Object Oriented Programming in C++
CISC 181 Introduction to Computer Science

## One of the following two options (A or B)

Option A
MATH 245 An Introduction to Proof ...........................................................

Option B
MATH 503 Advanced Calculus for Applications................................................ 3
and
One of the following two courses ................................................................. 3
MATH 426 Introduction to Numerical Analysis and Algorithmic Computation
MATH 529 Linear Programming: Methods and Applications
One of the following two options (C or D)
Option C
MATH 300 Statistical Methods and Theory.

MATH 201

Introduction to Statistical Methods I

MATH 202 Introduction to Statistical Methods II

## ELECTIVES

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

CREDITS TO TOTAL A MINIMUM OF

## 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
CSCC/ENGL 369
CSCC/HIST 382
CSCC 366
Philosophical Perspectives of Medicine
History of Western Medicine

Two courses from the following:
CSCC/WOMS 233 Women, Biology and Medicine
CSCC/PHIL 241 Ethical \& Moral Dimensions of Health Care
CSCC/SOCl 311 Sociology of Health Care
CSCC/ENGL 368 Literature and Science
CSCC/PHIL 444 Medical Ethics
Students wishing to complete a minor in Medical Humanities are encouraged to enroll as soon as possible. For more information, contact Dr Roger Wagner at (302) 831-8195.

## 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 (1000-14000 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 311 | Early Medieval Philosophy |

PHIL 312 Late 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) 831-1970

## 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 fouryear ROTC program requires the completion of eight one-semester courses, totaling 12 credit hours, and successful completion of a fiveweek 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, 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 (inor out-of-state rates), up to $\$ 17,000$ per year, plus a $\$ 450$ book allowance and a $\$ 2500$ 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 freshman through senior cadets for academic excellence. Typically, $100 \%$ 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 exceeds $\$ 35,000$.

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.

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. ROTC credits can be applied toward a leadership minor.

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, church 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 hitp://www.musig.udel.edu

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 Some 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 a an accredited institutional member of the National Association of Schools of Music

Telephone: (302) 831-2577
http://www music udel.edu/

## DEGREE: BACHELOR OF ARTS MAJOR: MUSIC

CURRICULUM
CREDITS
See page 81 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 1 ................................................. 1

MUSC 262 Private Study ........................... ................................ . 2

## Theory

MUSC 185/186 Ear Training and Sight Singing 1 and 11 ................... 4
MUSC 195/196 Harmony l 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
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.

## Literafure

MUSC 211 Introduction to Music History ....................................... 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

## DEGREE: BACHELOR OF MUSIC <br> MAJOR: APPLIED MUSIC-INSTRUMENTAL

 CONCENTRATION: PRINCIPAL INSTRUMENTSThe 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
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 83 .)
Mathematics: One of the following
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 infend to continue the study of mathematics)
MATH 221 Calculus 1
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)
HIST 101 Western Civilization to 1648
HIST 102 Western Civilization: 1648 to the Present .....................................................
Foreign Language
Two semesters of the same modern foreign language .... ............. 8

## Breadth Requirements (See page 8.5)

Group A6

Understanding and appreciation of the creative arts and humanities
(This requirement is satisfied by MUSC 195 and 196.)
Group B
The study of culture and institutions over time Fiffeen credits representing at least two areas. (This requirement is satisfied by MUSC 311, 312, 313, HIST 101, and 102.)
Group C
Empirically based study of human beings and their environment. Nine credits representing at least two areas.
Group D
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 261 Private Study ... ..... .................. ........... ... ... .. .. ............. 4
MUSC 262 Private Study .... ........... ............................................. . 4
MUSC 361 Private Study ..................................................................... 4
MUSC 362 Private Study … ..........................................................
MUSC 461 Private Study …. ..... ....... .............................................. 4
MUSC 462 Private Study

MUSC 401 Senior Recital ........................................................................... 0
Theory
MUSC 185/186
Ear Training and Sight Singing I and II
MUSC 195/196 Harmony land 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 ............................. ...... ............... . . . . . 6

## Ensemble

Twelve credits selected from the following:
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 deparimental ensemble ..... ........... . ........... ............... 2

## Literafure

MUSC 211 Introduction to Music History ..................................... 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
Three credits in an approved course or courses stressing ..... 3
3
COLLEGE REQUIREMENTS
Writing: (minimum grade C-) ..... 3 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 83 )
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
+3

Foreign Language
Two semesters of the same modern foreign language ................................. 8
Breadth Requirements (See page 85)
Group A
Understanding and appreciation of the creative arts and humanities. (This requirement is satisfied by MUSC 195 and 196)
Group B
The study of culture and institutions over time. Fifteen credits rèpresenting at least two areas. (This requirement is satisfied by MUSC 311,312 ,
313, HIST 101, and 102.)
Group C
Empirically based study of human beings and their environment Nine credits representing at least two areas
Group D
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 ........................................................................................


MUSC 262 Private Study ........ .. .... . .... ............. ... .................. 4
MUSC 361 Private Study

MUSC 461 Private Study .................................... 4
MUSC 462 Private Study ....... . ............ . ........... .................................. ... 4


Theory
MUSC 18.5/186 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 land II .... .................................... 6
MUSC 295/296 Advanced Harmony I and II .. .. ................................ . 6
MUSC 393/394 Keyboard Harmony .............................................................. 4
MUSC Theory courses ......... .......................................... .................... 46

## Ensemble

Two semesters of any departmental ensemble ................................................. 2
MUSC 241 Accompanying Chamber Music: Piano
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 364 Keyboard Literature II ............ ... ....... ........................... 3
Music Literature course ............................................................................ 3

## Music Electives

Excludes private study on primary instrument. .. ... ... ............. .... 6
May include two credits of ensemble.

## DEGREE: BACHELOR OF MUSIC <br> MAJOR: APPLIED MUSIC-VOICE

## CURRICULUM <br> UNIVERSITY REQUIREMENTS

CREDITS

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

## COLLEGE REQUIREMENTS

Writing: (minimum grade $C$-)
解 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 affer 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 83)

## Marhematics: One of the following

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 infend to continue the study of mathematics)
MATH 11.5 Pre-Calculus
(designed for students who intend to continue the study of mathematics)
MATH 221 Calculus I
MATH 241 Analytic Geomerry 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)
THEA 226 Acting3

Breadth Requirements (See page 85)
Group A6

Understanding and appreciation of the creative arts and humanities
(This requirement is satisfied by MUSC 195 and 196)
Group B
The study of culture and institutions over time Twelve credits represent-
ing at least two areas. (This requirement is satisfied by MUSC 311,
312, 313 and HIST 102 )
Group C
Empirically based study of human beings and their environment. Six credits representing at least two areas
Group D
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 |
| MUSC 162 | Privale Study |
| MUSC 261 | Private Study |
| MUSC 262 | Private Study |
| MUSC 361 | Private Study |
| MUSC 362 P | Private Study . ....... |
| MUSC 461 P | Private Study ...................... . ........ .. . ............... ... 4 |
| MUSC 462 | Private Study. |
| MUSC 175 | Class Piano: Elementary 1 |
| MUSC 176 | Class Piano: Elementary II. |
| MUSC 275 | Class Piano: Intermediaie I |
| MUSC 276 | Class Piano: Intermediate II |
| MUSC 301 J | Junior Recital. .... ....... . ... ........... .............. .. 0 |
| MUSC 401 |  |
| Theory |  |
| MUSC 185/186 | 86 Ear Training and Sight Singing I and II |
| MUSC 285/28 | 86 Advanced Ear Training and Sight Singing I and II |
| MUSC 195/196 | 96 Harmony l and II....................... 6 |
| MUSC 295/29 | 996 Advanced Harmony \| and II ... ..... |
| Ensemble: One of the following (any 8 semesters) |  |
| MUSC 108 <br> or | University Singers |
| MUSC 109 or | Choral Union |
| MUSC 110 | Choral |
| Literature |  |
| MUSC 211 | Introduction to Music History . .......... .. ... ....... . .. ... ... 3 |
| MUSC 311 | Music History: 400-1600 |
| MUSC 312 | Music History: 1600-1827 |

