The College of Arts and Science represents a range of academic disciplines and contributes to the general and professional education of all undergraduate students at the University.

Students enrolled in the college may choose among a number of degree programs and options designed to permit undergraduates as much flexibility as possible 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 include in their selections 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 arts and humanities deal with the development and refinement of systems of value, aesthetic appreciation, a comprehensive world view, and increased skill in communication, both verbal and nonverbal. Courses in the grouping Culture and Institutions Through Time provide an understanding of the impact of history upon the way we live and think, dealing with a wide variety of social, technological, literary, artistic, scientific and political subject matter from a historical perspective. Through the behavioral and social sciences, students should acquire knowledge of facts and concepts relating to social and political organization and patterns of interaction among individuals and groups; awareness of the practical, moral and ethical issues in society; and an understanding of psychological development and the determinants of individual behavior.

In an increasingly complex, technological society, an educated person must have some knowledge of the natural sciences and competency to deal with mathematical and quantitative concepts. The intent of these requirements is to provide students acquaintance with, and appreciation of, the materials and methodologies of each area and, ideally, 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 should 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 should acquire perceptions, skills, and attitudes that will assist them in achieving a full and satisfying life as contributing members of society.
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 section of this catalog.

**BACHELOR OF ARTS**

This degree, offered by all departments of the College of Arts and Science, 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.

**CORE CURRICULUM**

**UNIVERSITY REQUIREMENTS**

- **ENGL 110 - Critical Reading and Writing** 3
- **Mathematics:**
  - MATH 114 or MATH 170 - College Mathematics and Statistics 3
  - MATH 115 or MATH 171 - Pre-Calculus 3
- **Foreign Language:**
  - Completion of the intermediate-level course (107 or 112 or 214) in a given foreign language (ancient or modern). 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.

**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 laboratory

A course may be applied both toward the major requirements and a breadth requirement, 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 70-73.

**COURSES APPROVED FOR SECOND WRITING REQUIREMENT**

**Anthropology (ANTH)**

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

**Art History (ARTH)**

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

**Arts and Sciences (ARSC)**

- ARSC 316 - Seminar in the Arts

**Biology (BISC)**

- BISC 450 - Proseminar in Environmental Science (cross-listed with GEOG 450 and GEOL 450)
- BISC 498 - Topics in Biology (cross-listed with CSECS 498)

**Black American Studies (BAMS)**

- BAMS 415 - Race, Class and Gender (cross-listed with SOCI 415 and WOMS 415)
- BAMS 432 - Psychological Perspectives on the Black American (cross-listed with PSYC 412)

**Center for Science and Culture (CSCC)**

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

---

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.

** Minimum grade of C required.

† This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21.

† The only exception for total number of credits in breadth requirements for a Bachelor of Arts degree is for the Bachelor of Arts in Mathematics Education. See page 107 for these requirements.
HIST363  Germany in 20th Century: 1914 to Present
HIST368  Modern China: 1600-1920s
HIST369  China Since 1900
HIST373  Modern Ireland: 1534 to Present
HIST385  History of Biological Ideas (cross-listed with CSCC 385)
HIST392  History of Modern Japan
HIST377  Radicalism and Revolution: Islamic Movements in the Modern Middle East
HIST378  Nationalism in the Modern Middle East
HIST397  History of South Africa
HIST409  Varieties of Modern Feminism (cross-listed with WOMS 409)
HIST411  Seminar in American History (cross-listed with CSCC 411 and WOMS 411)
HIST430  Twentieth-Century Latin American Revolutions
HIST440  Africa Under Colonial Rule
HIST459  United States Urban History
HIST471  Studies in Medieval History (cross-listed with WOMS 472)
HIST473  Studies in Early Modern European History (cross-listed with WOMS 473)
HIST474  Studies in English History
HIST475  Seminar in Modern European History
HIST479  Studies in Asian History

Music (MUSC)
MUSC311  Music History: 400 through 1600
MUSC312  Music History: 1600 through 1627
MUSC313  Music History: 1825 to the Present
MUSC345  History of Theatre: American Musical Theatre (cross-listed with THEA 345)

Philosophy (PHIL)
PHIL444  Medical Ethics (cross-listed with CSCC 444)
PHIL463  Ethical Theory
PHIL465  Senior Seminar

Political Science (PLSC)
PLSC334  Liberalism and Conservatism
PLSC380  Introduction to Law
PLSC408  International Organizations
PLSC433  African Politics
PLSC463  Political Thoughts II
PLSC465  Human Rights and World Politics
PLSC465  Theories of International Relations

Psychology (PSYC)
PSYC405  Advanced Social Psychology
PSYC414  Drugs and the Brain
PSYC415  History and Systems of Psychology
PSYC416  Psychological Perspectives on the Black American (cross-listed with BAMS 432)
PSYC425  Topics in Child Psychology
PSYC445  Topics in Adolescent Psychology

Sociology (SOCI)
SOCI305  Social Class and Inequality
SOCI353  Computers, Ethics and Society (cross-listed with CSCC 353)
SOCI415  Race, Class and Gender (cross-listed with BAMS 415 and WOMS 415)
SOCI428  Corporate Crime (cross-listed with CRJU 428)
SOCJ 456  Lawyers and Society (cross-listed with CRJU 456)

Theatre (THEA)
THEA341  Theatre/Drama: Classical/Medieval (cross-listed with CMLT 341)
THEA342  Theatre/Drama: Renaissance to 1700 (cross-listed with CMLT 342)
THEA343  Theatre/Drama: 1700 to 1900 (cross-listed with CMLT 343)
THEA344  Theatre/Drama: 1900 to Present (cross-listed with CMLT 344)
THEA345  History of Theatre: American Musical Theatre (cross-listed with MUSC 345)
THEA346  History of Theatre: American Theatre
THEA410  Fundamentals of Dramaturgy

University (UNIV)
UNIV490  Honors Tutorial: Humanities
UNIV491  Honors Tutorial: Natural/Social Science

Women's Studies (WOMS)
WOMS300  Women in American History (cross-listed with HIST 300)
WOMS302  The World in Our Time (cross-listed with HIST 302)
WOMS409  Varieties of Modern Feminism (cross-listed with HIST 409)
WOMS411  Seminar in American Intellectual History (cross-listed with CMLT 411 and HIST 411)
WOMS415  Race, Class and Gender (cross-listed with CSCC 415 and WOMS 415)
WOMS416  The American Family 1608 to 1900 (cross-listed with HIST 416)
COLLEGE OF ARTS AND SCIENCE • BREADTH REQUIREMENTS

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

GROUP A

Anthropology (ANTH)
ANTH 205 Anthropology and Human Nature
ANTH 227 American Culture
ANTH 231 Personality and Culture
ANTH 251 Introduction to the Ethnic Arts
ANTH 338 Arts and Crafts of Native South America
ANTH 360 Humanities Colloquium

Art (ART)
ART 315 Issues in Contemporary Art

Art History (ARTH)
ARTH 150 Monuments and Methods in the History of Art
ARTH 151 Myth, Religion, and Art
ARTH 152 Design and Expression in the Visual Arts
ARTH 161 Art in East and West
ARTH 162 History of Architecture

Center for Science and Culture (CSCC)
CSCC 241 Ethical Issues in Health Care (cross-listed with PHIL 241)
CSCC 245 Ethical Issues in Scientific Research (cross-listed with PHIL 245)
CSCC 246 Philosophical Perspectives of Medicine (cross-listed with PHIL 246)
CSCC 368 Literature and Science (cross-listed with ENGL 368)
CSCC 369 Literature and Medicine (cross-listed with ENGL 369)
CSCC 444 Medical Ethics (cross-listed with PHIL 444)

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

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 Folk Song
ENGL 320 The Bible as Literature
ENGL 324 Shakespeare
ENGL 368 Literature and Science
(Cross-listed with CSCC 368)
ENGL 369 Literature and Medicine
(Cross-listed with CSCC 369)
ENGL 380 Women Writers
(Cross-listed with JWST 380 and WOMS 380)

Foreign Languages and Literatures (FLIT)
FLIT 202 Biblical and Classical Literature
(Cross-listed with CMLT 202 and ENGL 202)
FLIT 316 Classical Mythology (Cross-listed with CMLT 316)
FLIT 320 Varying Authors and Genres
(Cross-listed with CMLT 320 and WOMS 320)
FLIT 322 Topics: Classical Literature in Translation
(Cross-listed with CMLT 322)
FLIT 324 Topics: French Literature in Translation
(Cross-listed with CMLT 324)
FLIT 325 Topics: German Literature in Translation
(Cross-listed with WOMS 325)
FLIT 326 Topics: Hispanic Literature in Translation
(Cross-listed with WOMS 326)
FLIT 328 Topics: Japanese Literature in Translation
(Cross-listed with WOMS 328)

Geography (GEOG)
GEOG 203 Introduction to Cultural Geography
GEOG 345 Cultural Geography
GEOG 346 Urban Cultural Geography

GROUP B

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

Jewish Studies (JWST)
JWST 380 Women Writers
(Cross-listed with ENGL 380 and WOMS 380)

Linguistics (LING)
LING 301 Dictionaries

Music (MUSC)
MUSC 101 Appreciation of Music
MUSC 102 Appreciation of Music
MUSC 103 Introduction to Opera
MUSC 104 Introduction to Opera II
MUSC 105 Fundamentals of Music I
MUSC 106 Fundamentals of Music II
MUSC 195 Harmony I
MUSC 196 Harmony II
MUSC 197 Jazz Harmony

Philosophy (PHIL)
PHIL 100 Philosophy of Life (Cross-listed with WOMS 100)
PHIL 101 Introduction to Philosophy
PHIL 102 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 245 Ethical Issues in Scientific Research
(Cross-listed with CSCC 245)
PHIL 246 Philosophical Perspectives of Medicine
(Cross-listed with CSCC 246)
PHIL 317 American Philosophy
PHIL 444 Medical Ethics
(Cross-listed with CSCC 444)

Political Science (POSC)
POSC 285 Currents in Political Theory
POSC 333 Communism, Fascism, and Democracy

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

University (UNIV)
UNIV 490 Honors Tutorial: Humanities

Women's Studies (WOMS)
WOMS 100 Philosophies of Life (Cross-listed with PHIL 100)
WOMS 203 Contemporary Moral Problems
(Cross-listed with PHIL 202)
WOMS 204 Gender and Knowledge
WOMS 205 Women in the Arts and Humanities
WOMS 208 Introduction to Drama
(Cross-listed with CMLT 218 and ENGL 208)
WOMS 209 Introduction to the Novel
(Cross-listed with CMLT 219 and ENGL 209)
WOMS 210 Women and Religion
(Cross-listed with PHIL 210)
WOMS 216 Introduction to Feminist Theory
(Cross-listed with PHIL 216)
WOMS 320 Varying Authors and Genres
(Cross-listed with CMLT 320 and FLIT 320)
WOMS 324 French Literature in Translation
(Cross-listed with FLIT 324)
WOMS 325 German Literature in Translation
(Cross-listed with FLIT 325)
WOMS 326 Hispanic Literature in Translation
(Cross-listed with FLIT 326)
WOMS 328 Topics: Japanese Literature in Translation
(Cross-listed with FLIT 328)
WOMS 390 Women Writers
(Cross-listed with ENGL 380 and JWST 380)

Anthropology (ANTH)
ANTH 101 Introduction to Social and Cultural Anthropology
ANTH 105 Introduction to Historical Archaeology
ANTH 228 Peoples and Cultures of the Southwest
ANTH 260 Sociocultural History of Africa
ANTH 261 Peoples and Cultures of the Middle East
ANTH 265 High Civilizations of the Americas
ANTH 278 Historic Cultures of the Mid-Atlantic Region
(Cross-listed with HIST 278)
ANTH 322 The City in American Culture
(Cross-listed with HIST 322)
ANTH 323 Prehistory of South America
ANTH 327 Peoples of the Caribbean
ANTH 375 Peoples and Cultures of Modern Latin America
**Art History (ARTH)**
- ARTH 153: Introduction to Art History I
- ARTH 154: Introduction to Art History II
- ARTH 155: Asian Art
- ARTH 207: Origins of Art
- ARTH 208: Greek and Roman Art
- ARTH 209: Early Medieval Art 200-1000 A.D.
- ARTH 210: Later Medieval Art 1000-1400 A.D.
- ARTH 217: Early Renaissance Art
- ARTH 218: High Renaissance and Mannerist Art
- ARTH 220: Italian Renaissance Architecture
- ARTH 222: Baroque Art
- ARTH 223: Baroque and Rococo Architecture and Urbanism
- ARTH 225: Eighteenth Century Art
- ARTH 227: Modern Art I
- ARTH 228: Modern Art II
- ARTH 230: American Art: 1607-1865
- ARTH 231: American Art: 1865-Present
- ARTH 233: Art of China
- ARTH 234: Art of Japan
- ARTH 235: Art of India
- ARTH 236: The Arts of Islam
- ARTH 250: Rulers' Images from Augustus to George Washington
- ARTH 302: Prints and Society
- ARTH 304: Northern Baroque Art
- ARTH 305: Italian Baroque: Metaphor and Marvel
- ARTH 308: Modern Architecture I: 1750-1900
- ARTH 309: Modern Architecture II: 20th Century
- ARTH 310: Role of the Artist in Society
- ARTH 318: History of Photography

**Black American Studies (BAMS)**
- BAMS 134: History of Africa (cross-listed with HIST 134)
- BAMS 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)

**Center for Science and Culture (CSCC)**
- CSCC 330: Varying Authors, Themes and Movements (cross-listed with CMIT 330, FIT 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, FIT 330 and WOMS 330)
- CMLT 341: Theatre/Drama: Classic/Medieval (cross-listed with THEA 341)
- CMLT 342: Theatre/Drama: Renaissance to 1700 (cross-listed with THEA 342)
- CMLT 343: Theatre/Drama: 1700 to 1900 (cross-listed with THEA 343)
- CMLT 344: Theatre/Drama: 1900 to Present (cross-listed with THEA 344)

**Economics (ECON)**
- ECON 315: Economic History of Colonial America
- ECON 316: Economic History of the U.S
- ECON 318: Economic History of France

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

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

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

**Geography (GEOG)**
- GEOG 225: Historical Geography of the United States

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

**History (HIST)**
- HIST 101: Western Civilization to 1648
- HIST 102: Western Civilization: 1648 to Present
- HIST 104: World History to 1648
- HIST 107: World History: 1648 to Present
- HIST 130: Islamic Near East: 600-1500
- HIST 131: Islamic Near East: 1500 to Present
- HIST 134: History of Africa (cross-listed with BAMS 134)
- HIST 135: Introduction to Latin American History
- HIST 137: East Asian Civilization: China
- HIST 138: East Asian Civilization: Japan
- HIST 205: United States History
- HIST 206: United States History
- HIST 210: War and Society
- HIST 220: The American Civil Rights Movement
- 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 355: Early Modern Intellectual History
- HIST 356: Modern European Intellectual History
- HIST 359: Soviet Russia: 1917 to 1990
- HIST 363: Modern Germany: 1770 to 1919
- HIST 364: Germany in 20th Century: 1914 to Present
- HIST 368: Modern China: 1600-1920s
- HIST 369: China Since 1900
- HIST 374: History of England to 1715
- HIST 375: History of England: 1715 to Present
- HIST 377: Radicalism and Revolution: Islamic Movements in the Modern Middle East
- HIST 378: Nationalism in the Modern Middle East
- HIST 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 392: History of Modern Japan
- HIST 393: History of Modern Vietnam
- HIST 397: History of South Africa
- HIST 474: Studies in English History