MUSC 313 Music History: 1825 to the Present ..... 3
Related Music Studies
MUSC 171 Diction: English and ItalianMUSC 271 Diction: German
MUSC 272 Diction: French
MUSC 489 Opera Workshop MUSC 489 Opera Workshop ..... 1$\ldots 1$
Nine credits from the following: (including four credits .....  9
from MUSC 327, 427 and/or 428)
MUSC 103 Infroduction to Opera
MUSC 104 -Introduction to Opera
MUSC 327 German Liederform Analysis
MUSC 397 Contemporary Harmony
MUSC 427 French Art Song
MUSC 428 Twentieth-Century Art SongELECTIVE
After required courses are completed, sufficient elective credits must betaken 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
UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing (minimum grade C-) ..... 3
hree credits in an approved course or courses stressing ..... 3COLLEGE REQUIREMENTS
Skill Requirements
Writing: (minimum grade C-)3A two papers with a combined minted for extended faculty critique of both composition and content. Thiscourse must be taken after completion of 60 credit hours Appropriatewriting courses are normally designated in the semester's RegistrationBooklet. (See list of courses approved for second writing requirement,page 83.)
Mathematics: One of the following ..... 0-4
MATH 113 Contemporary MathematicMATH 114 College Mathematics and Stristics
(designed for students who do not intend to continue the study of mathematics)MATH 115 Pre-Calculus
(designed for students who
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 85
Art or Art History course, to be selected from Group A or B ..... 3
Group A. ..... 9Understanding and appreciation of the creative arts and humanitiesNine credits representing at least two departments. (This requirement ispartially satisfied by MUSC 195 and 196)
Group B9
The study of culture and institutions over time (MUSC 311, 312, and313 count toward completion of this requirement.)Group C9Empirically based study of human beings and their environment. Ninecredits representing at least two areasGroup D 4
science course with an associated laboratory

## MAJOR REQUIREMENTS

| Applied Music |  |
| :---: | :---: |
| MUSC 100 | Recital Aftendance (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 1 .................................................. 1 |
| MUSC 176 | Class Piano: Elementary II |
| MUSC 174 | Class Voice: Beginning ............ ........................ . .... 1 |
| MUSC 301 | Junior Recital .................................................... ............... 0 |
| Theory |  |
| MUSC 185/18 | 86 Ear Training and Sight Singing \| and II ........................ 4 |
| MUSC 285/28 | 866 Advanced Ear Training and Sight Singing I and II ............ 4 |
| MUSC 195/196 | 96 Harmony I and II..... ................. ......... .......... 6 |
| MUSC 295/29 | 996 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 |
| MUSC 215 | High Brass Insiruments Class |
| MUSC 216 | Low Brass Instruments Class ..... ............... ........ ........ ...... 1 |
| MUSC 217/218 | 18 Woodwind Instruments Class I and II ................... ...... 2 |
| MUSC 219 P | 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 ........................... . .i.n................. 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 elect primary inst | tives excluding ensemble and private study on ......................... 6 trument. |
| Professional Studies |  |
| EDUC 413 | Educational Psychology - Social Aspects .............. ... ..... ... 3 |
| EDUC 414 | Educational Psychology - Cognitive Aspects ... ..... ............... 3 |
| EDUC 419 | Diversity in the Classroom ............... .... .................. . ....... 3 |
| EDUC 400 | Student Teaching .... . ... .. .\| ........................... .......... 9 |
| EDUC. 430 | Classroom Management |

Grade of C - or better required in Professional Studies courses.
To be eligible to student teach, Music Education students must have a g.pa of 275 in their music major and an overall g.p a of 25 . Students must also pass a teacher competency test as established by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on p 184) to obtain the student teaching application and other information concerning student teaching policies
CREDITS TO TOTAL A MINIMUM OF ..... 130
DEGREE: BACHELOR OF MUSIC MAJOR: MUSIC EDUCATION-GENERAL/CHORAL CONCENTRATION: PIANO
CURRICULUM
UNIVERSITY REQUIREMENTSCREDITS
ENGL 110 Critical Reading and Writing (minimum grade C-1 ..... 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 $C-$
A second writing course involving significant writing experience including

## Music Methods

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MUSC 287 Music Technology ................................................... 3
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MUSC 335 Basic Conducting ...................... ...... ..................... 2
MUED 279 Practicum in Music Education

## MUED 336 Choral Conducting

Music in the Elementary and Junior High (or Midde) School
MUED 479 Secondary Music Materials and Approaches

## Music Electives

Three credits of music electives excluding ensemble and
private study on primary instrument. (MUSC 407 recommended)

## Professional Studies

EDUC 413 Educational Psychology - Social Aspects .. ................... 3
EDUC 414 Educational Psychology - Cognitive Aspects ........................... 3
EDUC 419 Diversity in the Classroom ............................................. 3

EDUC 430 Classroom Management ... ......... . ....... . ........... ......... . 1
Grade of C- or better required in Professional Studies courses
To be eligible to student teach, Music Education students must have a g.p.a. of 275 in their music major and an overall g.p a of 25 . Students must also pass a teacher competency test as established by the University Council on Teacher Education. Students should consult the leacher education program coordinator (see list on p. 184) to obtain the student teaching application and other information concerning student teaching policies
CREDITS TO TOTAL A MINIMUM OF

## DEGREE: BACHELOR OF MUSIC <br> MAJOR: MUSIC EDUCATION-GENERAL/CHORAL

## CONCENTRATION: VOICE

## CURRICULUM

## UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C-1
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 83.)
Mathematics: One of the following

## 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
MATH 241 Analytic Geometry and Calculus A
Successful performance on the college proficiency exam (O credits awarded)
Breadth Requirements (See page 85)
Art or Art History course, to be selected from Group A or B ....... ... ........... 3
Group A
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
The study of culture and institutions over time. (MUSC 311, 312, and 313 count toward completion of this requirement)
Group C
Empirically based study of human beings and their environment. Nine credits representing or least two areas

## Group D

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 162 Private Study ....... .................................................... 2
MUSC 261 Private Study
MUSC 262 Private Study ..................................................... 2
MUSC 361 Private Study … ....... .............. ................................... 2
MUSC 362 Private Study ..............................................................
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
MUSC 276 Class Piano: Intermediate II
MUSC 171 Diction: English and Italian
MUSC 271 Diction: German
MUSC 272 Diction: French
MUSC 480 Vocal Pedagogy
…… ................................................. 3

## 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 ........ A
MUSC 195/196 Harmony I and II
MUSC 295/296 Advanced Harmony land II
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

## Literature

MUSC 211 Introduction to Music History .................................... 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 ..........................................................
MUSC 335 Basic Conducting ........................ ... .. ..................... 2
MUED 279 Practicum in Music Education ..................................... 3
MUED 336 Choral Conducting .....................
MUED 379 Music in the Elementary and Junior High (or Middle) School ...................................
MUED 479 Secondary Music Materials and Approaches ......... ......... 3

## Music Electives

Three credits of music electives excluding ensemble and .......... .......... 3
private study on primary instrument (MUSC 407 recommended)

## Professional Studies

EDUC 413 Educational Psychology - Social Aspects ................................ 3
EDUC 414 Educational Psychology - Cognitive Aspects ......................... 3
EDUC 419 Diversity in the Classroom ............................................... 3
EDUC 400 Student Teaching ......................................................... 9
EDUC 430 Classroom Management ..............................................
Grade of C- or better required in Professional Studies courses.
To be eligible to student teach, Music Education students must have a g.pa. of 275 in their music major and an overall $\mathrm{g} . \mathrm{p}$ a of 2.5 Students must also pass a teacher competency test as established by the University Council on Teacher Education. Students should consult the teacher education program coordinator (see list on p . 184) to obtain the student teaching application and other information concerning student teaching policies.
CREDITS TO TOTAL A MINIMUM OF