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

**Music (MUSC)**
- MUSC 205: Music of the Non-Western World
- MUSC 206: Music of China, Korea and Japan
- MUSC 207: History of Jazz
- MUSC 311: Music History: 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)
<table>
<thead>
<tr>
<th>Philosophy (PHIL)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil 301 Ancient Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phil 302 Medieval Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phil 303 Modern Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phil 309 Indian Religion and Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phil 310 Chinese Religion and Philosophy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science (POSC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSC 311 Politics of Developing Nations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSC 387 American Political Thought</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian (RUSS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUSS 310 Introduction to Russian Literature I (to be taught in Russian)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUSS 311 Introduction to Russian Literature II (to be taught in Russian)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUSS 325 Russian Civilization and Culture (to be taught in Russian)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish (SPAN)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 301 Survey of Spanish Literature (to be taught in Spanish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 302 Survey of Spanish Literature (to be taught in Spanish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 303 Survey of Spanish-American Literature (to be taught in Spanish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 304 Survey of Spanish-American Literature (to be taught in Spanish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 325 Spanish Civilization and Culture (to be taught in Spanish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 326 Latin American Civilization and Culture (to be taught in Spanish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theatre (THEA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA 341 Theatre/Drama: Classic/Medieval (cross-listed with CMIT 341)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA 342 Theatre/Drama: Renaissance to 1700 (cross-listed with CMIT 342)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA 343 Theatre/Drama: 1700 to 1900 (cross-listed with CMIT 343)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA 344 Theatre/Drama: 1900 to Present (cross-listed with CMIT 344)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA 345 History of Theatre: American Musical Theatre (cross-listed with MUSC 345)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEA 346 History of Theatre: The American Theatre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's Studies (WOMS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOMS 300 Women in American History (cross-listed with HIST 300)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOMS 330 Varying Authors, Themes, and Movements (cross-listed with CMIT 330, CSCC 330 and FLIT 330)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology (ANTH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 103 Introduction to Prehistoric Archaeology (duplicate credit with ANTH 104 in Group D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 222 Technology and Culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 225 Peasant Societies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 229 Indians of North America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 320 Peoples of the World</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 355 Applied Archaeology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 399 Hunting Societies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 430 Prehistory of North America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 433 South American Indians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 470 Culture of Food Production and Economic Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 477 Ecological Anthropology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 480 Peoples and Cultures of Mexico and Central America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts and Science (ARSC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARSC 127 Shaping of the Modern World</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black American Studies (BAMS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAMS 110 Introduction to Black American Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAMS 204 Urban Communities (crosslisted with SOCI 204)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAMS 205 Contemporary Afro-American Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAMS 212 Afro-Caribbean Life and Culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAMS 361 Race, Power, and Social Conflict (crosslisted with SOCI 361)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center for Science and Culture (CSCC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCC 243 Society, Politics, and Health Care (crosslisted with SOCI 243)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCC 271 Comparative Medical Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCC 310 Sociology of Health Care (crosslisted with SOCI 310)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCC 311 Hospitals (crosslisted with SOCI 311)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication (COMM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 200 Introduction to Human Communication Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 245 Mass Communication and Culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 251 The Development of Verbal Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMM 330 Communication and Social Behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal Justice (CRJU)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJU 110 Introduction to Criminal Justice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJU 120 Illicit Drug Use in America</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJU 201 Problems of Law Enforcement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJU 202 Problems of Criminal Jurisdiction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRJU 345 Sociology of the Law (crosslisted with SOCI 345)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics (ECON)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 100 Economic Issues and Policies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 151 Introductory Microeconomics: Prices and Markets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 152 Introductory Macroeconomics: National Economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 305 Comparative Economic Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 306 Economic Theory of Politics (crosslisted with POSC 306)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 311 Economics of Developing Countries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 332 Economics of Government Spending and Taxation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 340 International Economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 348 Industrial Policies of France</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 360 Government Regulation of Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 381 Economics of Human Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 393 Urban Economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English (ENGL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 390 English linguistics (crosslisted with LING 390)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geography (GEOG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 102 Human Geography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 210 Economic Geography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 230 Humans and the Earth Ecosystem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 233 Conservation of Natural Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 240 Environment and Behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 320 Water and Society</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History (HIST)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 327 American Labor before Industrialization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linguistics (LING)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LING 101 Introduction to Linguistics I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LING 102 Language, Mind and Society</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LING 203 Languages of the World</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LING 222 Language and Gender (crosslisted with WOMS 222)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LING 270 Introduction to Cognitive Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LING 390 English linguistics (crosslisted with ENGL 390)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science (POSC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSC 106 Introduction to Political Science: Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSC 240 Introduction to International Relations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSC 270 Comparative Politics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSC 306 Public Choice (crosslisted with ECON 306)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology (PSYC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 201 General Psychology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 301 Personality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 303 Introduction to Social Psychology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 325 Child Psychology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 333 Psychology of Women (crosslisted with WOMS 333)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociology (SOCI)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 201 Introduction to Sociology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 202 Social Deviance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 203 The Individual and Society</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 204 Urban Communities (crosslisted with BAMS 204)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 206 Women and Work (crosslisted with WOMS 206)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 299 Social Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 310 Sociology of Health Care (crosslisted with CSCC 310)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 311 Hospitals (crosslisted with CSCC 311)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 322 Crows, Cults, and Revolutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 345 Sociology of Law (crosslisted with CRJU 345)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 361 Race, Power, and Social Conflict (crosslisted with BAMS 361)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOCI 362 Sociology of Mass Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women's Studies (WOMS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOMS 201 Introduction to Women's Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOMS 202 Introduction to International Women's Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOMS 206 Women and Work (crosslisted with SOCI 206)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOMS 211 Men, Conflict, and Social Change (crosslisted with SOCI 211)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOMS 222 Language and Gender (crosslisted with LING 222)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOMS 333 Psychology of Women (crosslisted with PSYC 333)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology (ANTH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH 102 Introduction to Biological Anthropology (duplicate credit with ANTH 104)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>ANTH 104</td>
<td>Introduction to Archaeology and Biological Anthropology (duplicate credit with ANTH 102, and with ANTH 103 in Group C)</td>
<td></td>
</tr>
<tr>
<td>ANTH 202</td>
<td>Human Evolution and the Fossil Record</td>
<td></td>
</tr>
<tr>
<td>Biology (BISC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BISC 103</td>
<td>General Biology (Both BISC 103 and BISC 207 cannot be used to fulfill Group D. Duplicate credit if taken after BISC 207)</td>
<td></td>
</tr>
<tr>
<td>BISC 113</td>
<td>General Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BISC 104</td>
<td>Neurobiology of the Brain</td>
<td></td>
</tr>
<tr>
<td>BISC 105</td>
<td>Human Heredity and Development</td>
<td></td>
</tr>
<tr>
<td>BISC 115</td>
<td>Human Heredity and Development Laboratory</td>
<td></td>
</tr>
<tr>
<td>BISC 106</td>
<td>Elementary Human Physiology</td>
<td></td>
</tr>
<tr>
<td>BISC 116</td>
<td>Elementary Human Physiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BISC 107</td>
<td>Elementary Evolutionary Ecology</td>
<td></td>
</tr>
<tr>
<td>BISC 117</td>
<td>Elementary Evolutionary Ecology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BISC 108</td>
<td>Molecular Bases of Human Disease</td>
<td></td>
</tr>
<tr>
<td>BISC 110</td>
<td>Viruses, Genes, and Cancer</td>
<td></td>
</tr>
<tr>
<td>BISC 152</td>
<td>Biology of Human Sexuality</td>
<td></td>
</tr>
<tr>
<td>BISC 171</td>
<td>Microbiology in Modern Society</td>
<td></td>
</tr>
<tr>
<td>BISC 195</td>
<td>Biological Evolution</td>
<td></td>
</tr>
<tr>
<td>BISC 207</td>
<td>Introductory Biology I (Both BISC 103 and BISC 207 cannot be used to fulfill Group D)</td>
<td></td>
</tr>
<tr>
<td>BISC 208</td>
<td>Introductory Biology II</td>
<td></td>
</tr>
<tr>
<td>Chemistry (CHEM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 100</td>
<td>Chemistry and the Human Environment</td>
<td></td>
</tr>
<tr>
<td>CHEM 101</td>
<td>General Chemistry (duplicate credit with CHEM 103, 105, 111)</td>
<td></td>
</tr>
<tr>
<td>CHEM 102</td>
<td>General Chemistry (duplicate credit with CHEM 104, 112)</td>
<td></td>
</tr>
<tr>
<td>CHEM 103</td>
<td>General Chemistry (duplicate credit with CHEM 101, 105, 111)</td>
<td></td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry (duplicate credit with CHEM 102, 112)</td>
<td></td>
</tr>
<tr>
<td>CHEM 105</td>
<td>General Chemistry (duplicate credit with CHEM 101, 103, 111)</td>
<td></td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry (duplicate credit with CHEM 101, 103, 105)</td>
<td></td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry (duplicate credit with CHEM 102, 104)</td>
<td></td>
</tr>
<tr>
<td>Computer and Information Sciences (CISC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISC 101</td>
<td>Computers and Information Systems</td>
<td></td>
</tr>
<tr>
<td>CISC 105</td>
<td>General Computer Science</td>
<td></td>
</tr>
<tr>
<td>CISC 106</td>
<td>General Computer Science for Engineers</td>
<td></td>
</tr>
<tr>
<td>Entomology (ENTO)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENTO 201</td>
<td>Wildlife Conservation and Ecology</td>
<td></td>
</tr>
<tr>
<td>ENTO 205</td>
<td>Elements of Entomology</td>
<td></td>
</tr>
<tr>
<td>ENTO 305</td>
<td>Entomology Laboratory</td>
<td></td>
</tr>
<tr>
<td>Geography (GEOG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Physical Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 102</td>
<td>Climate and Life</td>
<td></td>
</tr>
<tr>
<td>GEOG 206</td>
<td>Physical Geography: Topography—Soils</td>
<td></td>
</tr>
<tr>
<td>GEOG 220</td>
<td>Meteorology</td>
<td></td>
</tr>
<tr>
<td>GEOG 250</td>
<td>Computer Methods in Geography</td>
<td></td>
</tr>
<tr>
<td>Geology (GEOG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 105</td>
<td>General Geology (duplicate credit with GEOG 107)</td>
<td></td>
</tr>
<tr>
<td>GEOG 106</td>
<td>General Geology (duplicate credit with GEOG 108)</td>
<td></td>
</tr>
<tr>
<td>GEOG 107</td>
<td>General Geology I (duplicate credit with GEOG 105)</td>
<td></td>
</tr>
<tr>
<td>GEOG 110</td>
<td>Evolution and Extinction (duplicate credit with GEOG 144)</td>
<td></td>
</tr>
<tr>
<td>GEOG 114</td>
<td>Evolution and Earth History (duplicate credit with GEOG 110)</td>
<td></td>
</tr>
<tr>
<td>GEOG 233</td>
<td>The Ice Ages and Human Chronology</td>
<td></td>
</tr>
<tr>
<td>GEOG 234</td>
<td>Earth Resources and Ecology</td>
<td></td>
</tr>
<tr>
<td>GEOG 243</td>
<td>Rocks and Minerals</td>
<td></td>
</tr>
<tr>
<td>GEOG 245</td>
<td>Volcanoes and Earthquakes</td>
<td></td>
</tr>
<tr>
<td>Linguistics (LING)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LING 253</td>
<td>Laboratory Phonetics</td>
<td></td>
</tr>
<tr>
<td>Mathematical Sciences (MATH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 210</td>
<td>Discrete Mathematics I</td>
<td></td>
</tr>
<tr>
<td>MATH 221</td>
<td>Calculus I (duplicate credit with MATH 241)</td>
<td></td>
</tr>
<tr>
<td>MATH 220</td>
<td>Finite Mathematics with Applications</td>
<td></td>
</tr>
<tr>
<td>MATH 241</td>
<td>Analytic Geometry and Calculus A (duplicate credit with MATH 221)</td>
<td></td>
</tr>
<tr>
<td>Nutrition and Dietetics (NDT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDT 200</td>
<td>Nutrition Concepts</td>
<td></td>
</tr>
<tr>
<td>Philosophy (PHIL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 205</td>
<td>Logic (PHIL 351 alternate. Duplicate credit if taken after PHIL 351)</td>
<td></td>
</tr>
<tr>
<td>PHIL 207</td>
<td>Inductive Logic and Scientific Method</td>
<td></td>
</tr>
<tr>
<td>PHIL 211</td>
<td>Basic Decision Theory</td>
<td></td>
</tr>
<tr>
<td>PHIL 351</td>
<td>Advanced Logic (alternate to PHIL 205)</td>
<td></td>
</tr>
<tr>
<td>Physics (PHYS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 109</td>
<td>Planets, Asteroids, and Impacts</td>
<td></td>
</tr>
<tr>
<td>PHYS 133</td>
<td>Introduction to Astronomy</td>
<td></td>
</tr>
<tr>
<td>PHYS 140</td>
<td>Great Concepts of Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 141</td>
<td>Light, Lasers, Cameras, Perception</td>
<td></td>
</tr>
<tr>
<td>PHYS 143</td>
<td>Energy, Technology, and Society</td>
<td></td>
</tr>
<tr>
<td>PHYS 144</td>
<td>Concepts of the Universe</td>
<td></td>
</tr>
<tr>
<td>PHYS 145</td>
<td>Quasars, Black Holes, and the Universe</td>
<td></td>
</tr>
<tr>
<td>PHYS 146</td>
<td>Quarks, Gluons, and the Big Bang</td>
<td></td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Introductory Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Introductory Physics II (duplicate credit with PHYS 102, 208)</td>
<td></td>
</tr>
<tr>
<td>PHYS 207</td>
<td>Fundamentals of Physics I (duplicate credit with PHYS 101, 204, 201, and 101)</td>
<td></td>
</tr>
<tr>
<td>PHYS 208</td>
<td>Fundamentals of Physics II (duplicate credit with PHYS 102, 202)</td>
<td></td>
</tr>
<tr>
<td>Plant Science (PLSC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLSC 101</td>
<td>Botany I</td>
<td></td>
</tr>
<tr>
<td>Psychology (PSYC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 314</td>
<td>Brain and Behavior</td>
<td></td>
</tr>
<tr>
<td>Science (SCEN)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCEN 101</td>
<td>Physical Science (duplicate credit with PHYS 101, 104, 201, and 207)</td>
<td></td>
</tr>
<tr>
<td>SCEN 102</td>
<td>Physical Science</td>
<td></td>
</tr>
<tr>
<td>Statistics (STAT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 201</td>
<td>Introduction to Statistics I (duplicate credit with STAT 205)</td>
<td></td>
</tr>
<tr>
<td>STAT 205</td>
<td>Statistical Methods (duplicate credit with STAT 201)</td>
<td></td>
</tr>
</tbody>
</table>

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

**MAJOR OPTIONS**

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

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

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 Polit-
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 or International Relations. Students majoring in International Relations would be 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.

GENERAL INFORMATION (All Degrees)

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.

Physical Education. A maximum of two credits of HPER 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., a French 105 course would not be considered if taken after French 107; similarly, a Math 115 course would not be acceptable if taken after a Math 221 course.

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.

Minors. In addition to the major, students may also elect a minor concentration. 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 the minor. (See the list of minors in the front of this catalog.)

BACHELOR OF SCIENCE

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

BACHELOR OF ARTS IN LIBERAL STUDIES

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

This degree differs from the regular Bachelor of Arts degree in that it requires that 60 credits be 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 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 the knowledge in some broad, interdisciplinary field or focused more narrowly and in greater depth on one theme and, in general, involve course combinations that would not be feasible within one of the other degree options. A minimum of 39 credit hours must be related to the main theme of the B.A.L.S. project and a minimum grade of C- must be earned in these core courses.

Advisement and planning are essential in formulating such a proposal. Students are urged to seek advice from faculty members and the Dean's Office as they work on drawing up their programs. The screening committee will expect 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.

DEAN'S SCHOLAR PROGRAM

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

LIBERAL ARTS/ENGINEERING

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

ASSOCIATE DEGREES

The nonterminal degrees of Associate in Arts (A.A.) and Associate in Science (A.S.) may be awarded upon application before completion of a prescribed curriculum. Information regarding admission requirements and eligibility for the associate degree programs may be found in the Undergraduate Admissions section of this catalog.

Associate Degrees from the College of Arts and Science. The nonterminal degrees of Associate in Arts and Associate in Science may be awarded upon application before completion of 75 earned credit hours. 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.

CREDITS

CURRICULUM

UNIVERSITY REQUIREMENTS

Writing

ENGL 110** ........................................ 3

or

Exemption ............................................ 0

Multicultural Course ............................... 3

**Minimum grade of C required
SKILL REQUIREMENTS

Mathematics
- MATH 114 .................................................. 3
- or MATH 115 .................................................. 3
- or Successful completion of any mathematics course above the 100-level [except MATH 251 and MATH 252] 3-4
- or Proficiency Test ........................................... 0

Foreign Language
- Elementary Level ........................................... 4
- or Proficiency Test ........................................... 0

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

Group A Creative Arts and Humanities .................................. 9
Group B Culture and Institutions through Time ......................... 9
Group C Humans and Their Environment ................................ 9
Group D Natural Phenomena ............................................. 10
At least one course in Group D must be a laboratory science.

ELECTIVES

Elective Courses 1, 2, 3
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 .................................. 60

ASSOCIATE IN SCIENCE REQUIREMENTS

Any of the course requirements are satisfied through proficiency tests or exams, elective credits must be substituted to make up 60 hours.

CURRICULUM CREDITS

UNIVERSITY REQUIREMENTS

Writing
- ENGL 110** ................................................ 3
- or Exemption .................................................. 0
- or Multicultural Course .................................... 3

SKILL REQUIREMENTS

Mathematics
- MATH 221-222 ............................................. 6
- or MATH 241-242 ............................................. 8

Foreign Language 4
- Elementary Level ........................................... 4
- or Proficiency Test ........................................... 0

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

Group A Creative Arts and Humanities .................................. 9
Group B Culture and Institutions through Time ......................... 9
Group C Humans and Their Environment ................................ 9
Group D Natural Phenomena ............................................. 12
At least one course in Group D must be a laboratory science.

**Minimum grade of C required.
1 Course credit may be counted only once toward a degree. A course repeated to improve a passing grade already received may not be counted a second time toward the minimum total credit hours required
2 Courses taken to fulfill specific group, or language proficiency requirements must be on a regular grade, not pass/fail, basis. Students may opt to take one free elective course per semester P/F, but the total number of credits taken on a pass/fail basis may not exceed 12 in the associate degree program, excluding courses that are graded pass/fail only
3 Courses numbered below 100 (e.g., MATH 010, Intermediate Algebra) do not count toward a degree
4 For the Associate in Science degree, students must complete the elementary level course of a foreign language if there is a language requirement for the corresponding Bachelor of Science degree

ELECTIVES

Elective Courses 1, 2, 3
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 .................................. 60

Academic Advisement is available in the College of Arts and Science Advisement Center, 102 Elliott Hall.

TEACHER EDUCATION PROGRAMS

The College of Arts and Science offers teacher education programs in twenty-three areas for students who wish to prepare themselves to be certified teachers in Delaware or in twenty-seven other states and the overseas dependent schools. For secondary certification (high school, junior high school, middle school), programs are offered in biology, chemistry, earth sciences, English, foreign languages (Classics, 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).

Each degree program in teacher education requires a certain minimum GPA for enrollment in EDDV 400, Student Teaching, a course required for the degree. The appropriate teacher education program adviser (see list on p. 143) should be consulted for the exact GPA requirements and other policies concerning qualifications for student teaching.

See Teacher Education Programs in the College of Education section of this catalog.

ADVISEMENT

Students who have declared majors will be assigned an adviser who is a faculty member in the appropriate department. Undeclared students are assigned a member of the professional staff of the College of Arts and Science Advisement Center located at 102 Elliott Hall. All freshman students who have earned less than 28 credit hours are required to meet with their advisers during preregistration for the spring and fall semesters. All other students are strongly encouraged to meet regularly with their academic advisers.

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.

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 117A, Wolf Hall) coordinates advisory services for all students preparing for admission to health-related professional schools.

**MEDICAL SCHOLARS PROGRAM**

The Medical Scholars Program has been developed by the University of Delaware and Jefferson Medical College in Philadelphia to educate men and women to meet society's changing health care demands. This unique approach to medical studies unifies college, medical school, and residency years by integrating liberal arts, science, and professional studies across both institutions. Utilizing faculty and courses at the University of Delaware and Jefferson Medical College, the curriculum includes traditional studies in the life and health sciences, as well as courses in the humanities, ethics, social sciences, economics, political science, and health policy. Group discussion, problem-based instruction, hands-on science, computer and video disc technology are part of the program. Under this program, students receive a Bachelor of Arts in Liberal Studies degree and conditional acceptance to Jefferson Medical College as early as their sophomore year at the University of Delaware. For information, contact Professor Paul Durbin at 831-8202.

**FIELD STUDIES OPTION**

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

**THE DEPARTMENTS**

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

**ANTHROPOLOGY**

Anthropology is the study of humans and their works. The field is wide in scope, addressing itself both to the comparative study of worldwide variations in culture and to 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 sub specialties 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.

**DEGREE: BACHELOR OF ARTS**

**MAJOR: ANTHROPOLOGY**

<table>
<thead>
<tr>
<th>CURRICULUM</th>
<th>CREDITS*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>See page 68 for University and College requirements.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MAJOR REQUIREMENTS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Within the Department</strong></td>
<td></td>
</tr>
<tr>
<td>Social and Cultural Anthropology courses</td>
<td>12 1/4</td>
</tr>
<tr>
<td>Biological Anthropology courses</td>
<td>6 1/4</td>
</tr>
<tr>
<td>Archaeological Anthropology courses</td>
<td>6 1/4</td>
</tr>
<tr>
<td>ANTH 486 Tutorial in Social and Cultural Anthropology</td>
<td>3 1/4</td>
</tr>
<tr>
<td>ANTH 487 Tutorial in Archaeology</td>
<td>3 1/4</td>
</tr>
<tr>
<td>or ANTH 488 Tutorial in Physical Anthropology</td>
<td>3 1/4</td>
</tr>
<tr>
<td>Anthropology course</td>
<td>3 1/4</td>
</tr>
<tr>
<td><strong>A minimum of six credits must be taken at the 200-level and a minimum of twelve credits must be taken at the 300-level</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ELECTIVES</strong></td>
<td></td>
</tr>
<tr>
<td>After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree</td>
<td></td>
</tr>
<tr>
<td><strong>CREDITS TO TOTAL A MINIMUM OF .................... 124</strong></td>
<td></td>
</tr>
</tbody>
</table>

**DEGREE: BACHELOR OF ARTS**

**MAJOR: ANTHROPOLOGY EDUCATION**

<table>
<thead>
<tr>
<th>CURRICULUM</th>
<th>CREDITS*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>See page 68 for University and College requirements.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MAJOR REQUIREMENTS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Within the Department</strong></td>
<td></td>
</tr>
<tr>
<td>Social and Cultural Anthropology courses</td>
<td>12 1/4</td>
</tr>
<tr>
<td>Biological Anthropology courses</td>
<td>6 1/4</td>
</tr>
<tr>
<td>Archaeological Anthropology courses</td>
<td>6 1/4</td>
</tr>
<tr>
<td>ANTH 486 Tutorial in Social and Cultural Anthropology</td>
<td>3 1/4</td>
</tr>
<tr>
<td>ANTH 487 Tutorial in Archaeology</td>
<td>3 1/4</td>
</tr>
<tr>
<td>or ANTH 488 Tutorial in Physical Anthropology</td>
<td>3 1/4</td>
</tr>
<tr>
<td>Anthropology course</td>
<td>3 1/4</td>
</tr>
<tr>
<td><strong>A minimum of six credits must be taken at the 200-level and a minimum of twelve credits must be taken at the 300-level</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Within the College</strong></td>
<td></td>
</tr>
<tr>
<td>Economics course</td>
<td>3 1/4</td>
</tr>
<tr>
<td>Geography course</td>
<td>3 1/4</td>
</tr>
<tr>
<td>History course</td>
<td>3 1/4</td>
</tr>
<tr>
<td>Political Science course</td>
<td>3 1/4</td>
</tr>
<tr>
<td>Sociology course</td>
<td>3 1/4</td>
</tr>
<tr>
<td>PSYC 201 General Psychology</td>
<td>3 1/4</td>
</tr>
<tr>
<td>Six additional credits selected from the departments listed above</td>
<td>6 1/4</td>
</tr>
<tr>
<td><strong>Professional Studies</strong></td>
<td></td>
</tr>
<tr>
<td>EDST 201 Education in a Multicultural Society</td>
<td>3 1/4</td>
</tr>
<tr>
<td>EDST 304 Educational Psychology - Social Aspects</td>
<td>3 1/4</td>
</tr>
<tr>
<td>EDST 305 Educational Psychology - Cognitive Aspects</td>
<td>3 1/4</td>
</tr>
<tr>
<td>HIST 491 Planning a Course of Instruction</td>
<td>3 1/4</td>
</tr>
</tbody>
</table>

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.
HIST 493 Seminar: Problems in Teaching History and Social Sciences 3
EDST 420 Reading in the Content Areas 1
EDDV 400 Student Teaching 9

The Anthropology Education program requires a certain minimum G.P.A. for enrollment in EDDV 400, Student Teaching, a course required for the degree. The teacher education program advisor (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

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

**Honors Program.** Honors majors must complete a minimum of 33 credit hours of approved courses to include 18 Honors credits (6 of which are required: Honors Thesis). All Honors majors must complete satisfactorily the following:

**CREDITS**

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

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

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

**INTERDEPARTMENTAL MAJORS**

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

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

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

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

**REQUIREMENTS FOR THE MINOR IN ANTHROPOLOGY**

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

**ART**

The Department of Art is a studio-oriented department offering a wide range of visual arts activities and subject areas. The art major may elect to concentrate in ceramics, fibers, illustration, metals, painting and drawing, photography, printmaking, sculpture, or visual communications (advertising design, applied photography, graphic design). The courses of study are designed to prepare the student for professional practice in the student’s chosen area of specialization.

The Department of Art offers two undergraduate degrees: Bachelor of Arts (B.A.) and Bachelor of Fine Arts (B.F.A. in Fine Arts and Visual Communications). The department offers two graduate degrees: Master of Fine Arts (M.F.A.) and Master of Arts (M.A.).

Introduction to the B.F.A. is contingent upon submission of a portfolio of slides and/or original work after completion of the freshman year and a minimum of 12 credits of Foundations courses. A limited number of students are admitted to the program.

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

**DEGREE: BACHELOR OF ARTS**

**MAJOR: ART**

**CURRICULUM**

See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

**Within the Department**

**Art Foundations**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 110 Foundation Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 111 Foundation 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 112 Foundation Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 113 Foundation 3D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 114 Foundation Colloquium</td>
<td>0</td>
</tr>
</tbody>
</table>

**Area of Concentration**

Art Concentration: 12

- Twelve credits beyond those that might have been taken as part of foundations requirements. At least three credits must be at the 400-level (ceramics, fibers, illustration, metals, painting, photography, printmaking, sculpture)

**Art Electives**

- Courses from department disciplines outside of art concentration: 9

**Within the College**

- Art History courses: 6

**ELECTIVES**

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

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

**DEGREE: BACHELOR OF FINE ARTS**

**MAJOR: FINE ARTS, VISUAL COMMUNICATIONS**

**CURRICULUM**

See page 68 for University and College requirements.

**UNIVERSITY REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 110 Critical Reading and Writing**</td>
<td>3</td>
</tr>
</tbody>
</table>

**Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #**

**COLLEGE REQUIREMENTS**

**Skill Requirements**

| Writing** | 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 62 credit hours. Appropriate writing
courses are normally designated in the semester's Registration Booklet
(See list of courses approved for second writing requirement, page 68.)

Mathematics:
MATH 114 College Mathematics and Statistics 3
(designed for students who do not intend to continue the study of mathematics)
or
MATH 115 Pre-Calculus 3
(designed for students who intend to continue the study of mathematics)
or
One of the following:
MATH 211 Calculus I 3
MATH 212 Analytic Geometry and Calculus A 4
or
Successful performance on the college proficiency exam.