DEGREE: BACHELOR OF MUSIC
MAJOR: THEORY/COMPOSITION

## CONCENTRATIONS: THEORY/COMPOSITION

CURRICULUM

## UNIVERSITY REQUIREMENTS

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

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 83)
Mathematics: One of the following

## 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 ...... .... ..................... 12
or Italian
HIST 101 Western Civilization to 1648 ...... .. ............................. 3
HIST 102 Western Civilization 1648 to the Present... .... ... ....................... 3
Breadth Requirements (See page 85)
Two 200-level or higher English literature courses selected from ... ........ 6 Group A or B
Group A
Understanding and appreciation of the creative arts and humanities. (This requirement is satisfied by MUSC 195 and 196.)
Group B
The study of culture and institutions over time Fiffeen credits representing at least two areas. (This requirement is satisfied by MUSC 311, 312, 313, HIST 101, and 102.)
Group C
Empirically based study of human beings and their environment Nine credits representing at least two areas.
Group D
The study of natural phenomena through experiment and analysis Nine credits in at least two areas

MAJOR REQUIREMENTS

## Applied Music

MUSC 100 Recital Aftendance (six semesters required) ................................... 0
MUSC 175/176 Class Piana: Elementary I and II. ....................................... 2
MUSC 275/276 Class Piano: Intermediate I and II................................ 2
Secondary Instruments and Conducting
MUSC 214 Stringed Instruments Class .......... ................................................
MUSC 215 High Brass Instruments Class ................................................. 1
MUSC 217 Woodwind Instruments Class I ............................................ 1

MUSC 335 Basic Conducting .......................................................................... 2

## Theory

MUSC 185/186 Ear Training and Sight Singing I and II
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
MUSC 331 Orchestration
MUSC 392 Contrapuntal Writing

MUSC 397 Contemporary HarmonyOne 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

## 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
MUSC 407 Twentieth-Century Music ....................................................... 3

## Ensemble

A variety of ensembles are recommended, including Chamber ensembles........... 4
CREDITS TO TOTAL A MINIMUM OF ................................... 126

## HONORS BACHELOR OF ARTS: MUSIC HONORS BACHELOR OF MUSIC: THEORY AND COMPOSITION

The recipient must complete:

1. All requirements for the Bachelor of Arts in Music or the Bachelor of Music in Theory and Composition.
2. All the University's generic requirements for the Honors Degree (see page 43 of this catalog)

## 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 fitles 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:


## MUSIC MINOR: CHURCH MUSIC

The minor in Church Music is directed to the university student who wishes to learn about fundamental aspects of the field of church music. The minor is open to music majors as well as non-majors with appropriate background in keyboard and musical studies Admission requires departmental approval, based on audition. The program comprises a sequence of courses focusing on historical information, skills, and practical experience relative to the field of church music. Upon completion of the minor, many students will be prepared for positions as church musicians.
Reauired Courses: CREDITS

MUSC 279 Introduction to the Organ........................................... 2
(normally taken concurrently)
Applied Music: 3 semesters at 2 credits each ............................................... 6
(may be taken in Organ or Voice) ............................................... 6
Ensemble (taken concurrently with applied study) ........................................... 3
MUSC 212 History of Liturgy and Hymns ..... ...................................... . 3


## 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:

MUSC 181 and 281 Jazz Styles/Tech
MUSC 116 (four semesters), MUSC 32
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

## 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 specified music courses within that area of emphasis. Students interested in the minor in Music Management Studies are strongly urged to seek advisement from the music department no later than the sophomore year. Curriculum sheets for this minor are available in the music office More information about requirements for this minor may be found at: www music udel edu/current/non-majors html

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 309 Patterns of Patronage ….........................................................................

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:

| MUSC 185 | Ear Training and Sight Singing \| | . .... 2 |
| :---: | :---: | :---: |
| MUSC 195 | Harmony 1 ................... | 3 |
| MUSC 211 | Introduction to Music History | 3 |
| MUSC 311 or | Music History: 400-1600 | 3 |
| MUSC 312 or | Music History: 1600-1827 |  |
| MUSC 313 | Music History: 1825 to Present |  |
| MUSC Ensem |  | 2 |
| MUSC Histor | /Literature Elective IMUSC 101 and 102 do not | 3 |

fulfill this requirement Any other music history course will do.) MUSC Theory Elective (MUSC 186, 196, 197, 287, 385)
Total Credits 18-19

## 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

E-mail: northmor@udel edu

## 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 81 for University and College requirements. MAJOR REQUIREMENTS
Both of the following History of Philosophy courses 6
PHIL 301 Ancient Philosophy
PHIL 303 Modern Philosophy
One of the following Logic courses
PHIL 105 Critical Thinking
PHIL 205 Logic
One of the following Ethics courses ............... ........................... 3
PHIL 201 Social and Political Philosophy
PHIL 203 Ethics
One of the following Epistemology courses .......................................... 3
PHIL 305 Twentieth Century Philosophy
PHIL 306 Philosophy of Science
PHIL 320 Theory of Knowledge
One of the following Meraphysics courses .......................................... 3
PHIL 305 Twentieth Century Philosophy
PHIL 315 Metaphysics
PHIL $330 \quad$ Philosophy of Mind
PHIL 465 Senior Seminar ........................................................................... 3
Three Philosophy elective courses, to include ................. ........ ........... 9
One three-credit course at the 300 -level or above
One three-credit course with multicultural content

Note that PHII 305 can be used to satisfy either the requirement in Epistemology or the requirement in Metaphysics, but not both. A student who takes PHIL 305 must take at least one additional course from one of those two categories

## 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

## HONORS BACHELOR OF ARTS: PHILOSOPHY

The recipient must complete:

1. All requirements for the Bachelor of Arts in Philosophy.

2 All the University's generic requirements for the Honors Degree (see page 43 of this catalog).
a. At least six of the twelve Honors credits required in the major must be at the 300 -level or higher
b. At least three of these Honors credits must be in either PHIL 301 or PHIL 303.

## 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

## PHYSICS AND ASTRONOMY

The Department of Physics and Astronomy offers an undergraduate major program leading to the BS in physics, with the option of a concentration in astronomy/astrophysics, chemical physics, or materials physics. A concentration in Geophysics is offered as an option within the B.S degree in Geology (see the Geology section of this chapter). 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 ude edu/

## DEGREE: BACHELOR OF ARTS MAJOR: PHYSICS

CURRICULUM
CREDITS
See page $\mathbf{8 1}$ for University and College requirements. Note:
MATH 241 Analytical Geometry and Calculus A satisfies the
Mathematics Skills College requirement and is strongly rec-
ommended 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)
PHYS 201/202 Introductory Physics I and II
Twenty-two credits in Physics, of which fifteen must be at ..... .............. . ...... 22
the 300-level or higher
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

## DEGREE: BACHELOR OF SCIENCE <br> MAJOR: PHYSICS

CURRICULUM

## 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

Writing: (minimum grade C-)
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 83)
Foreign Language:
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 85)
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

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, Il and III ..................... 11
PHYS 306 Computational Methods of Physics ........... . ............. 3
PHYS 313 Physical Optics .......... .... ........ ...... ........... ........ . . . 4
PHYS 419 Classical Mechanics 1

PHYS 603/604 Electricity and Magneticism I and II .............................. 6


PHYS 621 Fundamentals of Modern Physics ....................... 3
PHYS 645 Electronics for Scientists ... . .... ... ... ....... ... ..... ... ..... . . 3

MATH 241/242/243 Analytic Geometry and Calculus A, B and C........ 12
MATH 302 Ordinary Differential Equations ..... ..... ........ ............ .... 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
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

## DEGREE: BACHELOR OF SCIENCE <br> MAJOR: PHYSICS <br> CONCENTRATION: ASTRONOMY/ASTROPHYSICS

CURRICULUM
CREDITS

## UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing (minimum grade C.)
Three credits in an approved course or courses stressing
multicultural, ethnic, and/or......

## COLLEGE REQUIREMENTS

Writing: (minimum grade C-)
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 83)

## Foreign Language:

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 85)
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 roward 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, Il and III .......................... 11

$\begin{array}{lll}\text { PHYS } 313 & \text { Physical Optics } \\ \text { PHYS } 419 & \text { Classical Mechanics 1 }\end{array}$

PHYS 422 Quantum Mechanics ........ ...................................... 3
PHYS 449 Introduction to Research ...... .... .. .... ..... ... ....... .. ........ .. 4
PHYS 603 Electricity and Magnetism I ........................... 3

PHYS 620 Classical Mechanics II......................... ....................... 3
PHYS 621 Fundamentals of Modern Physics I
PHYS 632 Astrophysics.


PHYS 646 Instrumentation for Scientists.... ... ................................... . 3
MATH 241/242/243 Analytic Geometry and Calculus A, B and C ....... 12

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 ...... .....
multicultural, ethnic, and/or gender-related content (see p. 57 ).

## COLLEGE REQUIREMENTS

## Writing: (minimum grade C )

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 83)
Foreign Language:
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 85)
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 credif toward graduation may be given with permission of the Physics chair.
PHYS 207/208/209 Fundamentals of Physics I, 11 and III................ 11
PHYS 306 Computational Methods of Physics. ............................. 3
PHYS 313 Physical Optics................................................................... 4


PHYS 616 Kinetic Theory and Thermodynamics ... ... ... ... ................ 3
PHYS 621 Fundamentals of Modern Physics $1 . \ldots . . . . . . . . . . . . . . . . . . . . . . . . . .$.
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
6
CHEM 457 Inorganic Chemistry ..... 3
ELECTIVESAfter required courses are completed, sufficient elective credits must betaken 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 stressingmulticultural, ethnic, and/or gender-related content (see p. 57)
COLLEGE REQUIREMENTS
Writing: (minimum grade C -3A second writing course involving significant writing experience includingtwo papers with a combined minimum of 3,000 words to be submitted forextended faculty critique of both composition and content. This coursemust be taken after completion of 60 credit hours Appropriate writingcourses are normally designated in the semester's Registration Booklet(See list of courses approved for second writing requirement, page 83)
Foreign Language:
Completion of the intermediate-level course (107 or 112) in a given lan-guage. Number of credits needed and initial placement will depend onnumber of years of high school study of foreign language Students withfour or more years of high school work in a single foreign language mayattempt to fulfill the requirement in that language by taking an exemptionexamination.
Breadth Requirements (See page 85)
A total of twenty-one credits from Groups A, B and C is21required with a minimum of six credits in each group. The six creditsfrom each group could be from the same area.
Group A: Understanding and appreciation of the creative arts and humanitiesGroup 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 maybe counted toward graduation requirements; similarly no more than fourfrom among PHYS 202, 208. Students interested in majoring in Physics whohave taken an introductory sequence other than PHYS 207/208 should con-sult with a member of the Physics faculty to consider the need for additionalintroductory courses, for which some additional credit toward graduationmay 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 .....
PHYS 313 Physical Optics
PHYS 419 Classical Mechanics I .....
Quanfum Mechanics
PHYS 603 Electricity and MagnetismKinetic Theory and The
inic .....  3Introduction to Solid State Physic
PHYS 645 Electronics for Scientists0.12PHYS 646 Instrumentation for Scientists
PHYS 647 Modern Physics Laboratory3
3MATH 241/242/243 Analytic Geometry and Calculus A, B and CMATH 302 Ordinary Differential EquationsMATH 349 Elementary Linear Algebra 3
CHEM 103/104 General Chemistry .12
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 OF130

## DEGREE: BACHELOR OF ARTS MAJOR: PHYSICS EDUCATION <br> CURRICULUM

See page 81 for University and College requirements. Note: MATH 241 Analytical Geometry and Calculus A satisfies the Mathematics Skills College requirement and is strongly rec- ommended as the first math course for physics education majors, unless the placement exam suggests differently.
PHYS 207/208/209 Fundamentals of Physics I, II and III ..... 11
Nineteen credits in PHYS, 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 413 Educational Psychology - Social Aspects ..... 3
EDUC 414 Educational Psychology - Cognitive Aspects ..... $\begin{array}{r}3 \\ 3 \\ \hline\end{array}$
EDUC 400 Student Teaching
DUC 430 Classroom Management ..... 9
$-\quad 1$
SCEN 491 Teaching Science in Secondary Schools ..... 4
grade of C - or band EDUC courses
To be eligible to student feach, Physics Education students must have a g.p. aof 2.75 in their physics major and an overall g.p.a of 2.5 They must alsopass a teacher competency test as established by the University Council onTeacher Education. Students should consult the feacher education programcoordinator (see list on p. 184) to obtain the student teaching applicationand ofher information concerning student teaching policies.
CREDITS TO TOTAL A MINIMUM OF124

## HONORS BACHELOR OF SCIENCE: PHYSICS

The recipient must complete:
1 All requirements for the Bachelor of Science in Physics.
2. All the University's generic requirements for the Honors Degree (see page 43 of this catalog)
3. At least six of the Honors credits in Physics must be in courses beyond those specified for the B S in Physics major requirements, chosen from PHYS 607, 608, 610, 624, 627, 638. The Department may designate other special courses that satisfy this requirement.

## 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 300level. 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, INTERNATIONAL RELATIONS, AND PUBLIC ADMINISTRATION

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/poscir/

## POLITICAL SCIENCE

Students may earn a Bachelor of Arts through major programs in Political Science and in Political Science Education, and through a joint program with the Department of Foreign Languages and Literatures 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. All majors are required to complete a set of core courses that provide an introduction to political science, American government, global politics or political theory, research methods and a capstone experience Beyond the core courses, majors may choose to specialize in one of five concentrations, or to major in political science without a concentration. In both cases, students are required to take their remaining credits at the upper level ( 300 - and 400 -level). Course work for both major options with or without a concentration helps students develop analytical and written and oral communication skills and prepares them for a wide array of careers (including law) and active citizenship. Political science majors are strongly encouraged to take advantage of many experiential learning opportunities including internships, independent research under faculty supervision, study abroad, or service learning Detailed explanations of major requirements and experiential learning opportunities are available in the department office.

UD students who wish to change their major to political science must have completed POSC 150 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 cumulative grade point average to change their major to political science. Students transferring into the major from outside the University of Delaware will have their transcripts evaluated on a case- by-case basis

The department maintains an advisory program for pre-law students and for students interested in government service

## DEGREE: BACHELOR OF ARTS <br> MAJOR: POLITICAL SCIENCE

CURRICULUM
CREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS
Core Courses for the Major:

| POSC 100 | Introduction to Political Science |
| :---: | :---: |
| POSC 150 | American Political System |
| POSC 300 | Data Analysis for Political Science |
| POSC 499 | Capstone for Political Science |

One of the following courses:
POSC 106 Introduction to Political Science: Issues
POSC 240 Introduction to International Relations
POSC 270 Comparative Politics
POSC 285 Currents in Political Theory
Students must choose one of the following options:
Option One: Major Without Concentration
Eighteen credits distributed as follows:

- nine credits from POSC courses at the 400 -level
- nine credits from POSC courses at the 300 - or 400 -level

Within these eighteen credits, the courses must represent four of the five
fields listed below: (Detailed list of courses available from department
office.)
a. American Government and Politics
b. Comparative Government and Politics
c. International Relations
d Public Administration and Public Policy
e Political Theory

## Option Two: Major With Concentration

Students may choose from among five concentrations: (1) American Politics, (2) Global Studies, (3) Politics and Journalism, (4) Public Law, (5) Public Policy and Public Administration..