Breadth Requirements† (See page 70)
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
Within the Department§
Art Foundations
ART 110 Foundation Drawing I 3
ART 111 Foundation 2D Design 3
ART 112 Foundation Drawing II 3
ART 113 Foundation 3D Design 3
ART 114 Foundation Colloquium 3
Area of Concentration
Art Concentration 21
Taken from a specified sequence of courses for each discipline in the
department. At least nine credits must be at the 400 level (advertis-
ing design, applied photography, ceramics, fibers, graphic design,
illustration, metals, painting, photography, printmaking, sculpture)
Art Studies 21
Taken from a list of specified courses established for each discipline
Art Electives
ART 315 Issues in Contemporary Art 9
ART 416 Professional Practices 9
ART 417 BFA Exhibition 9
Within the College
Art History courses† 9

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

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

REQUIREMENTS FOR A MINOR IN ART
Students must obtain written permission from the chair before
denying the minor. Admitted students will be assigned an adviser,
generally in the area of study. Eighteen credits are required, distribut-
ed as follows:
a) Three studio art courses at the 100-200
level from one or two areas ........................................ 9 credits
b) Two studio art courses at the 300-400
level from one or two areas ......................................... 6 credits
c) One related nonstudio art, art history
or art criticism course .................................................. 3 credits

ART HISTORY
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, but its
faculty has special expertise in the various areas of American and
European painting, photography, sculpture, and architecture from
antiquity to the present. The faculty of the Department also collaborate
with the research and vocational objectives of the Winterthur Program
in Early American Culture and the Department of Art Conservation.
Visits to various museums from New York to Washington are sched-
uled in connection with many art history courses. The University
Gallery houses a collection of original works of art and offers intern-
ship, research, and exhibition opportunities for students. Advanced stu-
dents may draw upon the departmental slide and photograph
collections, including the Wayne Andrews photographic archive of
American architecture and the Index of American Sculpture.

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 majors
have gone on to positions in businesses that are art related, education,
museums, art galleries, historic preservation, fine arts and slide
librarianship, state and national arts and humanities agencies, art
book and magazine publishing, art journalism, and various posts con-
ected with architecture and the decorative arts. Additional study on
the graduate level prepares students for professional careers in the
fields of college teaching, museums, historic preservation, librarian-
ship, and research.

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. See
the section on Interdisciplinary Programs in this catalog. Students
interested in museum work should consider taking museum studies
courses offered at the University.

DEGREE: BACHELOR OF ARTS
MAJOR: ART HISTORY
CURRICULUM
See page 68 for University and College requirements.

MAJOR REQUIREMENTS
Within the Department
ARTH 153 Introduction to Art History I 3
ARTH 154 Introduction to Art History II 3
Fifteen credits at the 200 level or above, distributed as follows:
a) Ancient ................................................................. 3
b) Medieval (including Northern Renaissance) .............. 3
c) Renaissance .......................................................... 3
d) Baroque or 18th Century ........................................ 3
e) Modern ................................................................. 3

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.
† A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
§ Note: 69 credit hours minimum Art Department courses; 80 credit hours maximum Art Department courses; all grades in art must be C- or better
* Must be taken both fall and spring of freshman year
ARATH 301 Research and Methodology in Art History 3
Art History Seminar at the 300 or 400-level 3.4
Art History courses above 100-level 6.1.4

Within the College
Fifteen credits of related work as follows: 15.1.4
ENGL 202 Biblical and Classical Literature 3.14
Any advisor-approved 200- or 300-level History course 3.14

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

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

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

REQUIREMENTS FOR THE MINOR IN ART HISTORY
The minor in art history requires 18 credits of course work, including
at least four (4) courses above the 100-level. Students must distribute
their courses among at least three (3) different key areas of art
history that follow: 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.

ASTRONOMY
(See Physics and Astronomy)

BIOLOGY
The undergraduate programs in biology are designed to meet intel-
lectual needs as well as to prepare students for subsequent profes-
sional or vocational training. Men and women interested in various
fields of biology and related activities will find challenging and flexi-
ble undergraduate programs which provide broad scope and some
necessary specialization appropriate to further study. Many interests
are served for graduate study or specialized professional training beyond
four years of college work; these include human and veterinary
medicine, dentistry, biological and medical research, genetics, marine
biology, physiology, and molecular biology.
Preprofessional students (medicine, physical therapy, dentistry,
osteopathy, etc.) generally enroll as majors in the biological sciences.
Special advisement for these students is available through the Health
Sciences Advisement and Evaluation Committee, Room 117A Wolf
Hall

Students interested in marine biology are encouraged to take
advantage of course and research opportunities in the Department of
Biology and the University's College of Marine Studies.
The Department of Biology offers both a major and a minor in
Biological Sciences, as well as a major in biological sciences educa-
tion, an Honors degree, and Honors courses. An interdepartmental
major between biology and psychology with an emphasis on neuro-
science is also available. The Department of Biological Sciences also
offers a B.S. degree with a concentration in biotechnology and particip-
ates in an interdepartmental B.S. degree program in Environmental
Sciences.

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 Col-
lege of Arts and Science, but may not be counted toward the credits
required for graduation for students majoring in or minoring in biology.
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.

BIOLGICAL SCIENCES
During the freshman year, biological science majors for the B.A.
degree ordinarily take courses in biology, chemistry, English, foreign
language, and mathematics. The minimal mathematics requirement is
one semester of calculus. Students should consider their objectives
and abilities and consult their advisors to select wisely from the vari-
ety of advanced courses and electives available.

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
major in Biological Sciences or Biological Sciences Education. Some
600-level courses in other departments may be counted toward the
major.

A grade of C- or better must be obtained in all biology courses
that are used to satisfy the requirements for the degree. Biology
courses at the 100-level may not be counted toward the degree. The
following sequence of courses is recommended for the biological sci-
ences major as well as premedical, prephysical therapy, predental,
and preveterinary students.

DEGREE: BACHELOR OF ARTS
MAJOR: BIOLOGICAL SCIENCES

CREDITSTO
This page 68 for University and College requirements.

MAJOR REQUIREMENTS

 Within the Department
BISC 207 Introductory Biology I 4
BISC 208 Introductory Biology II 4
BISC 303 Genetic and Evolutionary Biology 4
At least two of the following courses:
BISC 301 Molecular Biology of the Cell 2.3
BISC 302 General Ecology 3.2.3
BISC 306 General Physiology 4.2

Biology electives at the 300-level or above (must include one 600-level course other than Independent Study) for a total of at least 33 credits in biology

Within the College

CHEM 103 General Chemistry 4
CHEM 104 General Chemistry 4
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 Introductory Physics I 4.3
PHYS 202 Introductory Physics II 4.2

MATH 221 Calculus I 5

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

*Superior figures indicate year or years in which the course is normally taken, i.e., 1, freshman year; 2, sophomore year, etc.
BIOTECHNOLOGY

The Bachelor of Science degree in Biological Sciences with a concentration in biotechnology is a four-year program offered by the Department of Biology. The program 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 (BBT); however, they are not admitted into the program until the fall semester of the third year. Students apply for admission in the spring of the sophomore year. Admission is limited to 10 students per class. A minimum grade-point index (GPI) of 2.5 is required for application.

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

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

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

### CURRICULUM

#### DEGREE: BACHELOR OF SCIENCE

#### MAJOR: BIOLOGICAL SCIENCES

#### CONCENTRATION: BIOTECHNOLOGY

**UNIVERSITY REQUIREMENTS**

- ENGL 110 Critical Reading and Writing**
- Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #

**COLLEGE REQUIREMENTS**

#### Skill Requirements

**Writing:**

- 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 62 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet.

**Foreign Language:**

- Completion of the intermediate-level course (107 or 112 or 214) in a given 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 examination examination.

**Breadth Requirements** (See page 70)

- 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

- BISC 207 Introductory Biology I
- BISC 208 Introductory Biology II
- BISC 371 Introduction to Microbiology
- BISC 301 Molecular Biology of the Cell
- BISC 303 Genetic and Evolutionary Biology
- BISC 305 Cell Physiology
- BISC 604 Recombinant DNA Laboratory
- BISC 653 Recent Advances in Molecular Biology

**Two advanced lecture/laboratory combinations selected from the following groups:**

I

- BISC 492 Human and Mammalian Cytogenetics
- BISC 493 Mammalian Cytogenetics Laboratory

II

- BISC 471/BISC 671 Immunobiology
- BISC 601 Immunology

III

- BISC 619 Macromolecules Laboratory

**Two courses selected from the following:**

- BISC 499/BISC 669 Computers in Biological Research
- BISC 602 Molecular Biology of Animal Cells
- BISC 608 Genetic Toxicology
- BISC 617 Laboratory Techniques for Electron Microscopy
- BISC 650 Bacterial Physiology
- BISC 654 Biochemical Genetics
- BISC 658 Developmental Genetics
- BISC 667 Plant Cell Biology
- BISC 673 Topics in Immunogenetics
- BISC 679 Virology
- BISC 693 Human Genetics
- BISC 667 Gene Control. Antibody Genes, HIV

#### Within the College

- CHEM 103 General Chemistry
- CHEM 104 General Chemistry
- CHEM 321 Organic Chemistry
- CHEM 322 Organic Chemistry
- CHEM 527 Introductory Biochemistry

- CHEM 641 and CHEM 642 Biochemistry
- PHYS 201 Introductory Physics I
- PHYS 202 Introductory Physics II
- MATH 221 Calculus I

**ELECTIVES**

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

**CREDITS TO TOTAL A MINIMUM OF 124**

#### DEGREE: BACHELOR OF ARTS

#### MAJOR: BIOLOGICAL SCIENCES EDUCATION

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

**CURRICULUM**

See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

#### Within the Department

- BISC 207 Introductory Biology I
- BISC 208 Introductory Biology II

---

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshmen year, 2 sophomore year, etc.
** Minimum grade of C required.
# Minimum grade of C required.

*This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course token pass/fail. See page 21.

A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
BISC 301 Molecular Biology of the Cell .................................................. 4 1/4
BISC 303 Genetic and Evolutionary Biology ......................................... 4 1/4
BISC 302 General Ecology ................................................................. 4 1/4
or
BISC 306 General Physiology ............................................................. 4 1/4
Biology electives at the 300-level or above (must include at least 33
one 600-level course other than Independent Study for a total of at
least 33 credits in biology)

Within the College

CHEM 103 General Chemistry ............................................................ 4 1/4
CHEM 104 General Chemistry ............................................................ 4 1/4
CHEM 213 Elementary Organic Chemistry ....................................... 4 1/4

and

CHEM 321 Organic Chemistry ............................................................ 4
CHEM 214 General Biochemistry ....................................................... 3 1/4

and

PHYS 201 Introductory Physics I ......................................................... 4 1/4
PHYS 202 Introductory Physics II ....................................................... 4 1/4
MATH 221 Calculus I .......................................................... 3 1/4

and

BISC 306 General Physiology ............................................................. 4 1/4

Professional Studies

EDST 201 Education in a Multicultural Society ................................... 3 1/4
EDST 304 Educational Psychology - Social Aspects ......................... 3 1/4
EDST 305 Educational Psychology - Cognitive Aspects ..................... 3 1/4
EDST 420 Reading in the Content Areas .......................................... 3 1/4
SCEN 491 Teaching Science in Secondary Schools ......................... 4 1/4
EDDY 400 Student Teaching ........................................................... 9 1/4

The Biological Sciences Education program requires a certain minimum G.P.A. for enrollment in EDDY 400, Student Teaching, a course required for the degree. The teacher education program advisor (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

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

REQUIREMENTS FOR A MINOR IN BIOLOGY

The required courses are BISC 207, 208; two courses from BISC 302, 303, 391, 392, 396; CHEM 103, 104 (or 101, 102), and 213 (or 321, 325); plus the necessary prerequisites for any of these courses. Nursing majors may satisfy the chemistry requirement by taking CHEM 104, 105, and 106. Nursing, Medical Technology, Nutrition, and Dietetics majors may substitute BISC 276 for BISC 305.

Since most of the BISC courses above apply to the major in biological sciences, as well as to the minor, students will retain these credits if they switch to the major during the course of their degree program, so long as a grade of C- has been obtained in these courses.

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, biopsychology, neuropsychology, physiology, pharmacology and anatomy and for positions in pharmaceutical and biotechnology companies. It also provides preparation for professional programs in medicine, physical therapy, dentistry 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 of the Arts and Science Advisement Center and Dean's Office.

MEDICAL EDUCATION PROGRAMS

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 Director of the Department of Biology.

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 page 133).

COOPERATIVE EDUCATION PROGRAM

Through the cooperation of area businesses, industry, and government agencies, students may integrate their academic study with practical work experience. Especially beneficial to students wishing to join the work force after obtaining their bachelor's degree, participation in the Co-op Program offers students an opportunity to explore abilities and career interests before graduation, to complement their formal education with opportunities for learning not available in the regular classroom, to apply theoretical academic knowledge to real work situations, and to obtain practical work experience prior to entering the job market, giving them a "jump" on the competition.

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.

CHEMISTRY AND BIOCHEMISTRY

Chemists are concerned with matter and its properties: composition, structure, and reactions. The methods and techniques of chemistry are broadly applicable in many areas of science and engineering. Familiarity with the many chemicals in common use is becoming more and more necessary for the nonchemists who are concerned with public policy. Because of the central position of chemistry in the sciences, it covers areas from the fundamental to the applied and allows strong interactions with areas as diverse as physics, mathematics, biology, geology, computer science, business, economics, chemical engineering, criminal justice, art history, medicine, and marine studies.

Because of the large number of elective credits in the chemistry and biochemistry curricula, it is possible to arrange a course of study that will include work in another area of interest in order to broaden the student's education or more precisely fit the student for the specific career in view. Students in the B.A. programs must earn a minimum of C- in each course counted toward the major.

The department has extensive equipment and space for research, and advanced undergraduates are encouraged to undertake research with graduate students under the supervision of the faculty. Undergraduate research often leads to publication, and seniors frequently present the results of their research at the annual Intercollegiate Student Chemists Convention. The department has a vigorous graduate teaching and research program and an active seminar program with many notable visiting speakers. Seminars are generally open to undergraduates.
DEGREE: BACHELOR OF ARTS
MAJOR: CHEMISTRY
CURRICULUM CREDITS*

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 103</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 220</td>
<td>Quantitative Analysis</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 221</td>
<td>Quantitative Analysis Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>or CHEM 111</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 119</td>
<td>Quantitative Chemistry I</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 120</td>
<td>Quantitative Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 331</td>
<td>Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 333</td>
<td>Organic Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 332</td>
<td>Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 334</td>
<td>Organic Chemistry Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 437</td>
<td>Instrumental Methods</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 438</td>
<td>Instrumental Methods Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 418</td>
<td>Introductory Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 419</td>
<td>Introductory Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 445</td>
<td>Physical Chemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 443</td>
<td>Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 444</td>
<td>Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 445</td>
<td>Physical Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>One of the following eight courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 457</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 527</td>
<td>Introductory Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 610</td>
<td>History of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 620</td>
<td>Analytical Spectroscopy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 622</td>
<td>Electroanalytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 623</td>
<td>Chemometrics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 633</td>
<td>Advanced Organic Chemistry: Physical</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 634</td>
<td>Advanced Organic Chemistry: Synthesis and Reactivity</td>
<td>3</td>
</tr>
</tbody>
</table>

Within the College

Related Work

Mathematics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 221</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 241</td>
<td>Analytic Geometry and Calculus A (strongly preferred)</td>
<td>4</td>
</tr>
</tbody>
</table>

Physics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 201</td>
<td>Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 207</td>
<td>Fundamentals of Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Introductory Physics II</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 208</td>
<td>Fundamentals of Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

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

Within the Department

(30 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 119</td>
<td>Quantitative Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 120</td>
<td>Quantitative Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 111</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 220</td>
<td>Quantitative Analysis</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 221</td>
<td>Quantitative Analysis Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 213</td>
<td>Elementary Organic Chemistry</td>
<td>2</td>
</tr>
<tr>
<td>or CHEM 321</td>
<td>Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 331</td>
<td>Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 333</td>
<td>Organic Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 332</td>
<td>Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 334</td>
<td>Organic Chemistry Laboratory II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 437</td>
<td>Instrumental Methods</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 438</td>
<td>Instrumental Methods Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 418</td>
<td>Introductory Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 419</td>
<td>Introductory Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 445</td>
<td>Physical Chemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 443</td>
<td>Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 444</td>
<td>Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 445</td>
<td>Physical Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>One of the following eight courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 457</td>
<td>Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 527</td>
<td>Introductory Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 610</td>
<td>History of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 620</td>
<td>Analytical Spectroscopy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 622</td>
<td>Electroanalytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 623</td>
<td>Chemometrics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 633</td>
<td>Advanced Organic Chemistry: Physical</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 634</td>
<td>Advanced Organic Chemistry: Synthesis and Reactivity</td>
<td>3</td>
</tr>
</tbody>
</table>

Within the College

Related Work

BISC 207 | Introductory Biology I | 4 |
GEOL 105 | General Geology | 4 |
MATH 221 | Calculus I | 3 |
MATH 222 | Calculus II | 3 |
MATH 241 | Analytic Geometry and Calculus A | 4 |
MATH 242 | Analytic Geometry and Calculus B | 4 |
PHYS 201 | Introductory Physics I | 4 |
PHYS 207 | Fundamentals of Physics I | 4 |
PHYS 202 | Introductory Physics II | 4 |
PHYS 208 | Fundamentals of Physics II | 4

Professional Studies

(23 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDST 201</td>
<td>Education in a Multicultural Society</td>
<td>1</td>
</tr>
<tr>
<td>EDST 304</td>
<td>Educational Psychology - Social Aspects</td>
<td>1</td>
</tr>
<tr>
<td>EDST 305</td>
<td>Educational Psychology - Cognitive Aspects</td>
<td>1</td>
</tr>
<tr>
<td>SCEN 491</td>
<td>Teaching Science in Secondary Schools</td>
<td>1</td>
</tr>
<tr>
<td>EDST 420</td>
<td>Reading in the Content Areas</td>
<td>1</td>
</tr>
<tr>
<td>EDDV 400</td>
<td>Student Teaching</td>
<td>4</td>
</tr>
</tbody>
</table>

The Chemistry Education program requires a certain minimum G.P.A. for enrollment in EDDV 400, Student Teaching, a course required for the degree. The teacher education program adviser (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching

CREDITS TO TOTAL A MINIMUM OF ................. 124
COLLEGE REQUIREMENTS

Skill Requirements

Writing:** 3 3 4
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 62 credit hours. Appropriate writing courses are normally designated in the semester’s Registration Booklet. (See list of courses approved for second writing requirement, page 68.)

Foreign Language: 0-1 4
Completion of the intermediate-level course (107 or 112) in a modern 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 70]
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

CHEM 111 General Chemistry 3
CHEM 119 Quantitative Chemistry I 3
CHEM 112 General Chemistry II 3
CHEM 120 Quantitative Chemistry II 3
CHEM 331 Organic Chemistry 3
CHEM 333 Organic Chemistry Laboratory I 3
CHEM 332 Organic Chemistry 3
CHEM 334 Organic Chemistry Majors Laboratory II 3
CHEM 443 Physical Chemistry 3
CHEM 445 Physical Chemistry Laboratory 3
CHEM 437 Instrumental Methods 3
CHEM 527 Introductory Biochemistry 3

or

CHEM 641 Biochemistry 3
CHEM 444 Physical Chemistry 3
CHEM 446 Physical Chemistry Laboratory 3
CHEM 457 Inorganic Chemistry 3
CHEM 458 Inorganic Chemistry Laboratory 3
CHEM 465 Seminar (two semesters) 3
Advanced Chemistry course at 600-level or higher 3 3 4
CHEM 468 Undergraduate Research [optional] 3 3 4

(Chemistry credits to total a minimum of 45)

Within the College

Related Work

MATH 241 Analytic Geometry and Calculus A 4
MATH 242 Analytic Geometry and Calculus B 4
MATH 243 Analytic Geometry and Calculus C 4
MATH 302 Ordinary Differential Equations I 3

(Recommended)

PHYS 207 Fundamentals of Physics I 4
PHYS 208 Fundamentals of Physics II 4
or

PHYS 201 Introductory Physics I 4 1 4
PHYS 202 Introductory Physics II 4 1 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 ............................................ 128

DEGREE: BACHELOR OF SCIENCE

MAJOR: CHEMISTRY

CONCENTRATION: ENVIRONMENTAL STUDIES

CURRICULUM

CREDITS*

MAJOR REQUIREMENTS

See previous column for all requirements for the B.S. in Chemistry.

Concentration Requirements

Basic Environmentally Related Science

One of the following two-semester sequences:

BISC 207/208 Introductory Biology I/II 8
GEOG 132/220 Climate and Life/Meteorology 7
GEOL 106/107 General Geology 8

Advanced courses in Chemistry of the Environment

Two of the following three-credit courses:

BISC 302 General Ecology 3
CIEG 433 Hazardous Waste Management 3
CIEG 435 Industrial Wastes Management 3
CIEG 437/637 Water and Waste Water Quality 3
CIEG 632 Chemical Aspects of Environmental Engineering 3
CIEG 634 Physical Aspects of Environmental Engineering 3
CIEG 636 Biological Aspects of Environmental Engineering 3
GEOG 412 Physical Climatology 3
GEOG 420 Atmospheric Physics 3
GEOG 423 Atmospheric Dynamics 3
GEOL 421 Environmental and Applied Geology 3
MAST 646 Chemical Oceanography 3
MAST 647 Physical Chemistry of Seawater 3
MAST 681 Remote Sensing of Environment 3
PSC 608 Soil Chemistry 3

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

Example: A grade earned in CHEM 214 subsequent to a C or better grade earned in CHEM 327 (or CHEM 645/645) would not be counted in the chemistry GPA calculation for B.S. chemistry or biochemistry majors.

DEGREE: BACHELOR OF SCIENCE

MAJOR: BIOCHEMISTRY

CURRICULUM

CREDITS*

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing** 3 1 4
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content.†

COLLEGE REQUIREMENTS

Skill Requirements

Writing:** 3 3 4
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 62 credit hours. Appropriate writing courses are normally designated in the semester’s Registration Booklet. (See list of courses approved for second writing requirement, page 68.)

Foreign Languages: 0-1 4
Completion of the intermediate-level course (107 or 112) in a modern 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)

* Superior figures indicate year or years in which the course is normally taken, i.e., freshman year, sophomore year, etc.
** Minimum grade of C required.
** This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21.
† A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 119</td>
<td>Quantitative Chemistry I</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 120</td>
<td>Quantitative Chemistry II</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 333</td>
<td>Organic Chemistry Laboratory I</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 334</td>
<td>Organic Chemistry Majors Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 342</td>
<td>Introduction to Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 310</td>
<td>Computers in Chemistry (Recommended)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 418</td>
<td>Introductory Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 444</td>
<td>Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 437</td>
<td>Instrumental Methods</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 438</td>
<td>Instrumental Methods</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 641</td>
<td>Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 419</td>
<td>Introductory Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 444</td>
<td>Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 445</td>
<td>Physical Chemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 642</td>
<td>Biochemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Chemistry or Biochemistry course at 600 level

Advanced Biochemistry courses at 600 level

or

Biology courses selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISC 301</td>
<td>Molecular Biology of the Cell</td>
<td>3</td>
</tr>
<tr>
<td>BISC 303</td>
<td>Genetics and Evolutionary Biology</td>
<td>3</td>
</tr>
<tr>
<td>BISC 601</td>
<td>Immunology</td>
<td>3</td>
</tr>
<tr>
<td>BISC 604</td>
<td>Recombinant DNA Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>BISC 654</td>
<td>Biochemical Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BISC 679</td>
<td>Virology</td>
<td>3</td>
</tr>
<tr>
<td>BISC 698</td>
<td>Comparative Endocrinology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 665</td>
<td>Seminar (two semesters)</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 468</td>
<td>Undergraduate Research</td>
<td>6</td>
</tr>
</tbody>
</table>

(Chemistry credits to total a minimum of 46)

Within the College

Related Work

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 241</td>
<td>Analytic Geometry and Calculus A</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 221</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 242</td>
<td>Analytic Geometry and Calculus B</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 222</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 207</td>
<td>Introductory Biology I</td>
<td>2</td>
</tr>
<tr>
<td>BISC 208</td>
<td>Introductory Biology II</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Introductory Physics I</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Introductory Physics II</td>
<td>2</td>
</tr>
</tbody>
</table>

ELECTIVES

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

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

Candidates for a B.S. in biochemistry must achieve a cumulative GPA of at least 2.00 for all chemistry courses taken. The calculation of the chemistry course GPA (2.00 minimum required for graduation) for candidates for the B.S. degree in Chemistry or Biochemistry will not include grades earned for lower level subdisciplinary courses taken after a higher level course in the same subdiscipline has been taken and passed with a grade of C or higher. Likewise, freshman-level courses may not be used by upperclassmen as GPA enhancers after those required for graduation have been taken. CHEM 424 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.

COMUNICATION

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/organizational communication, mass communication, public relations, and oral communication skills.

Students enter this major as communication interest majors. A 2.0 overall GPA is required to declare the communication interest major. In order to qualify as communication majors, students must complete the four core courses with a minimum grade point average of 2.75.

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. Further information may be obtained from the department, or on the Internet by browsing the U of D homepage (http://www.udel.edu) and following the links to the Department's homepage.

DEGREE: BACHELOR OF ARTS

MAJOR: COMMUNICATION

CONCENTRATION: INTERPERSONAL/ORGANIZATIONAL COMMUNICATION

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

NOTE: All 4XX communication courses may be limited to COMM majors.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 245</td>
<td>Mass Communication and Culture</td>
<td>3</td>
</tr>
<tr>
<td>COMM 250</td>
<td>Principles of Communication Theory</td>
<td>3</td>
</tr>
<tr>
<td>COMM 301</td>
<td>Introduction to Communication Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

*Credits

*Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.

1 A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.

2 Must be completed with a grade point average of 2.75 or better.

84
COMM 330  Communication and Social Behavior 3F
COMM 350  Public Speaking 3F
COMM 361  Interpersonal Communication 3F
COMM 417  Communication and the Management of Conflict 3S
COMM 453  Symbolism in Organizations 3S
COMM 456  Communication in Organizations 3F
One additional 400-level COMM course, not COMM 466 or 3F
COMM 466, outside your concentration
Six to 15 COMM elective credits 6-15 3,4

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

Interpersonal/Organizational Communication Electives
COMM 200  Introduction to Human Communication Systems 3
COMM 251  The Development of Verbal Communication 3
COMM 335  Small Group Communication 3
COMM 338  Speech and Language in Human Behavior 3
COMM 440  Topics in Interpersonal and Organizational Communication 3
COMM 452  Communication, Power and Values 3
COMM 485  Analysis of Verbal Communication 3

Mass Communication Electives
NOTE: COMM 325 is prerequisite to COMM 388 and COMM 435
COMM 325  Television Production 3
COMM 388  TV Production Production 3
COMM 418  Topics in Mass Communication 3
COMM 435  Advanced TV Production and Direction 3
COMM 454  Children and the Mass Media 3

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 3
COMM 311  Public Relations Communication Techniques 3
COMM 409  Public Relations Planning 3
COMM 413  Public Relations Program Design 3

General Electives
COMM x66  Independent Study/Special Problems (366/466) 1-6
COMM 464  Internship 1-6
COMM x67  Experimental Courses (367/467) 3

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

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF ARTS
MAJOR: COMMUNICATION

CONCENTRATION: MASS COMMUNICATION

CURRICULUM  CREDITS
See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department
NOTE: All 4XX communication courses may be limited to COMM majors
COMM 245  Mass Communication and Culture 3 15
COMM 256  Principles of Communication Theory 3 1F
COMM 301  Introduction to Communication Research Methods 3 1F
COMM 330  Communication and Social Behavior 3 1F
COMM 350  Public Speaking 3 1F
COMM 365  Legal Issues of the Mass Media 3 1F
COMM 370  Theories of Mass Communication 3 1F
COMM 424  Media Message Analysis 3 1F
COMM 450  Mass Communication Effects 3 1F
One additional 400-level COMM course, not COMM 466 or 3F
COMM 464, outside your concentration
Six to 15 COMM elective credits 6-15 3,4

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

Interpersonal/Organizational Communication Electives
COMM 200  Introduction to Human Communication Systems 3
COMM 251  The Development of Verbal Communication 3
COMM 335  Small Group Communication 3

COMM 348  Communication and Social Behavior 3
COMM 350  Public Speaking 3
COMM 418  Topics in Mass Communication 3
COMM 435  Advanced TV Production and Direction 3
COMM 454  Children and the Mass Media 3

Mass Communication Electives
NOTE: COMM 325 is prerequisite to COMM 388 and COMM 435
COMM 325  Television Production 3
COMM 388  TV Production Production 3
COMM 418  Topics in Mass Communication 3
COMM 435  Advanced TV Production and Direction 3
COMM 454  Children and the Mass Media 3

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 3
COMM 311  Public Relations Communication Techniques 3
COMM 409  Public Relations Planning 3
COMM 413  Public Relations Program Design 3

General Electives
COMM x66  Independent Study/Special Problems (366/467) 1-6
COMM 464  Internship 1-6
COMM x67  Experimental Courses (367/467) 3

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

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF ARTS
MAJOR: COMPUTER AND INFORMATION SCIENCES

CURRICULUM  CREDITS
See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department
CISC 105, CISC 120 Advanced Computer Science, and
COMM 435 Advanced TV Production and Direction 3
COMM 454 Children and the Mass Media 3

Communication and the Management of Conflict 3S
COMM 453 Symbolism in Organizations 3S
COMM 456 Communication in Organizations 3F
COMM 466, outside your concentration
Six to 15 COMM elective credits 6-15 3,4

*Superior figures indicate year or years in which the course is normally taken, i.e., 1freshman year, 2 sophomore year, etc.
†Must be completed with a grade point average of 2.75 or better

COMPUTER AND INFORMATION SCIENCES • COLLEGE OF ARTS AND SCIENCE
CISC 260 Machine Organization and Microcomputers 3
CISC 280 Programming Paradigms 3
Eleven credits of Computer Science numbered 301 or above, approved by the student's adviser

Within the College
MATH 210 Discrete Mathematics I 3
MATH 241 Analytic Geometry and Calculus A 4
MATH 315 Discrete Mathematics II 3

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

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF SCIENCE
MAJOR: COMPUTER AND INFORMATION SCIENCES

CURRICULUM

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing* 3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS

Skill Requirements
Writing:** 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 62 credit hours. Appropriate writing courses are normally designated in the semester’s Registration Booklet. (See list of courses approved for second writing requirement, page 68.)

Breadth Requirements† (See page 70)
Six credits from each of the following groups 18
Group A Understanding and appreciation of the creative arts and humanities
Group B The study of culture and institutions over time
Group C Empirically based study of human beings and their environment

MAJOR REQUIREMENTS

Within the Department
CISC 181 Introduction to Computer Science 3
or
CISC 105, CISC 120 General Computer Science, and
Object Oriented Programming in C++ 3
then
CISC 220 Data Structures 3
CISC 260 Machine Organization and Microcomputers 3
CISC 280 Programming Paradigms 3
CISC 310 Logic and Programming 3
CISC 320 Algorithms and Advanced Programming 3
CISC 360 Computer Architecture 3
CISC 361 Operating Systems 3
CISC 471 Compiler Design 3

CISC Electives
Nine credits of Computer Science numbered 301 or above, approved by the student’s adviser

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

Within the College

Related Work
MATH 210 Discrete Mathematics I 3

MATH 241 Analytic Geometry and Calculus A 4
MATH 315 Discrete Mathematics II 3
STAT 205 Statistical Methods 3
ENGL 312 Written Communications in Business 3
or
ENGL 410 Technical Writing 3
CISC 355 Computers, Ethics and Society 3
One of the following sequences of laboratory science courses:
PHYS 207 Fundamentals of Physics I 4
PHYS 208 Fundamentals of Physics II 4
or
CHEM 103 General Chemistry 4
CHEM 104 General Chemistry 4
or
BISC 207 Introductory Biology I 4
BISC 208 Introductory Biology II 4
or
GEOL 106 General Geology 4
GEOL 107 General Geology 4

Within the University
ELEG 202 Introduction to Digital Systems 4
or
ELEG 210 Introduction to Combinational Logic and
ELEG 211 Introduction to Sequential Circuits 2

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

CREDITS TO TOTAL A MINIMUM OF 124

REQUIREMENTS FOR A MINOR IN COMPUTER SCIENCE
A minor in computer science consists of a total of 15 to 17 credits including CISC 181 (or CISC 105 and CISC 120), CISC 220, and CISC 280. Six additional credits at the 200-level or above should be chosen with the adviser’s approval.

ECONOMICS

Economics, a social science, analyzes the market and non-market production and allocation of goods and services. The problems associated with society’s efforts to prosper in a world possessing finite resources provide the focus.

The policy problems encountered in this study are varied, fascinating, and important for social welfare. The issues include (1) the conflicts between efficiency in production and equity in the distribution of income; (2) the causes of, and solutions to, unemployment and inflation; (3) the prospects for growth and development in the world’s poorer nations; (4) the contrasts between managed and market economies; (5) efficient and fair solutions for pollution problems; (6) the implications of monopoly and other private constraints on economic efficiency; and (7) the advantages of, and difficulties with, international trade.

The program leading to a Bachelor of Arts degree with a major in economics for a student enrolled in the College of Arts and Science has the same group and language requirements as other Bachelor of Arts programs offered in the College of Arts and Science.

Both a Bachelor of Arts and Bachelor of Science degree are available to students enrolled in the College of Business and Economics. The group and language (Bachelor of Arts) or quantitative proficiency (Bachelor of Science) requirements for students enrolled in the College of Business and Economics are described in the College of Business and Economics section of this catalog.
A minor program in economics is also available. Students majoring in economics will be advised by the faculty of the Department of Economics within the College of Business and Economics.

### DEGREE: BACHELOR OF ARTS

#### MAJOR: ECONOMICS

**See page 68 for University and College requirements.**

#### MAJOR REQUIREMENTS

**Within the Department**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 151</td>
<td>Introductory Microeconomics: Prices and Markets**</td>
<td>3</td>
</tr>
<tr>
<td>ECON 152</td>
<td>Introductory Macroeconomics: National Economy**</td>
<td>3</td>
</tr>
<tr>
<td>ECON 300</td>
<td>Intermediate Microeconomic Theory**</td>
<td>3</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Quantitative Microeconomic Theory**</td>
<td>3</td>
</tr>
<tr>
<td>ECON 302</td>
<td>Banking and Monetary Policy**</td>
<td>3</td>
</tr>
<tr>
<td>ECON 303</td>
<td>Intermediate Macroeconomic Theory**</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 311</td>
<td>Advanced Microeconomic Theory**</td>
<td>3</td>
</tr>
<tr>
<td>ECON 332</td>
<td>Advanced Macroeconomic Theory**</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 341</td>
<td>Advanced Microeconomic Theory**</td>
<td>3</td>
</tr>
<tr>
<td>ECON 342</td>
<td>Advanced Macroeconomic Theory**</td>
<td>3</td>
</tr>
</tbody>
</table>

Five Economics courses, at least two of which are at or above**  
the 400 level

**Within the College**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 201</td>
<td>Introduction to Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 370</td>
<td>Introduction to Statistical Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 202</td>
<td>Introduction to Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 371</td>
<td>Introduction to Statistical Analysis II</td>
<td>3</td>
</tr>
</tbody>
</table>

Fifteen credits in the following social sciences with at least three credits in each department: Anthropology, Geography, History, Political Science and International Relations, and Sociology.

#### Professional Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDST 201</td>
<td>Education in a Multicultural Society</td>
<td>3</td>
</tr>
<tr>
<td>EDST 304</td>
<td>Educational Psychology - Social Aspects</td>
<td>3</td>
</tr>
<tr>
<td>EDST 305</td>
<td>Educational Psychology - Cognitive Aspects</td>
<td>3</td>
</tr>
<tr>
<td>HIST 491</td>
<td>Planning a Course of Instruction</td>
<td>3</td>
</tr>
<tr>
<td>HIST 493</td>
<td>Seminar: Problems in Teaching History and Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>EDST 420</td>
<td>Reading in the Content Areas</td>
<td>1</td>
</tr>
<tr>
<td>EDV 400</td>
<td>Student Teaching</td>
<td>4</td>
</tr>
</tbody>
</table>

The Economics Education program requires a certain minimum GPA for enrollment in EDDV 400; Student Teaching, a course required for the degree. The teacher education program advisor (see list on p. 143) should be consulted for the exact GPA requirements and other policies concerning qualifications for student teaching.

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

Credit will not be allowed for both courses of any of the following sets of corresponding courses: ECON 311 and ECON 312; ECON 312 and ECON 433; ECON 341 and ECON 444; ECON 344 and ECON 444; ECON 341 and ECON 443; ECON 360 and ECON 461; or ECON 381 and ECON 483. (Also acceptable are ACCT 207, 208, and 261, any 200 level Mathematics course and any BUEC courses. No credits in any 400 level course are acceptable.)

#### 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

The English Department has a widely varied undergraduate program. In the undergraduate literary studies major, students can study literature in English from Britain, America, and around the world. Undergraduates may elect concentrations in journalism, film, or business/technical writing, or, if they meet the admission requirements, may elect the program in English education. Journalism concentrators undergo intensive training in written journalism and serve on the staff of the University newspaper, The Review, in connection with their study. A number of undergraduate journalism concentrators also gain internship experience with local newspapers, TV stations, and other organizations. The film concentration includes courses in history and theory of film as well as film and literature, Black cinema, and other subjects. The 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 concentration 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, and 409 may be counted only as part of the journalism concentration; ENGL 312, 410, 411, 412, 413, 414, 415, and 464 may be counted only as part of the concentration in business/technical writing; and ENGL 384 may be counted only as part of the concentration in English education.

---

*Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.

**Minimum grade of C+ required.

†A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
DEGREE: BACHELOR OF ARTS
MAJOR: ENGLISH

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

Five of the following six courses:
ENGL 202 Biblical and Classical Literature 3-1-4
ENGL 205 British Literature I. 3-1-4
ENGL 206 British Literature II 3-1-4
ENGL 300 Texts and Contexts 3
ENGL 324 Shakespeare 3-2-4
ENGL 340 American Literature to the Civil War 3-1-4

or
ENGL 341 American Literature: Civil War to World War II 3-2-3

Twelve credits at the 300-level or above distributed as follows:
   a A course other than Shakespeare in Medieval or Renaissance literature 3-1-4
   b A course in literature between 1700 and 1900 3
   c A course in Modern literature 3
   d A course in cultural and theoretical studies 3

English courses at or above the 300-level 6-1-4
English courses at or above the 200-level 3-1-4

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

ELECTIVES

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

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

---

DEGREE: BACHELOR OF ARTS
MAJOR: ENGLISH

CONCENTRATION: BUSINESS/TECHNICAL WRITING

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

Five of the following six courses:
ENGL 202 Biblical and Classical Literature 3-1-4
ENGL 205 British Literature I. 3-1-4
ENGL 206 British Literature II 3-1-4
ENGL 300 Texts and Contexts 3
ENGL 324 Shakespeare 3-2-4
ENGL 340 American Literature to the Civil War 3-1-4

or
ENGL 341 American Literature: Civil War to World War II 3-2-3

Nine credits at the 300-level or above distributed as follows:
   a A course other than Shakespeare in Medieval or Renaissance literature 3-1-4
   b A course in literature between 1700 and 1900 3
   c A course in Modern literature 3
   d A course in cultural and theoretical studies 3
   e A literature course 3

Students concentrating in film must take the following film courses:
ENGL 217 Introduction to Film 3-1-4
ENGL 317 Film History 3-1-4
ENGL 318 Studies in Film (variable content, may be repeated once) 3-1-4
ENGL 417 Film Theory and Criticism 3-1-4

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

ELECTIVES

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

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

---

DEGREE: BACHELOR OF ARTS
MAJOR: ENGLISH

CONCENTRATION: JOURNALISM

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

Five of the following six courses:
ENGL 202 Biblical and Classical Literature 3-1-4
ENGL 205 British Literature I. 3-1-4
ENGL 206 British Literature II 3-1-4
ENGL 300 Texts and Contexts 3-1-4
ENGL 324 Shakespeare 3-1-4
ENGL 340 American Literature to the Civil War 3-1-4

or
ENGL 341 American Literature: Civil War to World War II 3-2-3

Nine credits at the 300-level or above distributed as follows:
   a A course other than Shakespeare in Medieval or Renaissance literature 3-1-4
   b A course in literature between 1700 and 1900 3
   c A course in Modern literature 3
   d A course in cultural and theoretical studies 3
   e A literature course 3

All EFM 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

---

*Superior figures indicate year or years in which the course is normally taken, e.g., 1 freshman year, 2 sophomore year, etc.
Prior to enrolling in the following course, ENGL 110 or equivalent must be completed with a grade of B or better.

ENGL 307 News Writing and Editing

At least nine credits chosen from among the following courses:

ENGL 308 Reporter’s Practice
ENGL 309 Feature and Magazine Writing
ENGL 407 Advanced Reporting
ENGL 409 Topics in Journalism

May be taken in addition to the 36 required credits in English:

ENGL 466 Internship

All EJR 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

<table>
<thead>
<tr>
<th>DEGREE: BACHELOR OF ARTS</th>
<th>CURRICULUM</th>
</tr>
</thead>
</table>

MAJOR: ENGLISH EDUCATION

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department†

<table>
<thead>
<tr>
<th>Course</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 202 Biblical and Classical Literature</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 205 British Literature I</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 206 British Literature II</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 302 Advanced Composition</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 324 Shakespeare</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 340 American Literature to the Civil War</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 341 American Literature: Civil War to World War II</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 390 English Linguistics</td>
<td>3-1.4</td>
</tr>
</tbody>
</table>

Three English courses at the 300-level or above distributed as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>British literature before 1900</td>
<td>1-6</td>
</tr>
<tr>
<td>20th-century British, American or Comparative literature</td>
<td>3-1</td>
</tr>
<tr>
<td>Literary Theory and Criticism</td>
<td>3-1</td>
</tr>
</tbody>
</table>

All EJR majors must take at least one ENGL 480 seminar.

Within the College***

<table>
<thead>
<tr>
<th>Course</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 251, 255, 312, or 350 or THEA 102 or 226</td>
<td>3-1.4</td>
</tr>
</tbody>
</table>

One of the following four courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 494 History of the English Language</td>
<td>3-1.4</td>
</tr>
<tr>
<td>LING 491 Semantics I</td>
<td>3-1</td>
</tr>
<tr>
<td>LING 497 Sociolinguistics of English in the Inner City</td>
<td>3-1</td>
</tr>
<tr>
<td>LING 498 Teaching English as a Second Language</td>
<td>3-1</td>
</tr>
</tbody>
</table>

Professional Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDST 201 Education in a Multicultural Society</td>
<td>3-1.4</td>
</tr>
<tr>
<td>EDST 304 Educational Psychology – Social Aspects</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 383 Educational Psychology – Cognitive Aspects</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 384 Teaching Composition in Secondary School</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 481 Teaching English</td>
<td>3-1.4</td>
</tr>
<tr>
<td>EDDV 400 Student Teaching</td>
<td>3-1.4</td>
</tr>
<tr>
<td>EDDV 403 Adolescent Literature</td>
<td>3-1.4</td>
</tr>
</tbody>
</table>

The English Education program requires a certain minimum G.P.A. for enrollment in EDDV 400; Student Teaching, a course required for the degree. The teacher education program adviser (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

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

<table>
<thead>
<tr>
<th>DEGREE: BACHELOR OF ARTS</th>
<th>CURRICULUM</th>
</tr>
</thead>
</table>

MAJOR: ENGLISH

CONCENTRATION: ETHNIC AND CULTURAL STUDIES

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

Five of the following six courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 202 Biblical and Classical Literature</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 205 British Literature I</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 206 British Literature II</td>
<td>3-1.4</td>
</tr>
<tr>
<td>ENGL 302 Texts and Contexts</td>
<td>3-1</td>
</tr>
<tr>
<td>ENGL 324 Shakespeare</td>
<td>3-1</td>
</tr>
<tr>
<td>ENGL 340 American Literature to the Civil War</td>
<td>3-1.4</td>
</tr>
</tbody>
</table>

EDMA 341 American Literature: Civil War to World War II

Two courses at the 300-level or above, to be chosen in consultation with the student's concentration adviser.