## American Politics Concentration

One of the following
POSC 220 Introduction to Public Policy
POSC 301 State and Local Government
POSC 387 American Political Thought

Five courses from the following four groups, with at least three of the groups represented and at least two courses taken at the 400 -level
Race and Gender
POSC 321 Class, Ethnicity and Politics
POSC 322 Race and Politics
POSC 323 Introduction to Women and Polifics
Political Participation
POSC 320 Parties and Interest Groups
POSC 324 Voting and Elections
POSC 340 Politics and Media
POSC 464 Fieldwork in Political Science
or
POSC: 468 Undergraduate Research
Polifical Institutions
POSC 404 The Judicial Process
POSC 407 American Presidency
POSC 413 Problems in American Government
POSC 422 Political Leadership
POSC 423 Congress and Public Policy
Political Thought
POSC 334 Liberalism and Conservatism
POSC 483 Who Governs: Perspectives on Political Power
Global Studies Concentration
One of the following (will fulfill one of the core courses required of all majors) : POSC 240 Introduction to International Relations POSC 270 Comparative Politics
Three of the following iopical courses, with at least one at the 400 -level ........... 9 POSC 313 American Foreign Policy
POSC 316 International Political Economy
POSC 329 International Migration
POSC 333 Communism, Fascism and Democracy
POSC 341 Environment of the Multinational Corporation
POSC 363 International Law and Organization
POSC 365 Model United Nations
POSC 408 International Organizations
POSC 409 Problems in World Politics
POSC 414 Problems in American Foreign Policy
POSC 415 Force and World Politics
POSC 422 Political Leadership
POSC 444 Global Agenda
POSC 445 Human Rights and World Politics
POSC 446 International Human Rights on Film
POSC 448 Theories of international Relations
POSC 463 The United Nations and World Affairs
POSC 464 Fieldwork in Political Science
POSC 468 Undergraduate Research
Three of the following country courses, with at least one at the 400-level ........ 9
POSC 309 Political Culture by Country
POSC 310 European Governments
POSC 311 Politics of Developing Nations
POSC 312 East Asian Political Systems
POSC 315 Third World Women in Politics
POSC 339 Britain and Europe
POSC 372 East Central European Politics
POSC 377 Arab-Israeli Politics
POSC 412 Foreign Policy of the Post-Sovief Union
POSC 426 Latin American Political Systems
POSC 427 Politics in China
POSC 428 Politics in Japan
POSC 431 Latin American Politics: Countries
POSC 432 Political Systems of the Post-Soviet Union
POSC 433 African Politics
POSC 439 Problems in African Politics
POSC 441 Problems of Western European Politics by Country
POSC 442 Problems of Western European Politics
POSC 443 China and the World
POSC 450 Problems of Latin American Politics
POSC 465 Model OAS
Politics and Journalism Concentration
POSC 340 Media and Politics

The following course is required for the concentration and will fulfill one of
the core courses required of all majors):
POSC 240 Introduction to International Relations


Public Policy and Public Administration Concentration
POSC 220
Introduction to Public Policy .....................................................


Three of the following, with at least two at the 400-level ... ................. 9
POSC 301 State and Local Government
$\begin{array}{ll}\text { POSC } 306 & \text { Economic Theory and Politics } \\ \text { POSC } 343 & \text { Society, Politics, and Health Care }\end{array}$
POSC 343 Society, Politics, and Health
POSC 350 Politics and the Environment
POSC 355 Urban Politics and Community Development
POSC 408 International Organization
POSC 411 Politics and Poverty
POSC 415 Force and World Politics
POSC 420 introduction to Political Economy
POSC 424 Energy Policy and Administration
POSC 452 Problems in Urban Politics
POSC 453 Public Sector Human Resource Management
POSC 454 Organizational Behavior and Theory in the Public Sector
POSC 455 Public Budgeting and Financial Management
POSC 456 Disaster and Politics
POSC 457 Management and Nonprofit Organizations
POSC 464 Fieldwork in Political Science
or
POSC 468 Undergraduate Research

## ELECTIVES

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

## DEGREE: BACHELOR OF ARTS <br> MAJOR: POLITICAL SCIENCE EDUCATION

CURRICULUM

CREDITS

## See page 81 for University and College requirements.

MAJOR REQUIREMENTS
POSC 100 Introduction to Political Science .............................................. 3
POSC 150 American Political System ................................................................ 3
POSC 300 Data Analysis for Political Science ......................................... 3

One of the following:.... . . ....................... ........ .......... .. ................... 3
POSC 106 Introduction to Political Science: Issues
POSC 240 Introduction to International Relations
POSC 270 Comparative Politics
POSC 285 Currents in Political Theory
Eighteen credits distributed as follows: ..................................................... 18

- nine credits from POSC courses at the 400 -leve
- nine credits from POSC courses at the 300 - or 400 -level

Within these eighteen credits, the courses must represent four of the five
fields listed below: (Detailed list of courses available from department
office.)
a American Government and Politics
b. Comparative Government and Politics
c. International Relations
d. Public Administration and Public Policy
e. Polifical Theory

ECON 151 Introduction to Microeconomics ......... ............................. 3

One additional ECON course ................................................................... 3
GEOG 120 World Regional Geography
Two additional GEOG courses ................................................. 6
HIST 104 World History II.
HIST 206 U S History 1865 to Present
HIST 491 Planning a Course of
HIST 493 Seminar: Problems in Teaching History and Social Sciences ....... 3
One additional HIST course
EDUC 400 Student Teaching .............................................................. 9
EDUC 413 Educational Psychology - Social Aspects
EDUC 414 Educational Psychology - Cognitive Aspects ...............................
EDUC 419 Diversity in the Classroom ........................................................
EDUC 420 Reading in the Content Areas .......................................................
EDUC 430 lassroom Management ..... ... ........................................ . . 1
A grade of $C$ - or befter is required in all required EDUC, ECON,
GEOG, HIST, and POSC courses.
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 275 . Students must also pass a teacher competency test as established by the Unviersity Council on Teacher Education. Students should consult the teacher education program coordinator (see list on p 184) to obtain the student teaching application and other information concerning student teaching policies.

CREDITS TO TOTAL A MINIMUM OF

## 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 without concentration shall come from at least two different fields within the discipline
- The Honors credits in the major with concentration shall come from required concentration courses At least 6 Honors credits in the major must be at the 300 or 400 level


## DEGREE: BACHELOR OF ARTS <br> MAJOR: FRENCH, GERMAN, OR SPANISH/POLITICAL SCIENCE <br> CURRICULUM <br> CREDITS

## See page 81 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 150 The American Political System .....  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
the 400 nal courses at the 300 or 400 level with a leas 2 at ..... 9
In addition to completing the courses listed below, students arerequired to participate in a semester abroad program sponsored bythe Department of Foreign Languages and Literatures (in Paris, or theequivalent, for French; in Bayreuth, or the equivalent, for German; inGranada, 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 $3 x x$, $4 x x$3
FREN 4xx (literature) (Newark campus only) ..... 3
German
GRMN 2xx, 3xx, 4xx (Prior to semester abroad; GRMN 255 recommended) ..... 6
GRMN $3 x x$, $4 x x$ ..... 12
GRMN 4xx (literature) (Newark campus only) .....  3
Spanish
SPAN 2xx, 3xx, 4xx (Prior to semester abroad; SPAN 255 recommended) ..... 6
SPAN $3 x x$, $4 x x$ ..... 12
SPAN 4xx (literature) (Newark campus only) ..... 3The following courses taken abroad count toward the French, German, orSpanish/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

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 3400 .

## REQUIREMENTS FOR A MINOR IN POLITICAL SCIENCE

The required 15 credits for a minor in Political Science are as follows:
POSC 150 American Political System

One additional POSC course at the 300 - or 400 -level ............. ........................ 3
Two additional POSC courses at the 400 -level .... ... ..... ........... 6
The three additional POSC courses at the 300 - and 400 -level should be taken in two of the five fields below:
a. American Government and Politics
b. Comparative Government and Politics
c. International Relations
d. Public Administration and Public Policy
e. Political Theory

## REQUIREMENTS FOR A MINOR IN PUBLIC ADMINISTRATION

The required 18 credits for this minor are as follows:
POSC 150 American Political System....................................... ....... 3

POSC 303 The Administrative Process ..................... ............. .... .. .... 3
POSC 464 Fieldwork in Political Science .... ....... ... ................... 3
Two of the following courses: ....... ........................... .............. . . 6
POSC 453 Public Personnel Administration
POSC 454 Public Administrative and Organizational Theory
POSC 455 Public Budgeting and Financial Management

## 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 23 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 81 for University and College requirements.