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

CREDITS TO TOTAL A MINIMUM OF 124

<table>
<thead>
<tr>
<th>REQUIREMENTS FOR OTHER PROGRAMS IN ENGLISH</th>
</tr>
</thead>
</table>

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.

Eligible students may elect to pursue the Honors degree in English or the Degree with Distinction. Those taking the Honors degree must satisfy all the requirements established by the University Honors Program; in addition, they must meet requirements set by the English Department: a minimum of 12 credits in Honors courses in English, not including the thesis (one course must be an Honors Seminar, ENGL 480 Honors); and an Honors thesis.

<table>
<thead>
<tr>
<th>FOREIGN LANGUAGES AND LITERATURES</th>
</tr>
</thead>
</table>

Modern. Almost all spheres of human activity—from business to politics to humanistic studies—now have crucial international components. In order to be competitive in today’s world, an educated person must understand other people’s patterns of thought and action. The surest way to achieve this understanding is by learning how to speak other languages and by studying other cultures.
To prepare students to speak, understand, read and write the language they are studying, the Department of Foreign Languages and Literatures uses proficiency-oriented communicative approaches to language learning. Many of the elementary/intermediate courses are team taught, and there are special programs for students at this level who want to continue their language/culture study abroad. A high-tech Foreign Language Media Center is available for the use of students and faculty.

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 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, not only in Latin but in their own language as well, and in the process grapple with the universal ethical, social, and political problems and gain perspective, sensitivity, and insight. These are qualities that equip students for effective action in any profession.

The teaching of the classics will be the goal of some who select this major, whether they look to secondary education or to graduate school. Students who intend to enter the fields of law, theology, or medicine will find it appropriate, and it is a desirable choice as a major or a field of concentration for future writers, businesspersons, and public servants.

PLACEMENT AND DUPLICATE CREDIT

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

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

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

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

FOREIGN LANGUAGE EDUCATION

The Department of Foreign Languages & Literatures administers the B.A. program in Foreign Language Education leading to secondary certification in Classics, French, German, Italian, Latin, Russian, and Spanish. These 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.
Within the Department of Foreign Languages and Literatures

In addition to completing the courses listed below, students are required to participate in a semester abroad program sponsored by the Department of Foreign Languages and Literatures (in Caen, or the equivalent, for French; in Bayreuth, or the equivalent, for German; in Granada, or the equivalent, for Spanish).

**French**
- FREN 201, 301, 402, 4xx
- GREK 101 Elementary Greek I
- Two credits in Greek and Latin at the 100-level with six credits at or above the 300-level, and at least three credits in each language

**German**
- GRMN 101 Elementary German I
- GRMN 102 Elementary German II
- Two credits in Greek and Latin at the 100-level with six credits at or above the 300-level, and at least three credits in each language

**Spanish**
- SPAN 201, 301, 4xx
- SPAN 4xx (literature)

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

**Political Science**
- POSC 310 European Governments
- POSC 441 Problems of Western European Politics by Country
- POSC 442 Problems of Western European Politics

**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: Classical Studies**

**Curriculum**

See page 68 for University and College requirements.

**Major Requirements**

- At least 2 at the 400-level and at least 2 in the area of International Relations
- Within the College
  - Twenty-one credits at the 200-level or above
  - Chosen in consultation with the adviser and according to options
  - In the following areas: Anthropology, Art History, Comparative Literature, English, Foreign Languages and Literatures, History, Philosophy

**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: Classics Education**

**Curriculum**

See page 68 for University and College requirements.

**Major Requirements**

- At least 2 of the credits in Latin or Greek at the 200-level or above
- Within the College
  - Twenty-one credits at the 200-level or above
  - Chosen in consultation with the adviser and according to options
  - In the following areas: Anthropology, Art History, Comparative Literature, English, Foreign Languages and Literatures, History, Philosophy

**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

---

*Superior figures indicate year or years in which the course is normally taken, i.e., freshman year, sophomore year, etc.*

*Must be completed prior to leaving for the semester abroad (FREN 255, GRMN 255, and SPAN 255 are recommended for French, German or Spanish majors, respectively)*

*This 400-level literature course must be taken at the Newark Campus.*
be consulted for the exact G.P.A. requirements and other policies concern-
ing qualifications for student teaching.

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

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

DEGREE: BACHELOR OF ARTS
MAJOR: FOREIGN LANGUAGES AND LITERATURES
CONCENTRATION: FRENCH STUDIES

For the different options available under the French Studies concentra-
tion (language and literature, civilization and culture, area studies, peri-
od studies, linguistics), students should see their adviser or the associate
chair of the department.

CREDITSTO TOTALA MINIMUM OF••••••••••••••••••••••••••••124

DEGREE: BACHELOR OF ARTS
MAJOR: FOREIGN LANGUAGES AND LITERATURES
CONCENTRATION: GERMAN STUDIES

For the different options available under the German Studies concentra-
tion (language and literature, civilization and culture, area studies, peri-
od studies, linguistics), students should see their adviser or the associate
chair of the department.

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

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

DEGREE: BACHELOR OF ARTS
MAJOR: FRENCH EDUCATION

CREDITSTO TOTALA MINIMUM OF••••••••••••••••••••••••••••124

Note: See the associate chair of the department for detailed requirements.
The faculty of each program shall determine specific course requirements,
which may be more stringent than those listed above.
GRMN 325 German Civilization and Culture 3
GRMN 340 Focus on Genre: German Drama, Prose or Poetry 3
or
GRMN 355 Special Topics 3

One of the following courses:
GRMN 403 History of the German Language 3
GRMN 406 Advanced German Language 3
LING 460 The Structure of German 3

Six credits in GRMN literature at the 400-level 6

Professional Studies
EDST 201 Education in a Multicultural Society 3
EDST 304 Educational Psychology — Social Aspects 3
EDST 305 Educational Psychology — Cognitive Aspects 3
FLLT/LING 421 Methods of Teaching Foreign Languages 3
FLLT/LING 422 Language Syllabus Design 3
LING/FLLT 424 Second Language Testing 3
EDDV 400 Student Teaching 9

The German Education program requires a certain minimum GPA for enrollment in EDDV 400. Student teaching, a course required for the degree. The teacher education program adviser (see list on p. 143) should be consulted for the exact GPA requirements and other policies concerning qualifications for student teaching.

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

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF ARTS
MAJOR: FOREIGN LANGUAGES AND LITERATURES
CONCENTRATION: ITALIAN STUDIES

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

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

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

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

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

CREDITS TO TOTAL A MINIMUM OF 124

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

DEGREE: BACHELOR OF ARTS
MAJOR: LATIN EDUCATION

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department
ITAL 200 Italian Grammar Review 3
or
ITAL 206 Practical Oral/Written Expression 3
ITAL 305 Translation 3
ITAL 306 Advanced Italian Conversation and Composition 3
ITAL 250 Introduction to Business Italian 3
ITAL 205 Italian Conversation 3

Beyond the Department

Students should see their adviser or the associate chair of the department for detailed requirements.

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Professional Studies
EDST 201 Education in a Multicultural Society 3
EDST 304 Educational Psychology — Social Aspects 3
EDST 305 Educational Psychology — Cognitive Aspects 3
FLLT/LING 421 Methods of Teaching Foreign Languages 3
FLLT/LING 422 Language Syllabus Design 3
LING/FLLT 424 Second Language Testing 3
EDDV 400 Student Teaching 9

The Italian Education program requires a certain minimum GPA for enrollment in EDDV 400. Student teaching, a course required for the degree. The teacher education program adviser (see list on p. 143) should be consulted for the exact GPA requirements and other policies concerning qualifications for student teaching.

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

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF ARTS
MAJOR: FOREIGN LANGUAGES AND LITERATURES
CONCENTRATION: LATIN STUDIES

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

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department
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-level)

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

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

CREDITS TO TOTAL A MINIMUM OF 124

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

DEGREE: BACHELOR OF ARTS
MAJOR: LATIN EDUCATION

CURRICULUM

See page 68 for University and College requirements.

Note: Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshmen year, 2 sophomore year, etc.
ITAL 206 and ITAL 306 are offered only in Siena.
MAJOR REQUIREMENTS

Within the Department

LATN 2xx .......................................................... 6
LATN 3xx and/or LATN 4xx ...................................... 9
LATN 421 Latin prose Composition ................................ 3
LATN 431 History of Latin Literature ................................. 3
LATN 451 Latin prose Composition ................................. 3
Professional Studies

EDST 201 Education in a Multicultural Society ....................... 3
EDST 304 Educational Psychology – Social Aspects ................. 3
EDST 305 Educational Psychology – Cognitive Aspects ............ 3
FLIT/UNG 421 Methods of Teaching Foreign Languages .......... 3
LING/FLIT 422 Language Syllabus Design ........................ 3
EDV 400 Student Teaching ......................................... 9

Related Work:

FLIT 327 Topics: Russian literature in Translation ................ 3
FLIT 375 Topics: Russian and Soviet Culture in Translation ....... 3

ELECTIVES

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

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

DEGREE: BACHELOR OF ARTS
MAJOR: FOREIGN LANGUAGES AND LITERATURES

CONCENTRATION: RUSSIAN STUDIES

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

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

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)

FLIT 327 Topics: Russian literature in Translation .................. 3
FLIT 375 Topics: Russian and Soviet Culture in Translation ........... 3

Within the College

A total of nine credits at the 200-level or above, chosen with prior approval of the adviser and according to option requirements, from the following areas: Russian, Art History, Comparative Literature, English, Foreign Languages and Literatures, History, Linguistics, Music, Political Science .......................... 9

ELECTIVES

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

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

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

DEGREE: BACHELOR OF ARTS
MAJOR: RUSSIAN EDUCATION

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

One of the following courses:

RUSS 200 Russian Grammar Review .................................... 3
RUSS 205 Russian Conversation ......................................... 3
RUSS 206 Practical Oral/Written Expression ........................ 3

RUSS 211 Russian Reading and Composition .............................. 3
RUSS 305 Russian Conversation and Composition ...................... 3

Two of the following courses:

RUSS 310 Introduction to Russian Literature I ......................... 3
RUSS 312 Introduction to Russian Literature II ......................... 3
RUSS 325 Russian Civilization and Culture ................................ 3

RUSS 401 Advanced Russian Grammar and Composition .............. 3

Six credits in RUSS literature at the 400-level ........................... 6

ELECTIVES

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

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

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

DEGREE: BACHELOR OF ARTS
MAJOR: SPANISH EDUCATION

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

SPAN 201 Spanish Reading and Composition† ................................ 3

†Spanish 200 is the prerequisite for Spanish 201.
One of the following courses:
- SPAN 308 Contemporary Spain II ..................................................... 3
- SPAN 325 Spanish Civilization and Culture ........................................... 3
- SPAN 326 Latin American Civilization and Culture ................................. 3
Any three of the following four literature survey courses:
- SPAN 301 Survey of Spanish Literature .................................................. 3
- SPAN 302 Survey of Spanish Literature .................................................. 3
- SPAN 303 Survey of Spanish-American Literature .................................... 3
- SPAN 304 Survey of Spanish-American Literature .................................... 3

Of
- SPAN 305 Oral Communication ............................................................. 3
- SPAN 306 Practical Oral/Written Expression .............................................. 3
- SPAN 314 Spanish Phonetics and Phonology ............................................ 3

One of the following courses:
- SPAN 401 Advanced Spanish Grammar .................................................. 3
- SPAN 403 History of the Spanish Language .............................................. 3
- SPAN 406 Advanced Spanish Language ................................................... 3

Six credits in SPAN literature at the 400-level .......................................... 6

Professional Studies
- EDST 201 Education in a Multicultural Society ....................................... 3
- EDST 304 Educational Psychology – Social Aspects ...................................... 3
- EDST 305 Educational Psychology – Cognitive Aspects ................................ 3
- FLIT/UNG 421 Methods of Teaching Foreign Languages ............................ 3
- FLIT/UNG 422 Language Syllabus Design ................................................. 3
- UNG/FLIT 424 Second Language Testing .................................................. 3
- EDDY 400 Student Teaching ................................................................. 9

The Spanish Education program requires a certain minimum G.P.A. for enrollment in EDDY 400, Student Teaching, a course required for the degree. The teacher education program adviser (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

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

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

---

DEGREE: BACHELOR OF ARTS
MAJOR: FOREIGN LANGUAGES AND LITERATURES
CONCENTRATION: FOUR LANGUAGES

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

First Language
Six first-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

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 eleven credits of third-language courses (at least three credits at or above the 200-level for Western language) ........................................... 9-11

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

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

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

---

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.
Madrid, various programs for study abroad are specifically designed for students of foreign languages.

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

INTERNATIONAL HONORS CERTIFICATES

For majors in French, German, Spanish, or Italian Studies, and in Political Science and International Relations. This program requires participation in a semester program abroad (in Caen for French, Bayreuth for German, or Granada for Spanish).

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

Information is available at the Department offices.

FOREIGN LANGUAGE CERTIFICATES FOR INTERNATIONAL RELATIONS AND POLITICAL SCIENCE STUDENTS

The (Honors) Foreign Language Certificate Program is intended to enhance the international dimension of the Bachelor's degree in Political Science or International Relations. To earn a Bachelor's degree in Political Science or International Relations with a Foreign Language Certificate or an Honors Foreign Language Certificate in German, French, 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 Winter Session in Germany, France, Spain, or Costa Rica, and two courses taken on the Delaware campus. The Winter Session courses must be taken first, followed by the courses offered on the Delaware campus.

German Courses
Winter Session in Bayreuth, Germany: CREDITS
GRMN 206 Culture through Conversation 3
GRMN 208 Contemporary Germany I 3

Delaware Campus
GRMN 255 German Politics in the Press 3
GRMN 325 German Civilization and Culture 3

French Courses
Winter Session in Caen, France: CREDITS
FREN 206 Culture through Conversation 3
FREN 208 Contemporary France I 3

Delaware Campus
FREN 255 French Politics in the Press 3
FREN 325 French Civilization I 3
or FREN 326 French Civilization II 3
or FREN 453 French Civilization III 3

Spanish Courses (Spain)
Winter Session in Granada, Spain: CREDITS
SPAN 206 Culture through Conversation 3
SPAN 208 Contemporary Spain I 3

Delaware Campus
SPAN 255 Spanish Politics in the Press 3
SPAN 325 Spanish Civilization and Culture 3

Spanish Courses (Costa Rica)
Winter Session in San José, Costa Rica: CREDITS
SPAN 206 Culture through Conversation 3
SPAN 207 Contemporary Latin America I 3

Delaware Campus
SPAN 254 Latin American Politics in the Press 3
SPAN 326 Latin American Civilization and Culture 3

Foreign Language Certificate: To earn a Bachelor's degree in Political Science or International Relations with a Foreign Language Certificate in German, French, or Spanish, a student is required to complete the designated sequence of four 200 and 300-level German, French, or Spanish courses (listed above) with no grade below a C.

Honors Foreign Language Certificate: To earn a Bachelor's degree in Political Science or International Relations with a Honors Foreign Language Certificate, the student must:

- Complete the designated sequence of four courses at the 200 and 300-levels in German, Spanish, or French listed above with no grade below a B-
- Take all four of these courses for Honors credit.
- Achieve a 3.0 cumulative grade index by the time of graduation.

Students who have successfully completed the above requirements will be awarded an Honors Foreign Language Certificate that will be presented during an appropriate Honors ceremony and recorded on the recipient's official transcript.

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.

FOREIGN LANGUAGE CERTIFICATES FOR ACCOUNTING, BUSINESS ADMINISTRATION AND ECONOMICS STUDENTS

The (Honors) Foreign Language Certificate Program is intended to enhance the international dimension of the Bachelor's degree in Accounting, Business Administration, or Economics. To earn a Bachelor's degree in Accounting, Business Administration, or Economics with a Foreign Language Certificate or an Honors Foreign Language Certificate in German, French, 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 Winter Session in Germany, France, Spain, or Costa Rica, and two courses taken on the Delaware campus. The Winter Session courses must be taken first, followed by the courses offered on the Delaware campus.

German Courses
Winter Session in Bayreuth, Germany: CREDITS
GRMN 206 Culture through Conversation 3
GRMN 208 Contemporary Germany I 3

Delaware Campus
GRMN 250 Introduction to Business German 3
GRMN 325 German Civilization and Culture 3

French Courses
Winter Session in Caen, France: CREDITS
FREN 206 Culture through Conversation 3
FREN 208 Contemporary France I 3

Delaware Campus
FREN 250 Introduction to Business French 3
FREN 325 French Civilization I 3
or FREN 326 French Civilization II 3
or FREN 453 French Civilization III 3

Spanish Courses (Spain)
Winter Session in Granada, Spain: CREDITS
SPAN 206 Culture through Conversation 3
SPAN 208 Contemporary Spain I 3
Honors Foreign Language Certificate:

To earn a Bachelor's degree in Accounting, Business Administration, or Economics with a Foreign Language Certificate in German, French, or Spanish, a student is required to complete the designated sequence of four courses at the 200 and 300-level German, French, or Spanish courses (listed above) with no grade below a C.

Honors Foreign Language Certificate: To earn a Bachelor's degree in Accounting, Business Administration, or Economics with an Honors Foreign Language Certificate, the student must:

- Complete the designated sequence of four courses at the 200 and 300-levels in German, Spanish, or French listed above with no grade below a B-.
- Take all four of these courses for Honors credit.
- Achieve a 3.0 cumulative grade index by the time of graduation.

Students who have successfully completed the above requirements will be awarded an Honors Foreign Language Certificate that will be presented during an appropriate Honors ceremony and recorded on the recipient's official transcript.

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.

**FOREIGN LANGUAGE CERTIFICATES FOR ENGINEERING STUDENTS**

The Foreign Language Certificate Program is intended to enhance the Bachelor’s degree in Engineering by adding the increasingly crucial international dimension. To earn a Bachelor's degree in Engineering with a Foreign Language Certificate or an Honors Foreign Language Certificate in German, the student is required to complete the four courses listed below, the first two of which must be taken during Winter Session in Germany, followed by two courses on the Delaware campus.

Winter Session in Bayreuth, Germany:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRMN 206</td>
<td>Culture through Conversation</td>
<td>3</td>
</tr>
<tr>
<td>GRMN 208</td>
<td>Contemporary Germany I</td>
<td>3</td>
</tr>
<tr>
<td>Delaware Campus</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRMN 240</td>
<td>German Culture and Technology</td>
<td>3</td>
</tr>
<tr>
<td>GRMN 325</td>
<td>German Civilization and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

Foreign Language Certificate: To earn a Bachelor's degree in Engineering with a Foreign Language Certificate in German, the student is required to complete the designated sequence of courses listed above with no grade below a C.

Honors Foreign Language Certificate: To earn a Bachelor's degree in Engineering with an Honors Foreign Language Certificate, the student must:

- Complete the designated sequence of courses listed above with no grade below a B-.
- Take all four of these courses for Honors credit.
- Achieve a 3.0 cumulative grade index by the time of graduation.

Honors Foreign Language Certificates will be awarded at an appropriate Honors ceremony and recorded on the recipient's official transcript. 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.

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

**MISCELLANY**

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

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

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

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

**MINORS**

**Foreign Language Minors:** A minor in a foreign language requires a minimum of 18-21 credits (100-level courses do not count in the French, German, or Spanish minor), as follows:

**FRENCH:** 18 credits above the 100-level including FREN 201 or 202, 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 composed of 15 credits of Japanese above the 100-level, 6 of which must be at the 300-level and above; and one of the following: JAPN 208 (Contemporary Japan I), FLLT 328 (Topics: Japanese Literature in Translation), or FLLT 380 (Topics: Japanese Culture in Translation).

**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).

**CLASSICS:** 18 credits including 12 credits in Latin and/or Greek at or above the 200-level and 6 credits in FLLT courses, with one course at or above the 300-level.
An adviser on minors for each language will help students tailor the chosen minor program to their needs.

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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 204, 3xx, 4xx</td>
<td>4†</td>
</tr>
<tr>
<td>FREN 306 or 406</td>
<td>3</td>
</tr>
<tr>
<td>FREN 308</td>
<td>3</td>
</tr>
</tbody>
</table>

Three of: ARTH 339, FREN 355, FREN 455, HIST 339, POSC 441 |

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

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

**GERMAN STUDIES MINOR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRMN 204, 3xx, 4xx</td>
<td>6†</td>
</tr>
<tr>
<td>GRMN 306 or 406</td>
<td>3</td>
</tr>
<tr>
<td>GRMN 308</td>
<td>3</td>
</tr>
</tbody>
</table>

Three of: ARTH 339, GRMN 355, GRMN 455, HIST 339, POSC 441 |

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

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

**SPANISH STUDIES MINOR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 204, 3xx, 4xx</td>
<td>6†</td>
</tr>
<tr>
<td>SPAN 306 or 406</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 308</td>
<td>3</td>
</tr>
</tbody>
</table>

Three of: ARTH 339, SPAN 355, SPAN 455, HIST 339, POSC 441 |

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

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

**GEOGRAPHY**

Geographers investigate processes that explain the location of human and natural phenomena, as well as the interactions between people and their environment. At the University of Delaware, geographic research includes modeling of the impact of climate on socioeconomic conditions, the role of energy and water budgets in the solution of environmental problems, the examination of urban development and landscape aesthetics, and new approaches to cartographic representation. The study of migration and settlement, and of cultural attitudes toward land and nature, represent further dimensions of inquiry in the department. Such a broad range of interests exemplifies the integrative nature of geography and reflects its position simultaneously in the natural sciences, social sciences, and humanities.

Students who major in geography may, if they choose, specialize. The department has an excellent program in climatology, for instance, and research may be undertaken through its Center for Climatic Research. Other areas include environmental studies, biogeography, conservation, cultural-historical geography, urban geography and geomorphology. Computer, cartographic and other skills also are studied by geography majors. Students are required to take an introductory sequence of courses to provide a common background for all majors. An additional component of the program is the opportunity for majors to take a number of courses in allied disciplines, tailored to the student’s particular interests. During the senior year, majors may, at their option, undertake a research paper under the direction of their program advisers. A detailed brochure describing the geography program and requirements is available upon request from the department office.

**DEGREE: BACHELOR OF ARTS MAJOR: GEOGRAPHY**

**CURRICULUM**

See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

Within the Department

Six credits selected from the following natural geography courses:

- GEOG 101 Physical Geography
- GEOG 152 Climate and Life
- GEOG 206 Physical Geography: Topography-Soils
- GEOG 220 Meteorology
- GEOG 230 Humans and the Earth Ecosystem
- GEOG 235 Conservation of Natural Resources
- GEOG 255 Applied Climatology

Six credits selected from 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

Three credits selected from 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 at the 300 or 400 level (GEOG 445 strongly recommended)

Six credits selected from geography courses at the 200, 300, or 400 level

**ELECTIVES**

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

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

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

**CURRICULUM**

See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

Within the Department

Six credits selected from the following natural geography courses:

- GEOG 101 Physical Geography
- GEOG 152 Climate and Life
- GEOG 206 Physical Geography: Topography-Soils
- GEOG 220 Meteorology
- GEOG 230 Humans and the Earth Ecosystem
- GEOG 235 Conservation of Natural Resources
- GEOG 255 Applied Climatology

Six credits selected from 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

Three credits selected from 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 at the 300 or 400 level

Six credits selected from geography courses at the 200, 300, or 400 level

**ELECTIVES**

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

**CREDITS TO TOTAL A MINIMUM OF: 124**
GEOG 225 Historical Geography of the United States 3
GEOG 236 Conservation: Global Issues 3
Three credits selected from the following methods courses:
GEOG 250 Computer Methods in Geography 4 1/4
GEOG 270 Map Communication and Design 3
GEOG 272 Map and Air Photo Interpretation 3
Nine credits selected from geography courses at the 300 or 400-level (GEOG 445 strongly recommended) 9 1/4
Six credits selected from geography courses at the 200, 300, or 400-level 6 1/4

Within the College
Twenty-four credits in the following social sciences with at least three credits in each department
Anthropology course 3
Economics course 3
History course 3
Political Science course 3
Sociology course 3
PSYC 201 General Psychology 3 1/4
Six additional credits selected from the departments listed above 6 1/4

CREDENTIALS TO TOTAL A MINIMUM OF 124

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.

REQUIREMENTS FOR THE MINOR IN GEOGRAPHY
A minimum of 18 credits of course work in geography must be completed for a minor. Nine credits must be taken at the foundation level, with three credits from each of the foundation areas (Natural Geography, Human Geography, Methods). Nine more geography credits must be taken at the 300/400-level.

COURSES FOR NONMAJORS
Many geography courses are on the list of approved courses for fulfilling the general education requirements in the College of Arts and Science. At least two geography courses are found within each of the four groups, underscoring geography's role as a discipline that integrates the human and natural environments. The following geography courses presently fulfill requirements within each of the groups:

GROUP A: GEOG 203, 345, 346
GROUP B: GEOG 225
GROUP C: GEOG 102, 120, 210, 230, 235, 240, 320
GROUP D: GEOG 101, 152, 206, 220, 250

BACHELOR OF ENVIRONMENTAL SCIENCE
Complementing the B.A. programs in Geography, the Geography Department, in cooperation with the Geology Department and the Department of Biology, offers a B.S. degree in Environmental Science. The program emphasizes a broad scientific understanding of the character, function and analysis of environmental systems. It is hoped that Environmental Science B.S. students will be able to contribute to society's understanding of and solutions to problems that arise from the human occupation and use of the environment. Curriculum and requirements associated with the Environmental Science B.S. program appear below.

DEGREE: BACHELOR OF SCIENCE
MAJOR: ENVIRONMENTAL SCIENCE
CURRICULUM

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing 3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content

COLLEGE REQUIREMENTS
Skill Requirements
Writing** 3 3/4
A second writing course involving significant writing experience including a second paper 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 62 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 68.)

Foreign Language: 6 1/4
Completion of the intermediate-level course (107 or 112 or 214) in a given 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 70)
Nine credits are required in each of the following groups:
Group A Understanding and appreciation of the creative arts and humanities 9
Group B The study of culture and institutions over time. At least two areas must be represented 9
Group C Empirically based study of human beings and their environment. At least two areas must be represented 9

MAJOR REQUIREMENTS
Within the Cooperating Departments
GEOI 107 General Geology 4 1/2
BISC 207, BISC 208 Introductory Biology I and II 8 1/2
GEOG 220 Meteorology 3 1/2
GEOG 250 Computer Methods in Geography 4 2/3
BISC 302 General Ecology 3 2/3
BISC 312 General Ecology Lab 1 2/3

*Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.
**Minimum grade of C required.
#This requirement may be filled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21.
†A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
MATH302 Ordinary Differential Equations
MATH349 Elementary linear Algebra

*Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.

One of the following five courses:

MATH 302 Ordinary Differential Equations
MATH 349 Elementary Linear Algebra

At least 12 credits of coursework must be at the 300 level or above.

**MAJOR REQUIREMENTS**

**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** 127

**GEOLOGY**

Geology, the study of the earth, employs the methods of other sciences, as well as those unique to geology, to investigate the nature, processes, and history of the earth. Geology is vital to the discovery and recovery of earth resources including petroleum and other fuels, metals and building materials. Geologists and geophysicists also deal with environmental issues and the understanding of natural hazards such as earthquakes, volcanoes, landslides and floods. New interest in the earth as an integrated global system and shifting employment opportunities for geologists have dictated a major change in emphasis for the earth sciences. Recent trends indicate that over the next few years most geologists will be hired in the environmental field.

Advanced undergraduate geology students are encouraged to undertake research, under the supervision of the faculty, in areas such as geochemistry, geophysics, igneous and metamorphic petrology, micropaleontology and paleontology, mineralogy, paleomagnetics, sedimentary petrology, stratigraphy, and structural geology. As an additional resource, the Department maintains close ties with the Delaware Geological Survey and with the College of Marine Studies.

In view of the close relationship between geology and other disciplines, interdepartmental and double majors are encouraged. Various interdisciplinary programs within the field of geology are also possible. Examples of such programs include paleobiology, geochemistry, and geophysics. Students interested in any of these programs should contact the Geology Department for information.

The Department of Geology offers B.A. degrees in geology (including a B.A. with a concentration in paleobiology) and in earth science education. The Department offers B.S. degrees in geology and geophysics (jointly with the Physics Department), and a minor in geology. Environmental Science majors can concentrate in geology while earning a B.S. in Environmental Science.

In recognition of the relationship of geology to many academic disciplines and the many applications of geology to problems of the environment and the recovery of earth resources, the Department of Geology offers courses in varied aspects of geology for nonmajors. These include the general courses, GEOL 105 and 106, as well as specialty courses, such as GEOL 110, 144, 233, 234, 243, and 245. These courses fulfill the GROUP D requirements for the College of Arts and Science.
GEOL 203 Mineralogy and Crystallography 3
GEOL 204 Properties of Rocks and Minerals 4
GEOL 301 Systematic and Evolutionary Paleontology 3
GEOL 303 Sedimentology 3
GEOL 304 Stratigraphy 3
GEOL 305 Structural Geology 3
GEOL 402 History of the Earth 3
GEOL 407 Igneous and Metamorphic Petrology 3
GEOL 452 Plate Tectonics and Geophysics 3

Three credits of field geology (taught only in the summer):
GEOL 432 Recent Sedimentary Environment 3
GEOL 460 Field Geology in the Western States 3

Within the College
Chemistry courses (CHEM 103-104) 8
Physics courses (PHYS 201-202) 8
Mathematics courses through college-level trigonometry 3

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

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF ARTS
MAJOR: GEOLOGY

CONCENTRATION: PALEOBIOLOGY

CREDITS*

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department
GEOL 107 General Geology I 4
GEOL 203 Mineralogy and Crystallography 4
GEOL 204 Properties of Rocks and Minerals 4
GEOL 301 Systematic and Evolutionary Paleontology 3
GEOL 303 Sedimentology 3
GEOL 304 Stratigraphy 3
GEOL 305 Structural Geology 3
GEOL 402 History of the Earth 3
GEOL 466 Independent Study 3

Three credits of field geology (taught only in the summer):
GEOL 432 Recent Sedimentary Environment 3
GEOL 460 Field Geology in the Western States 3

Within the College
BISC 207 Introductory Biology I 4
BISC 208 Introductory Biology II 4
BISC 302 General Ecology 4
BISC 324 Invertebrate Zoology 4
BISC 402 Vertebrate Morphology (recommended) 3
BISC 495 Evolution 3
STAT 201 Introduction to Statistics I 3
STAT 202 Introduction to Statistics II 3
CHEM 103 General Chemistry 3
CHEM 104 General Chemistry 3
MATH 115 Pre-calculus 3

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

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF SCIENCE
MAJOR: GEOLOGY

CREDITS*

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing** 3

Three credits in an approved course or courses stressing
multicultural, ethnic, and/or gender-related content # 3

COLLEGE REQUIREMENTS

Skill Requirements

Writing** 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 62 credit hours. Appropriate writing
courses are normally designated in the semester’s Registration Booklet.
(See list of courses approved for second writing requirement, page 68.)

Foreign Language:

Completion of the intermediate-level course (107 or 112 or 214) in a
given language. Students with four or more years of high school work in a
single foreign language may attempt to fulfill the requirement in that lan-
guage by taking an exemption examination.

Breadth Requirements (See page 70)

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
GEOL 107 General Geology I 4
GEOL 203 Mineralogy and Crystallography 4
GEOL 204 Properties of Rocks and Minerals 4
GEOL 301 Systematic and Evolutionary Paleontology 3
GEOL 303 Sedimentology 3
GEOL 304 Stratigraphy 3
GEOL 305 Structural Geology 3
GEOL 402 History of the Earth 3
GEOL 407 Igneous and Metamorphic Petrology 3
GEOL 452 Plate Tectonics and Geophysics 3

Six credits from the following:
GEOL 460 Field Geology in the Western States 3

Six credits from the following:

Related Work
MATH 241 Analytic Geometry and Calculus A 4
CHEM 103 General Chemistry 4
CHEM 104 General Chemistry 4
PHYS 201 Introductory Physics I 4

Two of the following:
MATH 242 Analytic Geometry and Calculus B 4
PHYS 202 Introductory Physics II 4
STAT 205 Statistical Methods 4

Two of the following:
BISC 207 Introductory Biology I 4
BISC 208 Introductory Biology II 4

ELECTIVE suppressing science course 3
(see department chair for list of approved courses)

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

CREDITS TO TOTAL A MINIMUM OF 125

REQUIREMENTS OF THE MINOR IN GEOLOGY

The minor consists of at least 18 credit hours in geology. The requirements are: GEOL 107; GEOL 203; at least two of the follow-
ing: GEOL 204, 301, 303, 304, 305; any 400-level geology course or courses must be used to obtain the remaining credits to reach a total of 18.

**DEGREE: BACHELOR OF ARTS
MAJOR: EARTH SCIENCE EDUCATION**

---

See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

Within the Department

- GEOL 105 General Geology ........................................... 4
- or
- GEOL 107 General Geology ........................................... 4
- GEOL 106 General Geology ........................................... 4
- GEOL 101 Physical Geography ....................................... 3
- GEOL 203 Mineralogy and Crystallography ........................ 3
- GEOL 220 Meteorology ................................................ 3
- GEOL 235 Conservation of Natural Resources ...................... 3
- GEOL 303 Sedimentology ............................................. 3
- GEOL 343 Climatic Geomorphology ................................... 3
- or
- GEOL 255 Applied Climatology ..................................... 3
- PHYS 133 Introduction to Astronomy ................................ 4
- PHYS 201 Introductory Physics I ................................... 4
- PHYS 202 Introductory Physics II .................................. 4
- CHEM 103 General Chemistry ....................................... 4
- BISC 195 Biological Evolution ..................................... 3
- MATH 221 Calculus I .................................................. 3

Three credits from the following:

- GEOL 432 Recent Sedimentary Environments ....................... 3
- GEOL 450 Field Geology in the Western States .................... 3

External to the College

- MAST 200 Introduction to Marine Studies ........................ 3

**Professional Studies**

- EDST 201 Education in a Multicultural Society .................. 3
- EDST 304 Educational Psychology - Social Aspects ............... 3
- EDST 305 Educational Psychology - Cognitive Aspects .......... 3
- SCEN 491 Teaching Science in Secondary Schools ............... 3
- EDST 420 Reading in the Content Area ............................ 3
- EDDV 400 Student Teaching ......................................... 3

The Earth Science Education program requires a certain minimum G.P.A. for enrollment in EDDV 400. Student Teaching, a course required for the degree. The teacher education program advisor (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

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

---

**BACHELOR OF SCIENCE DEGREE IN GEOPHYSICS**

The Geology Department, jointly with the Physics Department, offers a B.S. degree in geophysics. Geophysics involves the use of seismic, gravity, magnetic, and electrical methods to study the structure and tectonic evolution of the earth. Geophysicists may perform such diverse tasks as using ground penetrating radar to detect the presence of buried hazardous wastes to modeling seismic waves to determine the nature of the earth’s core-mantle boundary. The geophysics program is designed to produce students well-grounded in both geology and physics, but specifically trained in geophysical principles and techniques.

---

**DEGREE: BACHELOR OF SCIENCE
MAJOR: GEOPHYSICS**

---

**UNIVERSITY REQUIREMENTS**

- ENGL 110 Critical Reading and Writing* ......................... 3
- Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #

**COLLEGE REQUIREMENTS**

**Skill Requirements**

**Writing** **#**

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 62 credit hours. Appropriate writing courses are normally designated in the semester’s Registration Booklet. (See list of courses approved for second writing requirement, page 68)

**Breadth Requirements** **#**

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**

- GEOL 107 Geology I .................................................. 4
- GEOL 203 Mineralogy and Crystallography ........................ 3
- GEOL 204 Properties of Rocks and Minerals ....................... 3
- GEOL 303 Sedimentology ............................................. 3
- GEOL 305 Structural Geology ....................................... 3
- GEOL 402 History of the Earth .................................... 3
- GEOL 451 Geophysical Field Methods ............................. 3
- GEOL 452 Plate Tectonics and Geophysics ........................ 3
- GEOL 453 Elementary Geophysics I ............................... 3
- GEOL 454 Elementary Geophysics II ............................... 3
- GEOL 460 Field Geology in the Western States .................... 3

One of the following four courses:

- PHYS 313 Physical Optics ........................................... 4
- PHYS 603 Electricity and Magnetism ............................... 3
- PHYS 604 is selected, PHYS 604 is strongly encouraged as an elective course.

**Within the College**

- PHYS 207 Fundamentals of Physics I .............................. 4
- PHYS 208 Fundamentals of Physics II ............................. 2
- PHYS 209 Fundamentals of Physics III ............................ 2
- PHYS 645 Electronics for Scientists .............................. 3
- PHYS 646 Instrumentation for Scientists .......................... 3

One of the following four courses:

**Physics**

- PHYS 313 Physical Optics ........................................... 4
- PHYS 603 Electricity and Magnetism ............................... 3
- PHYS 604 is selected, PHYS 604 is strongly encouraged as an elective course.

**Related Work**

- CISC 106 General Computer Science for Engineers ............. 3
- MATH 241 Analytic Geometry and Calculus A .................... 4
- MATH 242 Analytic Geometry and Calculus B .................... 4
- MATH 243 Analytic Geometry and Calculus C .................... 4
- MATH 302 Ordinary Differential Equations I ..................... 3
- CHEM 103 General Chemistry ...................................... 3

**External to the College**

- MEEG 213 Principles of Mechanics I ............................. 3

**CREDITS TO TOTAL A MINIMUM OF .................. 125**

---

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.
** Minimum grade of C required.
# This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21.
1 A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
HISTORY

The study of history combines literary art and critical analysis, enabling us to analyze complex situations and to present our findings clearly and effectively. These intellectual and literary skills can be easily transferred to other disciplines and to real life situations.

Strengths of the department include the fields of U.S. and European history; social, cultural, intellectual, and women's history; the history of science and technology; and the history of American civilization as well as course offerings in African, East Asian, Latin American, and Middle Eastern history.

The History Department offers a rich array of programs. In addition to the regular major, students can choose a concentration in American, European, Global, or Policy history. In conjunction with the College of Education, it offers a History Education program for those choosing a career as secondary school social studies teachers. Collaboration with the Department of Foreign Languages and Literatures has resulted in a major combining languages with the history of the regions in which those languages are spoken. Together with the Department of English, the History Department administers a History/Journalism major. 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. An Honors Degree as well as a Degree with Distinction are also possible options. An adviser in the History Department can provide details.

DEGREE: BACHELOR OF ARTS

MAJOR: HISTORY

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101 Western Civilization to 1648</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 102 Western Civilization: 1648 to the Present</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 268 Seminar</td>
<td>3.2</td>
</tr>
<tr>
<td>History course on the history of Asia, Africa, Latin America, or the Ancient World</td>
<td>3.1/4</td>
</tr>
<tr>
<td>History courses at or above the 300-level</td>
<td>3.2/4</td>
</tr>
<tr>
<td>History seminar at the 400-level or above</td>
<td>3.5/4</td>
</tr>
<tr>
<td>History course (excluding HIST 491 and 493 and Independent Study)</td>
<td>3.1/4</td>
</tr>
</tbody>
</table>

ELECTIVES

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

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF ARTS

MAJOR: HISTORY

CONCENTRATION: AMERICAN HISTORY

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101 Western Civilization to 1648</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 102 Western Civilization: 1648 to the Present</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 268 Seminar</td>
<td>3.2</td>
</tr>
<tr>
<td>History course on the history of Asia, Africa, Latin America, or the Ancient World</td>
<td>3.1/4</td>
</tr>
<tr>
<td>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.</td>
<td>21.1/4</td>
</tr>
</tbody>
</table>

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF ARTS

MAJOR: HISTORY

CONCENTRATION: EUROPEAN HISTORY

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101 Western Civilization to 1648</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 102 Western Civilization: 1648 to the Present</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 268 Seminar</td>
<td>3.2</td>
</tr>
<tr>
<td>History course on the history of Asia, Africa, Latin America, or the Ancient World</td>
<td>3.1/4</td>
</tr>
<tr>
<td>History seminar at the 400-level or above</td>
<td>3.3/4</td>
</tr>
<tr>
<td>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.</td>
<td>21.1/4</td>
</tr>
</tbody>
</table>

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF ARTS

MAJOR: HISTORY

CONCENTRATION: GLOBAL HISTORY

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101 Western Civilization to 1648</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 102 Western Civilization: 1648 to the Present</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 268 Seminar</td>
<td>3.2</td>
</tr>
<tr>
<td>History course on the history of Asia, Africa, Latin America, or the Ancient World</td>
<td>3.2</td>
</tr>
<tr>
<td>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.</td>
<td>21.1/4</td>
</tr>
</tbody>
</table>

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF ARTS

MAJOR: HISTORY

CONCENTRATION: POLICY HISTORY

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101 Western Civilization to 1648</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 102 Western Civilization: 1648 to the Present</td>
<td>3.1/4</td>
</tr>
<tr>
<td>HIST 268 Seminar</td>
<td>3.2</td>
</tr>
<tr>
<td>History course on the history of Asia, Africa, Latin America, or the Ancient World</td>
<td>3.1/4</td>
</tr>
</tbody>
</table>

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.
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.

History seminar at the 400-level or above
(excluding HIST 491 and 493 and Independent Study)

History 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 be taken to meet the minimum credit requirement for the degree.

CREDITS TO TOTAL A MINIMUM OF: 124

DEGREE: BACHELOR OF ARTS
MAJOR: HISTORY
EDUCATION

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

HIST 101 Western Civilization to 1648
HIST 102 Western Civilization: 1648 to the Present
HIST 268 Seminar

History course on the History of Asia, Africa, Latin America, or the Ancient World

History courses at or above the 300-level

History seminar at the 400-level or above
(excluding HIST 491 and 493 and Independent Study)

History course

Within the College

Twenty-four credits in the following social sciences with at least three credits in each department

Anthropology course
Economics course
Geography course
Political Science course
Sociology course

PSYC 201 General Psychology
Six additional credits selected from the departments listed

Professional Studies

EDST 201 Education in a Multicultural Society
EDST 304 Educational Psychology -- Social Aspects
EDST 305 Educational Psychology -- Cognitive Aspects

HIST 491 Planning a Course of Instruction

HIST 493 Seminar: Problems in Teaching History and Social Sciences

EDST 420 Reading in the Content Areas

EDDV 400 Student Teaching

CREDITS TO TOTAL A MINIMUM OF: 124

Students planning to enroll in EDDV 400 Student Teaching in their senior year must submit a student teaching application in February of their junior year. Applications may be submitted from the History Department Office, or from the program director, Dr. William E. Pulliam, by the end of the preceding semester. To continue in the program in their senior year, students must have a 3.0 in history and a 2.5 cumulative g p a of the preceding semester. To continue in the program in their senior year, students must have a 3.0 in history and a 2.5 cumulative g p a of the preceding semester.