## MAJOR REQUIREMENTS

The core consists of 24 hours of course work:
POSC. 240 Introduction to International Relations ................... .............. 3

ECON 152 Introduction to Macroeconomics ................................ 3
ECON 340 International Economics ..... ... ......... ........... ... .... .... .......... 3
GEOG 120 World Regional Geography
One Foreign Languages and Literatures course beyond the .................... 3 intermediate level taught in the relevant language
One course from:
HIST 102 Western Civilization 1648 to Present
or
HIST 104 World History II
And one history course from:
HIST 131 Islamic Near East 1500 to Present
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 ..................................
At least two ( 6 credits) from: ... ...................... ....... .......................... 6
POSC 315 Third World Women in Politics
POSC 316 International Political Economy
POSC 341 Environment of Multinational Corporations
POSC 362 Diplomacy
POSC 408 International Organization
POSC 414 Problems in American Foreign Policy
POSC 444 Global Agenda
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
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 .................. 0
ANTH 222 Technology and Culture
ANTH 225 Peasant Societies
ANTH 230 Peoples of the World
ANTH 330 Development and Underdevelopment
ANTH 363 Women in Cross- Cultural Perspective

ANTH 370 Culture/Food Production and Economic Development
ANTH 401 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 328 Work in Global Economy
SOCI 331 World Population: Profiles and Trends
SOCI 360 Sociology of Religion
SOCl 361 Racial Inequality
SOCI 460 Women in International Development
FREC 410 International Agricultural Trade and Marketing
FREC 420 Agriculture in Economic Development
PHIL 204 World Religions
Diplomacy and World Order Concentration
Required:
POSC 362 Diplomacy ...........................................................
At least two ( 6 credits) from: ........................................................ 6
POSC 313 American Foreign Policy
POSC 316 International Political Economy
POSC 330 Polifical 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 Contemporary Problems of World Politics
POSC 414 Problems in American Foreign Policy
POSC 415 Force and World Politics
POSC 444 Global Agenda
POSC 445 Human Rights and World Polifics
POSC 446 International Human Rights/Film
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 401 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 428 World Cities in Comparative Perspective
HIST 210 War in Western Civilization
HIST 254 Jewish Holocaust 1933-1945
HIST 302 The World in Our Time
HIST 306 History of American Foreign Policy
HIST 351 Europe in Crisis 1919-1945
HIST 483 Seminar in Comparative History
SOCI 306 Personality and Society
SOCI 320 Personality and Politics
SOCl 328 Work in a Global Economy
SOCl 331 World Population: Profiles and Trends
SOCI 360 Sociology of Religion
SOCl 361 Racial Inequality
SOCI 460 Women in International Development
FREC 410 International Agricultural Trade and Marketing
FREC 420 Agriculture in Economic Development
PHIL 204 World Religions

## International 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 Contemporary Problems of World Politics
POSC 414 Problems in American Foreign Policy
POSC 444 Global Agenda

POSC 448 Theories of International Relations
POSC 640 International Development and Policy Administration
At least one ( 3 credits) from:
3
ECON 30.5 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 lssues
GEOG 422 Resources Development and the Environment
GEOG 438 World Cities in Comparative Perspective
GEOG 460 Women in International Development
HIST 210 War in Western Civilization
HIST 302 The World in Our Time
HIST 306 History of American Foreign Policy
HIST 351 Europe in Crisis 1919-1945
SOCl 328 Work in Global Economy
SOCl 331 World Population: Profiles and Trends
SOCI 460 Women in International Development
FREC 410 International Agricultural Trade and Marketing
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 Contemporary Problems of World Politics
POSC 414 Problems in American Foreign Policy
POSC 415 Force and World Politics
POSC 444 Global Agenda
POSC 445 Human Rights and World Politics
POSC 448 Theories of Infernational Relations
POSC 463 The United Nations and World Affairs
POSC 465 Model OAS
POSC 604 International Law
At least one ( 3 credits) from:
ECON 30.5 Comparative Economic Systems
ECON 311 Economics or Developing Countries
ECON 341 Environment of Multinational Corporations
ECON 40.5 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
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 438 World Cities in comparative Perspective
HIST 210 War in Western Civilizations
HIST 302 The World in Our Time
HIST 306 History of American Foreign Policy
HIST 351 Europe in Crisis 1919-1945
HIST 483 Seminar in Comparative History
SOCl 306 Personality and Society
SOCI 320 Personality and Politics
SOCl 361 Racial Inequality
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:
POSC 270 Comparative Politics
POSC 311 Politics of Developing Countries
POSC 433 African Politics
POSC 439 Southern African Politics
Any two courses from:
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 Nations
POSC 312 East Asian Political Systems
POSC 427 Politics in China
POSC 428 Politics in Japan
POSC 429 Southeast Asia and the World
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 40.5 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 China Since 1900
HIST 370 History of Modern Japan
HIST 371 Postwar 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 Western European Politics: Countries
POSC 442 Problems of Western European Politics
Any two courses from:
ANTH 225 Peasant Societies
ANTH 325 Peoples of Europe
ECON 30.5 Comparative Economic Systems
ECON 341 Environment of Multinational Corporations
ECON 344 The Making of the European Economy
ECON 444 Analysis of European Economic Performance
GEOG 454 New Europe: Culture, Geopolitics, Milieu
HIST 254 The lewish Holocaust, 1933-1945
HIST 339 Topics in Modern European History
HIST 351 Europe in Crisis, 1919-1945
HIST 352 Contemporary European Society
HIST 353 Modern Germany: 1770-1919
HIST 354 Germany in the Twentieth Century 1914-Present
HIST 373 Modern Ireland, 1534 to Present
HIST 374 History of England to 1715
HIST 375 History of England 1715 to Present
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:
POSC 270 Comparative Politics
POSC 311 Politics of Developing Nations
POSC 426 Latin American Political System
POSC 431 Latin American Politics: Country
POSC 450 Problems of Latin American Politics
Any two courses from:
ANTH 225 Peasant Societies
ANTH 327 Peoples of the Caribbean
ANTH 330 Development and Underdevelopment
ANTH 375 Peoples Cultures of Modern Latin America
ANTH 380 Peoples Cultures of Mexico and 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 History of Caribbean I
HIST 332 History of Caribbean II
HIST 336 Topics in Latin American History
HIST 349 Hispanic Societies: 1800-Present
HIST 430 Seminar in 20th Century Latin American Revolutions
HIST 477 Seminar in Latin American History

## Middle East Specialization

At least one course ( 3 credits) from:
POSC 270 Comparative Politics
POSC 311 Politics of Developing Nations
POSC 377 Arab-Israeli Politics
Any two courses from:
ANTH 330 Development and Underdevelopment
ECON 30.5 Comparative Economic Systems
ECON 341 Environment of Multinational Corporations
HIST 131 Islamic Near East 1500 to Present
HIST 377 Radicalism and Revolution: Islamic Movement/Modern Middle East
HIST 380 History of the Arab-sraeli Conflict
HIST 444 Seminar: Women in Islamic Middle East

## Russia/Central European Specialization

At least one course ( 3 credits) from:
POSC 270 Comparative Polifics
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:
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

## HONORS BACHELOR OF ARTS: INTERNATIONAL RELATIONS

A candidate for the Honors Bachelor of Arts in International Relations must:

1. Fulfill all requitements for the $\mathbf{B} \mathbf{A}$ 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

The 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 psych udeledu,

## DEGREE: BACHELOR OF ARTS <br> MAJOR: PSYCHOLOGY

CURRICULUM
CREDITS
See page 81 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
fuffilled; PSYC 309 is a prerequisite for PSYC 350, 370, 380,
390, 310, 312, 340
PSYC 415 History and Systems of Psychology
PSYC 415 must be taken after the student has completed the 300 level course requirements
One of the following four courses:
PSYC 301 Personality
PSYC 303 Introduction to Social Psychology
PSYC 325 Child Psychology
PSYC 334 Abnormal Psychology
One of the following four courses:...
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:
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 PSYC 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 <br> MAJOR: PSYCHOLOGY EDUCATION

CURRICULUM ..... CREDITS
See page 81 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 isfulfilled; 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
One of the following four courses: ..... 3
PSYC 301 PersonalityPSYC 303 Introduction to Social Psychology
PSYC 325 Child Psychology
Abnormal Psychology
One of the following four courses:3
Developmental Psychology$\begin{array}{ll}\text { PSYC } 380 & \text { Research in Person } \\ \text { PSYC } 380 & \text { Psychopathology }\end{array}$
PSYC 390 Social Psychology
Credit for the lower (e g, PSYC 325) and higher (PSYC 350) level ver-sions of these courses may not both be counted toward the 30 creditmajor. 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 majo
FOR EXAMPLE:If PSYC 325 is taken, PSYC 350 cannot count towards the majorIf PSYC 301 is taken, PSYC 370 cannot count towards the majorIf PSYC 334 is taken, PSYC 380 cannot count towards the majorIf PSYC 303 is taken, PSYC 390 cannot count towards the major
Two of the following four courses: ..... 6
PSYC 310 Sensation and Perception
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 413 Educational Psychology - Social Aspects ..... 3
EDUC 414 Educational Psychology - Cognitive Aspects ..... 3
EDUC 419 Diversity in the ClassroomHIST 491 Planning a Course of Instruction.HIST 493 Seminar: Problems in Teaching History and Social SciencesEDUC 420 Reading in the Content Areas3
3
Student Teaching ..... 9
EDUC 430 Classroom Management ..... 1

A grade of $C$ - or better is required in all required PSYC, EDUC, and HIST courses.

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 pa of 275 Students must also pass a teacher competency test as established by the University Council on Teacher Education Students should consult the teacher education program coordinator (see list on p. 184) 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

## HONORS BACHELOR OF ARTS:

## PSYCHOLOGY OR PSYCHOLOGY EDUCATION

The recipient must complete:

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

## 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 "interdisciplinary" 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: $\mathrm{AFOX} @ u d e l e d v$
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/

## 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 81 for University and College requirements. MAJOR REQUIREMENTS
SOCl 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 9 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) or internship courses $(464,410,412,441,442)$
Five courses in related subjects chosen in consultation with. 15
the advisor, normally from among the following departments: Economics, Black American Studies, Criminal Justice, Geography, History, Philosophy, Polifical Science and International Relations, Psychology, and 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

## DEGREE: BACHELOR OF ARTS <br> MAJOR: SOCIOLOGY

CONCENTRATION: DATA ANALYSIS
CURRICULUM ..... CREDITS
See page 81 for University and College requirements.MAJOR REQUIREMENTS
SOCl 201 Introduction to Sociology ..... 3
SOCI 301 Introduction of Sociological Research ..... 4
SOCI 312 Theories of Society ..... 3
SOCI 401 Advanced Sociological Methods ..... 3
SOCl 411 Techniques of Demographic Analysis
3
SOCl 414 Data Analysis ..... 15
at the 200 -level. At least 6 credits must be at the 400 -level or higher,but cannot be fulfilled with 400 -level directed siudy courses (466) orinternship courses (464, 410, 412, 441, 442)
SOCl 412 Practicum ..... 4
This course is required but does not count as part of the thirty-fouSociology credits for the major.
MATH 201 Introduction to Statistics I. ..... 3
MATH 202 Introduction to Statistics II ..... 3
Three courses chosen from the following: ..... 9-11
GEOG 250 Computer Methods in GeographyPHIL 245 Ethical Issues in Scientific ResearchPHIL 245 Ethical Issues in Scientific ResearchPHIL 320 Theory of KnowledgeECON 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 betaken 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
CURRICULUMCREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS
SOCl 201 Introduction to Sociology ..... 3
SOCl 301 Introduction of Sociological Research ..... 4
3
SOCI 311 Hospitals .....  3
SOCI 312 Theories of Society ..... 3
15
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) orinternship courses $(464,410,412,441,442)$ (SOCl 34$]$ and 348recommended for those interested in medical social work)
SOCl 341 Welfare and Society3
SOCl 346 Sociology of Aging
SOCl 348 Theories of Social Work Practice
SOCl 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 and11
will be selected in consultation with the student's advisor. Departmenoffering courses filling the needs of health concentration studentsinclude Anthropology, Business Administration, Science and Culture,Economics, Individual and Family Studies, Philosophy, Psychology,and Women's Studies
ELECTIVESaken to meet the minimum credit requirement for the dered
CREDITS TO TOTAL A MINIMUM OF124
DEGREE: BACHELOR OF ARTS
MAJOR: SOCIOLOGY
CURRICULUMSee page 81 for University and College requirements.
MAJOR REQUIREMENTS
SOCl 201 Introduction to Sociology ..... 3
SOCI 301 Introduction of Sociological Research ..... 4
SOCI 312 Theories of Society ..... 3SOCI 345 Sociology of Law.
SOCl 4.56 Lawyers and Society ..... 3
SOCI 442 Law and Society Practicum and Seminar ..... 4
This course is required but does not count as part of the thirty-oneSociology credits for the major.Any five other courses in Sociology, with no more than 9 credits15
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) orinternship courses $(464,410,412,441,442)$
Suggested courses for the study of family/gender include:
Social Deviance
SOCl 213 Men and Women in American SocietySOCI 308 The Family

SOCl 330
SOCl 407 Sopulation, Law and Society
Suggested courses in the organization/work area:
SOCI 327 Sociology of Organizations
SOCl 330 Population, Law and Society
SOCl 355 Computers, Ethics and Society
SOCl 428 Corporate Crime
SOCl 450 Political Sociology
Twelve credits from the following courses are recommended:
CRUU 320 Introduction to Criminal Law
CRUU 347 The Jury: Guilty or Not Guilty
CRJU 357 Seminar on the Police
CRJU 425 Criminal Law and Social Policy
CRIU 4 xx Contemporary Debates
POSC 402 Civil Liberties 1
POSC 404 The Judicial Process
POSC 405 Constitutional Law of the U S
POSC 406 Civil Liberties il
PHIL 201 Social and Political Philosophy
PHIL 446 Philosophy of Law
HIST 301 The Worker in American Life
HIST 309 US. Business and Political Economy
A second writing course in any department ..... ............. ........... ............ ....... 3
A course in oral communication is suggested

## 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

## DEGREE: BACHELOR OF ARTS <br> MAJOR: SOCIOLOGY

## CONCENTRATION: SOCIAL WELFARE

CURRICULUM CREDITS

See page 81 for University and College requirements.