DEGREE: BACHELOR OF ARTS
MAJOR: HISTORY
CLASSICS

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

HIST 101 Western Civilization to 1648
HIST 102 Western Civilization: 1648 to the Present
HIST 268 Seminar

History course on the history of Asia, Africa, Latin America, or the Ancient World

History courses at or above the 300-level

History seminar at the 400-level or above
(excluding HIST 491 and 493 and Independent Study)

History course

Within the College

Twenty-four credits in the following social sciences with at least three credits in each department

Anthropology course
Economics course
Geography course
Political Science course
Sociology course

PSYC 201 General Psychology
Six additional credits selected from the departments listed

Professional Studies

EDST 201 Education in a Multicultural Society
EDST 304 Educational Psychology -- Social Aspects
EDST 305 Educational Psychology -- Cognitive Aspects

HIST 491 Planning a Course of Instruction

HIST 493 Seminar: Problems in Teaching History and Social Sciences

EDST 420 Reading in the Content Areas

EDDV 400 Student Teaching

CREDITS TO TOTAL A MINIMUM OF: 124

History seminar at the 400-level or above
(excluding HIST 491 and 493 and Independent Study)

Within the Department of Foreign Languages and Literatures

CLASSICS

Two classical civilizations (or culture) courses:

- e.g., FLIT 202 (Biblical and Classical Literature)
- FLIT 316 (Mythology)

Literature: Either 9 credits of Latin at the 200-level or above and 3 credits of Latin at the 300-level or above, or GREEK 213 and GREEK 214 and 6 credits of Latin at the 200-level or above

French

Civilization: FREN 325 (French Civilization I), or FREN 326 (French Civilization II)

Literature: FREN 301 (Introduction to French Literature: Prose) and FREN 302 (Introduction to French Literature: Poetry and Theatre)

400-level literature course

Two courses at the 200, 300, or 400-level

German

Civilization: GRMN 325 (German Civilization and Culture)

Literature: GRMN 311 (Introduction to German Literature I) and GRMN 312 (Introduction to German Literature II)

400-level literature course

Two courses at the 200, 300, or 400-level

Russian

Civilization: RUSS 325 (Russian Civilization)

Literature: RUSS 310 (Introduction to Russian Literature I) and RUSS 312 (Introduction to Russian Literature II)

400-level literature course

Two courses at the 200, 300, or 400-level

Spanish

Civilization: SPAN 325 (Spanish Civilization and Culture) or SPAN 326 (Latin American Civilization and Culture)

Literature: SPAN 301 (Survey of Spanish Literature) and SPAN 302 (Survey of Spanish Literature)

or

SPAN 303 (Survey of Spanish-American Literature) and SPAN 304 (Survey of Spanish-American Literature)

400-level literature course

Two courses at the 200, 300, or 400-level

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

CREDITS TO TOTAL A MINIMUM OF: 124

DEGREE: BACHELOR OF ARTS
MAJOR: HISTORY
CONCENTRATION: JOURNALISM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

HIST 101 Western Civilization to 1648
HIST 102 Western Civilization: 1648 to the Present
HIST 268 Seminar

History on the history of Asia, Africa, Latin America, or the Ancient World

History courses at or above the 300-level

History seminar at the 400-level or above
(excluding HIST 491 and 493 and Independent Study)

History course

Within the College

ENGL 307 New Writing and Editing

CREDITS*
Nine credits chosen from the following courses: 9

- ENGL 308: Reporters' Précis 3
- ENGL 309: Feature and Magazine Writing 3
- ENGL 310: Copy Editing and Layout 3
- ENGL 407: Advanced Reporting 3
- ENGL 409: Topics in Journalism 3
- ENGL 466: Independent Study 3

ELECTIVES

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

CREDITS TO TOTAL A MINIMUM OF: 124

REQUIREMENTS FOR A MINOR IN HISTORY

A student may minor in history by taking 15 credits: two courses in any combination from HIST 101, 102 (Western civilization), 205, 206 (American history), and the remaining 9 credits at or above the 300-level.

Many history courses fulfill Group B requirements of the College of Arts and Science. HIST 327 fulfills a Group C requirement.

JOURNALISM

The journalism program is centered in the Department of English but reaches beyond it. There are 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 in this catalog.

LINGUISTICS

The Department of Linguistics offers two minors at the undergraduate level. There are a number of courses in linguistics at the introductory, intermediate, and advanced levels in both applied and theoretical areas. Many Linguistics 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.

The minor in linguistics requires 18 credits, distributed as follows:

- LING 101: Introduction to Linguistics 3

One of the following:

- LING 407: Phonology I 3
- LING 409: Syntax I 3
- LING 477: Structure of English 3
- LING 491: Semantics I 3

Any four additional LING courses, two of which must be at the 300-level or above 12

Special problems courses and courses other than those specified above must have approval of the Undergraduate Studies Committee of the Department of Linguistics.

COGNITIVE SCIENCE MINOR

Cognitive Science studies the computational and representational structure of the mind by combining linguistics, philosophy, computer science (especially artificial intelligence), and psychology. Courses for the minor in cognitive science focus on three areas: (1) broad foundational issues in linguistics, psychology, and computing; (2) narrower issues in mental representation, computation, mathematical 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 the following:

- LING 101: Introduction to Linguistics
- PSYC 201: General Psychology
- CISC 105: General Computer Science
- or CISC 181: Introduction to Computer Science
  (prereq: CISC 105 or programming experience)

B. One of the following:

- LING 405: Syntax I (prereq: LING 101)
- LING 491: Semantics I (prereq: LING 101)
- CISC 480: Computers and the Mind
- PSYC 340: Cognition (prereq: PSYC 309)

C. Two of the following:

- PSYC 310: Sensation & Perception (prereq: PSYC 309)
- PSYC 314: Brain & Behavior
- CISC 220: Data Structures (prereq: CISC 181)
- CISC 681: Artificial Intelligence (prereq: CISC 220 & 310)
- PHIL 205: Logic
- EDST 462: Language Acquisition
- LING 410: Syntax II (prereq: LING 409)

The courses not chosen under B

No more than 3 courses may be from a single department.

For more information, contact: Professor William Frawley, Department of Linguistics (302) 831-6806 email: billf@brahms.und.edu

CONFERENCE INTERPRETATION PROGRAM

Intensive Summer Seminar in Simultaneous and Consecutive Interpretation

Within the Department of Linguistics, the Conference Interpretation Program offers an intensive course in simultaneous and consecutive interpretation during the summer session. The Delaware program is one of only five in existence in the United States.

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.

The languages of the intensive summer seminar are English and Spanish. Candidates must have a good working knowledge of both languages in order to participate. Other languages may be offered based on student demand and faculty availability. Prospective students are urged to contact the Department of Linguistics regarding additional working languages.

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 this area may pursue an interdisciplinary major or 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.

MATHMATICAL SCIENCES

The Department of Mathematical Sciences provides service courses for those who need to use mathematics and statistics in their career, be it engineering, science, medicine, or management. Mathematical sciences majors must also delve deeply into the structure of their subject without neglecting its applications. The balance between these two phases of mathematical education will depend on the goals and the inclination of the student. To meet these various needs, the Department offers four degree programs: the Bachelor of Science in Mathematical Sciences, the Bachelor of Science in Statistics, the Bachelor of Arts in Mathematical Sciences, and the Bachelor of Arts in Mathematics Education, which trains students for careers in secondary school mathematics education.

Since mathematics is a highly structured discipline, careful attention must be paid to prerequisites. The successful mathematical sciences major must complete several courses in the major each year to graduate within a reasonable time frame. Thus, the Department of Mathematical Sciences carefully monitors student progress and will drop from the major any student not making satisfactory progress in the program. A normally matriculated student majoring in the Department of Mathematical Sciences is not making satisfactory progress if he or she: (1) has not successfully completed a required Mathematical Science course by the beginning of the third semester; or (2) has not successfully completed MATH 302 by the end of the fifth 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.

DEGREE: BACHELOR OF ARTS
MAJOR: MATHEMATICAL SCIENCES

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS:

Within the Department

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 210</td>
<td>Discrete Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 242</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 243</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 245</td>
<td>An Introduction to Proof</td>
<td>3</td>
</tr>
<tr>
<td>MATH 349</td>
<td>Elementary Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 352</td>
<td>Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>STAT 300</td>
<td>Statistical Methods and Theory</td>
<td>4</td>
</tr>
<tr>
<td>STAT 379</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 380</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>STAT 381</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 450</td>
<td>Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 555</td>
<td>Advanced Probability</td>
<td>3</td>
</tr>
<tr>
<td>STAT 560</td>
<td>Advanced Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>STAT 575</td>
<td>Statistical Computing and Simulation</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 30

Within the College

Students with previous experience with a programming language should take:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 181</td>
<td>Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 220</td>
<td>Data Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

Students with no previous experience with a programming language should take:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISC 105</td>
<td>General Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>CISC 120</td>
<td>Object Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CISC 220</td>
<td>Data Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

Any substitutions must be approved by the department Undergraduate Studies Committee.

ENGL 312 | Written Communications in Business | 3.4 |

Suitable equivalent

Within the University

Area of application outside the department must be approved by the department Undergraduate Studies Committee. Student should check with adviser.

ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree, at least 79 outside Mathematical Sciences

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

DEGREE: BACHELOR OF SCIENCE
MAJOR: MATHEMATICAL SCIENCES

CURRICULUM

CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110 | Critical Reading and Writing**     | 3.1 |

Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content

COLLEGE REQUIREMENTS

Skill Requirements

Writing** ................................. 3.3.4

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 62 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 58)

Foreign Language: .......................... 0.12.1.4

Completion of the intermediate-level course (107 or 112) in a given language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

French, Russian, or German is recommended

BREADTH REQUIREMENTS** (See page 70)

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.

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.

** Minimum grade of C- required.

# This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21.

1 A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.

* 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.
MAJOR REQUIREMENTS:

Within the Department

- MATH 210 Discrete Mathematics I
- MATH 242 Analytic Geometry and Calculus B
- MATH 243 Analytic Geometry and Calculus C
- MATH 245 An Introduction to Proof
- MATH 302 Ordinary Differential Equations
- MATH 349 Elementary Linear Algebra
- MATH 401 Advanced Calculus
- MATH 426 Introduction to Numerical Analysis and Algorithmic Computation
- MATH 451 Abstract Algebra
- STAT 300 Statistical Methods and Theory

- Eighteen additional credits of mathematics and/or statistics at the 300 level or above. MATH 379, MATH 380, MATH 381, MATH 555, STAT 450, and STAT 555 are not applicable.

Within the College

- Students with previous experience with a programming language should take:
  - CISC 181 Introduction to Computer Science
  - CISC 220 Data Structures
  - Students with no previous experience with a programming language should take:
  - CISC 105 General Computer Science
  - CISC 120 Object Oriented Programming in C++
  - CISC 220 Data Structures

- Any substitutions must be approved by the department Undergraduate Studies Committee.

ENGL 312 Written Communications in Business

- Two-semester sequence of laboratory 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 128

DEGREE: BACHELOR OF SCIENCE MAJOR: STATISTICS

CURRICULUM

CREDITS*

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing**

Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS

Skill Requirements

Writing**: 3.4

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 62 credit hours. Appropriate writing courses are normally designated in the semester’s Registration Booklet (see list of courses approved for second writing requirement, page 68).

Foreign Language:

Completion of the intermediate-level course (107 or 112) in a given language. Students with four or more years of high school work in a single foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

French, Russian or German is recommended.

Breadth Requirements: (See page 70)

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

- MATH 210 Discrete Mathematics I
- MATH 242 Analytic Geometry and Calculus B
- MATH 243 Analytic Geometry and Calculus C
- MATH 245 An Introduction to Proof
- MATH 302 Ordinary Differential Equations
- MATH 349 Elementary Linear Algebra
- MATH 401 Advanced Calculus
- MATH 426 Introduction to Numerical Analysis and Algorithmic Computation
- MATH 451 Abstract Algebra
- STAT 300 Statistical Methods and Theory

- Eighteen additional credits of mathematics and/or statistics at the 300 level or above. MATH 379, MATH 380, MATH 381, MATH 555, STAT 450, and STAT 555 are not applicable.

Within the College

- Students lacking adequate preparation for MATH 242 should begin with MATH 241.

**Minimum grade of C- required.

***Students lacking adequate preparation for MATH 242 should begin with MATH 241.
Courses are normally designated in the semester's Registration Booklet. (See list of courses approved for second writing requirement, page 68.)

**Foreign Language:**
Completion of the intermediate-level course (107 or 112) in a given language, or, for students with more than 4 years of high school foreign language or the equivalent, satisfactory performance on a proficiency test in that language. French, Russian, or German is recommended.

**Breadth Requirements** (See page 70)
- **Group A**
  - Understanding and appreciation of the creative arts and humanities
  - Twelve 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 thirteen credits representing at least two areas including a minimum of one course with an associated laboratory.

**MAJOR REQUIREMENTS**

**Within the Department**
- MATH 210 Discrete Mathematics I
- MATH 224 Analytic Geometry and Calculus C
- MATH 245 An Introduction to Proof
- MATH 249 Elementary Linear Algebra
- MATH 379 Problem Solving Strategies
- MATH 380 Approaches to Teaching Mathematics
- MATH 401 Advanced Calculus
- MATH 451 Abstract Algebra I
- MATH 518 Mathematical Models and Applications
- **or another Modeling course**
- MATH 540 Geometry
- STAT 300 Statistical Methods and Theory

In addition, students seeking certification to teach calculus must complete:
- MATH 503 Advanced Calculus for Applications
- MATH 508 Introduction to Complex Variables and Applications

**Within the College**
- 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

**Professional Studies**
- EDST 201 Education in a Multicultural Society
- EDST 204 Educational Psychology - Social Aspects
- EDST 305 Educational Psychology - Cognitive Aspects
- MATH 179 Problem Solving Strategies I
- MATH 379 Problem Solving Strategies
- MATH 380 Approaches to Teaching Mathematics
- MATH 381 Practicum in Secondary Mathematics
- EDST 420 Reading in the Content Areas
- EDVS 400 Student Teaching

The Mathematics Education program requires a certain minimum G.P.A. for enrollment in EDVS 400. Student teaching, a course required for the degree. The teacher education program adviser (see list on page 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

**Electives**
After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree, 79 outside of Mathematical Sciences.

**CREDITS TO TOTAL A MINIMUM OF** 124

---

1. A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
2. A grade of C- or better is required for major courses and related work.
3. **Students lacking adequate preparation for MATH 242 should begin with MATH 241**

**COURSES FOR OTHER MAJORS**

The three-semester calculus sequence MATH 241-242-243 is the traditional basis for programs in the physical sciences and engineering. Students with a sound preparation in calculus are encouraged to enroll in MATH 242 to avoid repetition of known material. Students with advanced placement are automatically placed in MATH 242, and others should follow the advice given during freshman orientation.

The calculus sequence MATH 221-222 and finite mathematics course MATH 230 are designed for students in the biological, behavioral, management, and social sciences. Trigonometry is not a 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 210 as an alternative to MATH 230 and MATH 241-242 as an alternative to MATH 221-222.

The sequence MATH 251-252 is designed for training elementary school teachers and is restricted to declared majors in the appropriate programs of the College of Education and College of Human Resources.

Students who need further preparation in algebra and trigonometry prior to a 200-level course should take MATH 115. MATH 114 serves to establish minimal skill levels for students not expecting to continue at the 200-level. Students seeking mathematical electives for self-enrichment may select MATH 280 if their skills are adequate for the 200-level.

Ordinarily, credit is not given for 100-level courses that follow successful completion of 200-level courses. Credit for corresponding courses from different tracks MATH 114 and 115; MATH 210 and 230; MATH 221 and 241; MATH 222 and 242; MATH 302 and MATH 341; and, MATH 349 and MATH 342 will be given only upon approval of the chair.

**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 mathematics to include 9 credits above MATH 302 (MATH 341 is not considered above MATH 342 since there is a comparable course from a different track. However, MATH 342 may be counted as above MATH 302, provided MATH 349 is not included in the count.) STAT 370 or any course cross-listed with a mathematics course may be counted toward the minor, except that courses in mathematics education (e.g., MATH 379, 380, 381) do not apply.

**REQUIREMENTS FOR A MINOR IN STATISTICS**

A student seeking a minor in statistics must obtain permission from the chairperson or his/her designee in the Department of Mathematical Sciences. Course requirements include STAT 370-371 and 9 credits in statistics above STAT 371 (excluded are STAT 555, STAT 650, STAT 655 and STAT 657).

**MILITARY SCIENCE**

Students at the University of Delaware have the opportunity to earn a commission as a Second Lieutenant in the U.S. Army upon completion of military science and a baccalaureate degree. The normal four-year program consists of the completion of eight semester courses, totaling 12 credits, and one six-week summer camp. Courses at
the 100 and 200-level are electives open to all students. To be eligible to take 300 and 400-level courses, students must have completed all 100 and 200-level courses or qualify for the two-year program as described below. Restrictions apply for those students who are seeking an Army Commission (for more information contact the Military Science Department at 831-2217). A military obligation is incurred only if the student contracts for a commission and receives pay.

**Two-Year Program.** The two-year program provides sophomores, juniors, and graduate students who have not completed the first two years of military science the opportunity to qualify for advanced ROTC and to obtain a commission. The student must have at least two years of full-time academic status remaining to qualify. As a prerequisite, the student must complete a six-week summer basic camp. Students are paid while attending this camp. Military veterans with two academic years remaining generally qualify automatically for the two-year program.

**Advanced Camp.** The ROTC student desiring to receive a commission must successfully complete a six-week summer camp, normally between the junior and senior years. This camp allows the student to apply, in a military environment, those leadership and technical skills studied on campus. Students are provided uniforms, food, lodging, and medical care at no cost and are paid during this period. Transportation to and from the student's home is provided.

**Pay and Allowances.** ROTC students contracting for a commission during the junior and senior years receive a subsistence allowance of $100 per academic month.

**Army ROTC Scholarship.** Three- and four-year scholarships are awarded on the basis of academic merit and leadership potential. Scholarships pay up to $12,000 in tuition, an allowance for books and supplies, fees, and $150 subsistence allowance per academic month. A limited number of scholarships are available to qualified students who desire a commission in the Army Reserve or National Guard.

**Obligation.** All ROTC graduates must serve in some capacity for eight years. This may be fulfilled by serving three to four years on active duty, followed by service in the Army National Guard (ARNG) or U.S. Army Reserve (USAR), or by serving eight years in the Guard or Reserve preceded by the active duty time needed to complete an officer basic course.

**Educational Delay.** ROTC graduates may apply for a delay from entry on active duty for the purpose of obtaining an additional academic degree.

**Academic Credit.** The colleges of Agricultural Sciences, Arts and Science, Business and Economics, Education, Human Resources, and Physical Education, Athletics and Recreation accept all 12 military science credits toward graduation. The College of Nursing and College of Engineering accept 6 and 4 credits, respectively.

---

**DEGREE: BACHELOR OF ARTS**

**MAJOR: MUSIC**

**CURRICULUM**

See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

Within the Department

**Applied Music**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 100</td>
<td>0.12</td>
</tr>
<tr>
<td>MUSC 161</td>
<td>2.13</td>
</tr>
<tr>
<td>MUSC 162</td>
<td>2.13</td>
</tr>
<tr>
<td>MUSC 175</td>
<td>1.1</td>
</tr>
<tr>
<td>MUSC 261</td>
<td>2.24</td>
</tr>
<tr>
<td>MUSC 262</td>
<td>2.24</td>
</tr>
</tbody>
</table>

**Theory**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 185</td>
<td>2.13</td>
</tr>
<tr>
<td>MUSC 186</td>
<td>2.13</td>
</tr>
<tr>
<td>MUSC 285</td>
<td>2.24</td>
</tr>
<tr>
<td>MUSC 286</td>
<td>2.24</td>
</tr>
<tr>
<td>MUSC 195</td>
<td>3.1</td>
</tr>
<tr>
<td>MUSC 196</td>
<td>3.1</td>
</tr>
<tr>
<td>MUSC 295</td>
<td>3.24</td>
</tr>
<tr>
<td>MUSC 296</td>
<td>3.24</td>
</tr>
</tbody>
</table>

**Ensemble***

Four credits of large ensembles (Students must be enrolled in a large ensemble during all semesters in which they are enrolled in Applied Music)

---

*Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.

**Four semesters of recital attendance are required. No more than forty-five credits of music courses may count toward the degree.

***B A. Music Majors with principle instrument of piano, organ or guitar must refer to the Department for required ensembles.

---

109
Literature
MUSC 211 Introduction to Music History ........................................... 3
MUSC 311 Music History: 1450-1750 .................................................... 3
MUSC 312 Music History: 1715-1825 ................................................... 3
MUSC 313 Music History: 1825 to the Present .................................... 3

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

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

DEGREE: BACHELOR OF MUSIC
MAJOR: APPLIED MUSIC-INSTRUMENTAL
CONCENTRATION: PRINCIPAL INSTRUMENTS;

CREDIT*
CURRICULUM

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing** .......................................... 3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS
Skill Requirements
Writings** ............................................................................................... 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 62 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet.

Mathematics:
MATH 114 College Mathematics and Statistics [designated for students who do not intend to continue the study of mathematics] or
MATH 115 Pre-Calculus [designated for students who intend to continue the study of mathematics] or
One of the following:
MATH 221 Calculus I ................................................................. 3
MATH 241 Analytic Geometry and Calculus A .................................. 4
Successful performance on the college proficiency exam

English language course [200 level - Group A or B] ........................................ 3
HIST 101 Western Civilization to 1848 ............................................. 3
HIST 102 Western Civilization: 1648 to the Present ............................ 3

Foreign Language
Two semesters of the same modern foreign language .......................... 8

Broaden Requirements (See page 70)
Group A ............................................................................................... 6
Understanding and appreciation of the creative arts and humanities
[This requirement is satisfied by MUSC 195 and 196.]

Group B ............................................................................................... 15
The study of culture and institutions over time. Fifteen credits representing at least two areas. [This requirement is satisfied by MUSC 311, 312, 313, HIST 101, and 102.]