## MAJOR REQUIREMENTS

SOCI 201 Introduction to Sociology ................................................ 3
SOCI 301 Introduction of Sociological Research .. ...... ........... ...... 4
SOCl 312 Theories of Society … ..................................................... 3
SOCI 341 Welfare and Society 3

SOCl 348 Theories of Social Work Practice
SOCl 441 Social Welfare Practicum and Seminar. .......................................
This course is required but does not count as part of the thirty-one Sociology credits for the major
Any five courses in Sociology, with no more than 9 credits at the 200 -level.
At least 6 credits must be at the 400 -level or higher, but cannot be ful-
filled with 400 -level directed study courses ( 466 ) or internship courses
( $464,410,412,441,442$ ). The following courses are recommended:
SOCl 202 Social Deviance
SOCl 204 Urban Communities
SOCl 303 Juvenile Delinquency
SOCl 304 Criminology
SOCl 305 Social Class and Inequality
SOCI 308 The Family
SOCl 346 Sociology of Aging
SOCI 361 Race, Power and Social Conflict
SOCl 415 Race, Class and Gender
SOCI 418 Race, Gender and Poverty
SOCl 448 Community Based Treatment
Eleven additional credits of related work are required ....... . ...................... 11
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 credif requirement for the degree
CREDITS TO TOTAL A MINIMUM OF

## DEGREE: BACHELOR OF ARTS

## MAJOR: SOCIOLOGY EDUCATION

CURRICULUM
CREDITS
See page 81 for University and College requirements.
MAJOR REQUIREMENTS
SOCI 201 Introduction to Sociology ... . ................... ..... ..................... 3
SOCl 301 Introduction of Sociological Research . ....... ..................... 4
SOCI 312 Theories of Society .... ....................................................... 3
Seven Sociology courses, with no more than 9 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) or internship courses (464, 410, 412, 441, 442).
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 413 Educational Psychology - Social Aspects .......................... 3
EDUC 414 Educational Psychology - Cognitive Aspects ....... .... ............. .. 3
EDUC 419 Diversity in the Classroom
EDUC 420 Reading in the Content Areas ................................................ . 1
HIST 491 Planning a Course of Instruction...................................................
HIST 493 Seminar: Problems in Teaching History and Social Sciences .......
EDUC 400 Student Teaching
EDUC 430 Classroom Management$\begin{array}{r}-\quad 3 \\ 9 \\ \hline\end{array}$

A grade of C - or better is required in all required SOCI, EDUC, and HIST courses

To be eligible to student feach, Sociology Education students must have a g.pa of 3.0 in their major and an overall g.p.a of 275 Students must
pass a teacher competency test as established by the University Council on
Teacher Education Students should consult the teacher education program
coordinator (see list on p 184) to obtain the student teaching application
and other information concerning student teaching policies.
CREDITS TO TOTAL A MINIMUM OF

## DEGREE: HONORS BACHELOR OF ARTS: SOCIOLOGY (ALL CONCENTRATIONS)

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

1. All requirements for the Bachelor of Arts degree with a major in Sociology, and where appropriate, concentration requirements (see www udel edu/soc/concentr htm)
2. All of the University's generic requirements for the Honor Baccalaureate degree
3. Twelve credits of honors courses in Sociology. At least six credits must be at the 300 level or higher

## 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, MATH 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 23.

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 social work or related fields)

## DEGREE: BACHELOR OF ARTS MAJOR: CRIMINAL JUSTICE

CURRICULUM CREDITS

## See page 81 for University and College requirements.

MAJOR REQUIREMENTS
CRUU 110 Introduction to Criminal Justice .. ..... ............. .... ................... 3
CRUU 201 Problems of Law Enforcement ......................................... 3

CRJU 203 Problems of Corrections ........................................... . . . 3
Criminal Justice courses at the 300 or 400-level (except CRUU 495) ...... ...... 18
No more than 6 credits of independent study (CRUU 366 or 466) may count toward the requirements for the major
SOCl 201 Introduction to Sociology .... .......... ....................................... 3
SOCl 301 Introduction of Sociological Research ................................... 4
POSC 150 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:
POSC 402 Civil Liberties
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

## DEGREE: HONORS BACHELOR OF ARTS: CRIMINAL JUSTICE

Students wishing to receive an Honors B A in Criminal Justice must complete:

1. All requirements for the Bachelor of Arts degree with a major in Criminal Justice.
2. All of the University's generic requirements for the Honor Baccalaureate degree
3. Twelve credits of honors courses in Criminal Justice At least six credits must be at the 300 level or higher

## STATISTICS

(See Food and Resource Economics in College of Agriculture and Natural Resources)

## 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, scenery, lighting, properties, sound, stage management, and costumes, 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, or Khulumani Theatre Troupe.

Telephone: (302) 831-2201
http://www udel.edu/theatre/

## DEGREE: BACHELOR OF ARTS MAJOR: THEATRE PRODUCTION

CURRICULUM CREDITS
See page 81 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 301 Fundamentals of Properties Construction
THEA 302 Fundamentals of Stage Lighting
THEA 303 Fundamentals of Scene Painting
THEA 304 Fundamentals of Audio for the Theatre
THEA 305 Fundamentals of Costume Production
THEA 306 Fundamentals of Patternmaking
THEA 307 Fundamentals of Draping for the Stage
THEA 308 Fundamentals of Costume Crafts
THEA 309 Fundamentals of Stage Management
THEA 310 Fundamentals of Maskmaking
Or other courses as approved by advisor.
Two of the following:
ENGL 208 Introduction to Drama
ENGL 324 Shakespeare
THEA 106 Theatrical Experience Abroad
THEA 341 Theatre/Drama: Classic/Medieval
THEA 347 Special Topics in Theatre History
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


## 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 <br> MAJOR: WOMEN'S STUDIES

CURRICULUM
CREDITS
See page 81 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 or courses cross-listed with ... ....... 6
History and/or humanities departments chosen from the following list (only sections cross-listed with WOMS):
WOMS 203/PHIL. 202 Contemporary Moral Problems
WOMS 205
Women in Arts and Humanities
WOMS/PHIL 210 Women and Religion
WOMS/ENGL 214 Literature and Gender
WOMS 242/ARTH 240 Women and Art
WOMS/ARSC 293 Honors Short Course
WOMS/HIST 300 Women in American History
WOMS/MUSC 302 Women in Music: Alternate Survey
WOMS/ARTH 311 Renaissance Women, Society and Art
WOMS/ENGL 318 Studies in Film
WOMS/FLLT 320 Varying Authors and Genres
WOMS/FLLT 322 Topics: Classical Literature in Translation
WOMS/FLLT 324 Topics: French Literature in Translation
WOMS/FLLT 325 Topics: German Literature in Translation
WOMS/FLLT 326 Topics: Hispanic Literałure in Translation
WOMS/FLLT 328 Topics: Japanese Literature in Translation
WOMS/FLLT 329 Topics: Italian Literature in Translation
WOMS/FLLT 330 Varying Authors, Themes, and Movements
WOMS/ENGL 352 Studies in Nineteenth Century Literature
WOMS/ENGL 353 Twentieth Century British Literature
WOMS/ENGL 380 Women Writers
WOMS/ENGL 381 Women in Literałure
WOMS/ENGL 382 Studies in Multicultural Literature in English WOMS/HIST 411 Seminar in American History
WOMS/HIST 439 Women and Revolution in Africa
WOMS/HIST 444 Seminar: Women in the Islamic Middle East
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

WOMS/SOCI 206 Women and Work
WOMS/SOCI 211
WOMS/SOCl 213
WOMS/LING 222
WOMS 240
WOMS/POSC 315
WOMS/POSC 323
WOMS/PSYC 333
WOMS/CRUU 350
WOMS/ANTH 363
WOMS/ECON 385
Women and the Economy
WOMS/SOCl 407 Sociology of Sex and Gender
WOMS/POSC 413 Problems in American Government
WOMS/SOCI/BAMS 415 Race, Class, and Gender
WOMS/SOCl 418 Race, Gender and Poverty
WOMS/IFST 430 Teaching Family Life
WOMS/POSC 436 Politics and Literature
WOMS/SOCI/GEOG/IFST 460 Women in International Development
WOMS/SOCI 607 Sociology of Sex and Gender
Three credits in WOMS sciencerelated courses chosen from the following list:
WOMS/CSCC 233 Women, Biology, and Medicine
WOMS/ANTH 305 The Evolution of Human Sex Roles and Reproduction
WOMS/PHIL 327 Race, Gender, Science
WOMS/CSCC/PHIL 389 Topics: Women and Health Issues
Nine additional credits in courses in Women's Studies or cross-listed ...... ...... 9 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

## 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

## 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
Note: No more than 9 credits may be taken in any one department No more than 6 credits in WOMS experimental courses ( $\times 67$-numbered) may be counted toward the 18 -credit requirement.

A minimum grade of C - is required in each course.