Group C ............................................................................................... 9
Empirically based study of human beings and their environment. Nine credits representing at least two areas

Group D ............................................................................................... 6
The study of natural phenomena through experiment and analysis

MAJOR REQUIREMENTS
Within the Department
Applied Music
MUSC 100 Recital Attendance [six semesters required] ......................... 0

MUSC 161 Private Study ................................................................. 4
MUSC 162 Private Study ................................................................. 4
MUSC 261 Private Study ................................................................. 4
MUSC 262 Private Study ................................................................. 4
MUSC 361 Private Study ................................................................. 4
MUSC 362 Private Study ................................................................. 4
MUSC 461 Private Study ................................................................. 4
MUSC 462 Private Study ................................................................. 4
MUSC 175 Class Piano: Elementary I ............................................... 1
MUSC 176 Class Piano: Elementary II ............................................... 1
MUSC 301 Junior Recital .................................................................. 0
MUSC 401 Senior Recital .................................................................. 0

Theory
MUSC 185 Ear Training and Sight Singing I ........................................ 2
MUSC 186 Ear Training and Sight Singing II ....................................... 2
MUSC 285 Advanced Ear Training and Sight Singing I ....................... 2
MUSC 286 Advanced Ear Training and Sight Singing II ....................... 2
MUSC 195 Harmony I ..................................................................... 1
MUSC 196 Harmony II .................................................................... 1
MUSC 295 Advanced Harmony I ...................................................... 3
MUSC 296 Advanced Harmony II ...................................................... 3
MUSC Theory courses ...................................................................... 4

Ensemble
Twelve credits selected from the following:
MUSC 115 Band, MUSC 116 Jazz Ensemble, MUSC 117 University Orchestra, MUSC 118 Percussion Ensemble, and MUSC 321 Ensemble.
[All Ensembles may be repeated.]

Music Electives
Excludes private study on primary instrument ................................. 7
May include two credits of ensemble

CREDITS TO TOTAL A MINIMUM OF ............................................. 130

DEGREE: BACHELOR OF MUSIC
MAJOR: APPLIED MUSIC-PIANO
CURRICULUM

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing** .......................................... 3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS
Skill Requirements
Writings** ............................................................................................... 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 62 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet.

Mathematics:
MATH 114 College Mathematics and Statistics .................................. 3
[designated for students who do not intend to continue the study of mathematics] or
MATH 115 Pre-Calculus [designated for students who intend to continue the study of mathematics] or

Foreign Language
Two semesters of the same modern foreign language .......................... 8

Music Electives
Excludes private study on primary instrument ................................. 7
May include two credits of ensemble

CREDITS TO TOTAL A MINIMUM OF ............................................. 130

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.
** Minimum grade of C required.
# This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21.
† A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
†† The concentration designates the student's principal instrument. A list of instrumental options can be found in the chart on page vii at the front of this catalog, or can be obtained from the Department of Music or the College of Arts and Science Advisement Center.

110
One of the following:
- MATH 1221 Calculus I .............................................. 3
- MATH 241 Analytic Geometry and Calculus A .................. 4

Successful performance on the college proficiency exam.

English literature course (200-level – Group A or B) ............. 3
HIST 101 Western Civilization to 1648 ..... 3
HIST 102 Western Civilization: 1648 to the Present ............... 3

Foreign Language
Two semesters of the same modern foreign language ............... 8

Breadth Requirements [See page 70]

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 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, their environment, and their environment. Nine credits representing at least two areas.

Group D
The study of natural phenomena through experiment and analysis.

MAJOR REQUIREMENTS

Within the Department

Applied Music

MUSC 100 Recital Attendance (six semesters required) .............. 0
MUSC 161 Private Study ............................................. 4
MUSC 162 Private Study ............................................. 4
MUSC 261 Private Study ............................................. 4
MUSC 262 Private Study ............................................. 4
MUSC 361 Private Study ............................................. 4
MUSC 362 Private Study ............................................. 4
MUSC 461 Private Study ............................................. 4
MUSC 462 Private Study ............................................. 4
MUSC 301 Junior Recital ............................................. 3
MUSC 401 Senior Recital ............................................. 0

Theory

MUSC 185 Ear Training and Sight Singing I ......................... 2
MUSC 186 Ear Training and Sight Singing II ....................... 2
MUSC 285 Advanced Ear Training and Sight Singing I ............ 2
MUSC 286 Advanced Ear Training and Sight Singing II ............ 2
MUSC 195 Harmony I ................................................ 3
MUSC 196 Harmony II ............................................... 3
MUSC 295 Advanced Harmony I .................................... 3
MUSC 296 Advanced Harmony II .................................. 3
MUSC 393 Keyboard Harmony ....................................... 2
MUSC 394 Keyboard Harmony ....................................... 2
MUSC Theory courses .................................................. 4

Ensemble***

Two semesters of any departmental ensemble ....................... 2
MUSC 241 Accompanying Chamber Music: Piano .................... 1
MUSC 242 Accompanying Chamber Music: Piano .................... 1
MUSC 341 Accompanying Chamber Music: Piano .................... 1
MUSC 342 Accompanying Chamber Music: Piano .................... 1
MUSC 441 Accompanying Chamber Music: Piano .................... 1
MUSC 442 Accompanying Chamber Music: Piano .................... 1

Literature

MUSC 211 Introduction to Music History ......................... 3
MUSC 311 Music History: 1450-1750 ................................ 3
MUSC 312 Music History: 1715-1825 ................................ 3
MUSC 313 Music History: 1825 to the Present ...................... 3
MUSC 363 Keyboard Literature I ................................... 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.

CREDITS TO TOTAL A MINIMUM OF .................................. 133

DEGREE: BACHELOR OF MUSIC

MAJOR: APPLIED MUSIC-VOICE

CURRICULUM

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing** ......................... 3

Three credits in an approved course or courses stressing
multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS

Skill Requirements

Writing:** ......................................................... 3
A second writing course involving significant writing experience includ-
ing two papers with a combined minimum of 3,000 words to be submit-
ted for extended faculty critique of both composition and content. This
course must be taken after completion of 62 credit hours. Appropriate
writing courses are normally designated in the semester's Registration
Booklet. (See list of courses approved for second writing requirement,
page 68.)

Mathematics:

MATH 114 College Mathematics and Statistics .................... 3
(designated for students who do not intend to continue the study of mathematics)
or
MATH 115 Pre-Calculus ............................................. 3
(designated for students who intend to continue the study of mathematics)
or

One of the following:

MATH 221 Calculus I .............................................. 3
MATH 241 Analytic Geometry and Calculus A ..................... 4
or
Successful performance on the college proficiency exam.

HIST 102 Western Civilization: 1648 to the Present ............. 3

Languages courses (French, German and Italian) .................. 24

THEA 226 Acting I .................................................. 3

Within the Department

Applied Music

MUSC 100 Recital Attendance (six semesters required) .............. 0
MUSC 161 Private Study ............................................. 4
MUSC 162 Private Study ............................................. 4
MUSC 261 Private Study ............................................. 4
MUSC 262 Private Study ............................................. 4
MUSC 361 Private Study ............................................. 4
MUSC 362 Private Study ............................................. 4
MUSC 461 Private Study ............................................. 4
MUSC 462 Private Study ............................................. 4
MUSC 301 Junior Recital ............................................. 3
MUSC 401 Senior Recital ............................................. 0

Theory

MUSC 185 Ear Training and Sight Singing I ......................... 2
MUSC 186 Ear Training and Sight Singing II ....................... 2
MUSC 285 Advanced Ear Training and Sight Singing I ............ 2
MUSC 286 Advanced Ear Training and Sight Singing II ............ 2
MUSC 195 Harmony I ................................................ 3
MUSC 196 Harmony II ............................................... 3
MUSC 295 Advanced Harmony I .................................... 3
MUSC 296 Advanced Harmony II .................................. 3
MUSC 393 Keyboard Harmony ....................................... 2
MUSC 394 Keyboard Harmony ....................................... 2
MUSC Theory courses .................................................. 4

Ensemble***

Two semesters of any departmental ensemble ....................... 2
MUSC 241 Accompanying Chamber Music: Piano .................... 1
MUSC 242 Accompanying Chamber Music: Piano .................... 1
MUSC 341 Accompanying Chamber Music: Piano .................... 1
MUSC 342 Accompanying Chamber Music: Piano .................... 1
MUSC 441 Accompanying Chamber Music: Piano .................... 1
MUSC 442 Accompanying Chamber Music: Piano .................... 1

Literature

MUSC 211 Introduction to Music History ......................... 3
MUSC 311 Music History: 1450-1750 ................................ 3
MUSC 312 Music History: 1715-1825 ................................ 3
MUSC 313 Music History: 1825 to the Present ...................... 3
MUSC 363 Keyboard Literature I ................................... 3
MUSC 364 Keyboard Literature II ................................... 3
Music Literature course .............................................. 3

* Superior figures indicate year or years in which the course is normally taken, e.g., freshman year, sophomore year, etc.

** Minimum grade of C required.

# This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21.

**1 A course must be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.

**M Applied Music – Piano majors must take MUSC 241, 242, 341, 342, 441, and 442 (Accompanying Chamber Music: Piano) plus two semesters of any ensemble offered in the Department of Music.
MUSC 176 Class Piano: Elementary II .................................................. 1.2
MUSC 275 Class Piano: Intermediate I ................................................. 2.3
MUSC 276 Class Piano: Intermediate II ................................................. 2.3
MUSC 301 Junior Recital ........................................................................ 0.5
MUSC 401 Senior Recital ....................................................................... 0.4

Theory
MUSC 185 Ear Training and Sight Singing I ........................................... 1.2
MUSC 186 Ear Training and Sight Singing II ......................................... 2.1
MUSC 285 Advanced Ear Training and Sight Singing I ......................... 2.2
MUSC 286 Advanced Ear Training and Sight Singing II ....................... 3.1
MUSC 195 Harmony I .......................................................................... 3.2
MUSC 196 Harmony II ........................................................................ 3.2
MUSC 295 Advanced Harmony I .......................................................... 3.2
MUSC 296 Advanced Harmony II .......................................................... 3.2

Ensemble
MUSC 108 University Singers .............................................................. 0.1

MUSC 109 Choral Union ...................................................................... 0.1

MUSC 110 Choral .................................................................................. 0.1

Literature
MUSC 211 Introduction to Music History .............................................. 3.3
MUSC 311 Music History: 1450-1750 ..................................................... 3.4
MUSC 312 Music History: 1715-1825 ..................................................... 3.4
MUSC 313 Music History: 1825 to the Present ...................................... 3.4

Related Music Studies
MUSC 171 Diction: English and Italian ................................................ 1
MUSC 271 Diction: German ................................................................. 1.2
MUSC 272 Diction: French ................................................................. 1.2
MUSC 489 Opera Workshop .............................................................. 1.4

Music Electives
Nine credits from the following; (including four credits from MUSC 321, 322 and/or 421) .......................................................... 0.1

MUSC 130 Introduction to Opera ....................................................... 3.2
MUSC 327 German Lieder ................................................................. 2.2
MUSC 335 Basic Conducting .............................................................. 2.3
MUSC 395 Form Analysis ................................................................. 3.3
MUSC 397 Contemporary Harmony .................................................. 3.3
MUSC 427 French Art Song .............................................................. 2.2
MUSC 428 Twentieth-Century Art Song ........................................... 2.2
MUSC 480 Vocal Pedagogy ............................................................... 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 ................................................. 134

DEGREE: BACHELOR OF MUSIC
MAJOR: MUSIC EDUCATION-INSTRUMENTAL
CONCENTRATION: PRINCIPAL INSTRUMENT; **

CURRICULUM CREDITS*

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing* ........................................... 3.1
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content # ........................................................................ 3.1

COLLEGE REQUIREMENTS
Skill Requirements
Writing:* ....................................................................................... 3.4

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 62 credit hours. Appropriate writing courses are normally designated in the semester’s Registration booklet. (See list of courses approved for second writing requirement, page 68.)

Mathematics:
MATH 114 College Mathematics and Statistics ................................... 3
(Designated for students who do not intend to continue the study of mathematics)
MATH 115 Pre-Calculus .................................................................... 3
(Designated for students who intend to continue the study of mathematics)

One of the following:
MATH 221 Calculus I ........................................................................ 3
MATH 241 Analytic Geometry and Calculus A ................................. 4

Successful performance on the college proficiency exam.

Breadth Requirements [See page 70]

Art or Art History course, to be selected from Group A or B ............ 3.1
Group A ......................................................................................... 1.3

Understanding and appreciation of the creative arts and humanities:
Nine credits representing at least two departments. (This requirement is partially satisfied by MUSC 195 and 196)

Group B ......................................................................................... 1.3

The study of culture and institutions over time (MUSC 311, 312, and 313 count toward completion of this requirement)

Group C ......................................................................................... 1.4

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

Group D ......................................................................................... 1.4

The study of natural phenomena through experiment and analysis. One science course with an associated laboratory.

MAJOR REQUIREMENTS
Within the Department

Applied Music
MUSC 100 Recital Attendance (six semesters required) ...................... 0.4
MUSC 161 Private Study .................................................................... 2.1
MUSC 162 Private Study .................................................................... 2.1
MUSC 261 Private Study .................................................................... 2.2
MUSC 262 Private Study .................................................................... 2.2
MUSC 361 Private Study .................................................................... 2.3
MUSC 362 Private Study .................................................................... 2.3
MUSC 461 Private Study .................................................................... 2.4
MUSC 175 Class Piano: Elementary ...................................................... 1.1
MUSC 176 Class Piano: Elementary ...................................................... 1.1
MUSC 174 Class Voice: Beginning ...................................................... 1.1
MUSC 301 Junior Recital .................................................................... 0.3

Theory
MUSC 185 Ear Training and Sight Singing I ........................................... 1.2
MUSC 186 Ear Training and Sight Singing II ........................................... 2.1
MUSC 285 Advanced Ear Training and Sight Singing I ....................... 2.2
MUSC 286 Advanced Ear Training and Sight Singing II ....................... 3.1
MUSC 195 Harmony I ........................................................................ 3.2
MUSC 196 Harmony II ...................................................................... 3.2
MUSC 295 Advanced Harmony I ......................................................... 3.2
MUSC 296 Advanced Harmony II ......................................................... 3.2
MUSC 331 Orchestration .................................................................... 3.4

Ensemble
MUSC 115 Band .................................................................................. 7.1

Literature
MUSC 211 Introduction to Music History ............................................. 3.2
MUSC 311 Music History: 1450-1750 .................................................. 3.4
MUSC 312 Music History: 1715-1825 .................................................. 3.4
MUSC 313 Music History: 1825 to the Present .................................... 3.4

Secondary Instruments
MUSC 214 Stringed Instruments Class ................................................. 1.3
MUSC 215 High Brass Instruments Class .............................................. 1.3
MUSC 216 Low Brass Instruments Class ............................................. 1.3
MUSC 217 Woodwind Instruments Class I ......................................... 1.4
MUSC 218 Woodwind Instruments Class II ......................................... 1.4
MUSC 219 Percussion Instruments .................................................... 1.4

* Superior figures indicate year or years in which the course is normally taken, i.e., 1freshman year, 2 sophomore year, etc.
** Minimum grade of C required.
#This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21
†A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
‡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
Music Methods
MUSC 335 Basic Conducting
MUED 279 Practicum in Music Education
MUED 337 Instrumental Conducting
MUED 379 Music in the Elementary and Junior High [or Middle] School
MUED 479 Secondary Music Materials and Approaches

Music Electives
Six music electives excluding ensemble and private study on primary instrument.

Professional Studies
Education
EDST 201 Education in a Multicultural Society
EDST 304 Educational Psychology – Social Aspects
EDST 305 Educational Psychology – Cognitive Aspects
EDDV 400 Student Teaching

The Music Education program requires a certain minimum G.P.A. for enrollment in EDDV 400. Student Teaching, a course required for the degree. The teacher education program adviser (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

CREDITS TO TOTAL A MINIMUM OF ........................................ 126

DEGREE: BACHELOR OF MUSIC
MAJOR: MUSIC EDUCATION—GENERAL/CHORAL
CONCENTRATION: PIANO

CURRICULUM

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing** 3
Three credits in an approved course or courses required
multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS

Skill Requirements
Writing:** 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 62 credit hours. Appropriate writing courses are normally designated in the semester’s Registration Booklet. (See list of courses approved for second writing requirement, page 68.)

Mathematics
MATH 114 College Mathematics and Statistics 3
(designated for students who do not intend to continue the study of mathematics)
or
MATH 115 Pre-Calculus 3
(designated for students who intend to continue the study of mathematics)
or
One of the following: MATH 221 Calculus I 3
MATH 241 Analytic Geometry and Calculus A 4

or
Successful performance on the college proficiency exam

Breadth Requirements [See page 70]
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 at least two areas.

Group D
The study of natural phenomena through experiment and analysis. One science course with an associated laboratory

MAJOR REQUIREMENTS

Within the Department

Applied Music
MUSC 100 Recital Attendance (six semesters required) 0
MUSC 161 Private Study 2
MUSC 162 Private Study 2
MUSC 261 Private Study 2
MUSC 262 Private Study 2
MUSC 361 Private Study 2
MUSC 362 Private Study 2
MUSC 461 Private Study 2
MUSC 174 Class Voice: Beginning 1
MUSC 274 Class Voice: Advanced 1
MUSC 480 Vocal Pedagogy 3
MUSC 171 Diction: English and Italian 3
MUSC 271 Diction: German 1

Theory
MUSC 185 Ear Training and Sight Singing I 2
MUSC 186 Ear Training and Sight Singing II 2
MUSC 285 Advanced Ear Training and Sight Singing I 2
MUSC 286 Advanced Ear Training and Sight Singing II 2
MUSC 195 Harmony I 3
MUSC 196 Harmony II 3
MUSC 295 Advanced Harmony I 3
MUSC 296 Advanced Harmony II 3
MUSC 397 Contemporary Harmony 3

Ensemble
MUSC 108 University Singers 8
MUSC 109 Choral Union 8
or
MUSC 110 Choral 8

Literature
MUSC 211 Introduction to Music History 3
MUSC 311 Music History: 1450-1750 3
MUSC 312 Music History: 1715-1825 3
MUSC 313 Music History: 1825 to the Present 3
MUSC 328 Choral Literature 3

Secondary Instruments
MUSC 214 Stringed Instruments Class 1
MUSC 215 High Brass Instruments Class 1
MUSC 217 Woodwind Instruments Class I 1

Music Methods
MUSC 335 Basic Conducting 2
MUED 279 Practicum in Music Education 3
MUED 336 Choral Conducting 2
MUED 379 Music in the Elementary and Junior High [or Middle] School 3
MUED 479 Secondary Music Materials and Approaches 3

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

Professional Studies
Education
EDST 201 Education in a Multicultural Society 3
EDST 304 Educational Psychology – Social Aspects 3
EDST 305 Educational Psychology – Cognitive Aspects 3
EDDV 400 Student Teaching 3

The Music Education program requires a certain minimum G.P.A. for enrollment in EDDV 400. Student Teaching, a course required for the degree. The teacher education program advisor (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

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

*Superior figures indicate year or years in which the course is normally taken; i.e., freshman year, sophomore year, etc.
**Minimum grades of C required.
#This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21
A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
DEGREE: BACHELOR OF MUSIC
MAJOR: MUSIC EDUCATION—GENERAL/CHORAL
CONCENTRATION: VOICE

CURRICULUM

CREDITS*

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing** 3 4
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS

Skill Requirements

Writing** 3 4
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 62 credit hours. Appropriate writing courses are normally designated in the semester’s Registration Booklet (See list of courses approved for second writing requirement, page 68.)

Mathematics:
MATH 114 College Mathematics and Statistics 3 1
(designated for students who do not intend to continue the study of mathematics)
or
MATH 115 Pre-Calculus 3 4
(designated for students who intend to continue the study of mathematics)
or
One of the following:
MATH 221 Calculus I 3
MATH 241 Analytic Geometry and Calculus A 4
or
Successful performance on the college proficiency exam.

Breadth Requirements (See page 70)
Art or Art History course, to be selected from Group A or B 3 4
Group A 4
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 4
The study of culture and institutions over time (MUSC 311, 312, and 313 count toward completion of this requirement)
Group C 4
Empirically based study of human beings and their environment. Nine credits representing at least two areas
Group D 4
The study of natural phenomena through experiment and analysis. One science course with an associated laboratory

MAJOR REQUIREMENTS

Within the Department

Applied Music
MUSC 100 Recital Attendance (six semesters required) 1 3
MUSC 161 Private Study 2
MUSC 162 Private Study 2
MUSC 261 Private Study 2
MUSC 262 Private Study 2
MUSC 361 Private Study 2
MUSC 362 Private Study 2
MUSC 461 Private Study 2
MUSC 175 Class Piano: Elementary I 2
MUSC 176 Class Piano: Elementary II 2
MUSC 275 Class Piano: Intermediate I 2
MUSC 276 Class Piano: Intermediate II 2
MUSC 171 Diction: English and Italian 1
MUSC 271 Diction: German 2
MUSC 272 Diction: French 2
MUSC 480 Vocal Pedagogy 2
MUSC 301 Junior Recital 2

Theory
MUSC 185 Ear Training and Sight Singing I 2 1
MUSC 186 Ear Training and Sight Singing II 2 1
MUSC 285 Advanced Ear Training and Sight Singing I 2 3
MUSC 286 Advanced Ear Training and Sight Singing II 2 3
MUSC 195 Harmony I 1 2
MUSC 196 Harmony II 1 2
MUSC 295 Advanced Harmony I 2 3
MUSC 296 Advanced Harmony II 2 3
MUSC 297 Contemporary Harmony 3 4

Ensemble
MUSC 108 University Singers 8 1 4
or
MUSC 109 Choral Union 8 1 4
or
MUSC 110 Choral 8 1 4

Literature
MUSC 211 Introduction to Music History 3 2
MUSC 311 Music History: 1450-1750 3 2
MUSC 312 Music History: 1751-1825 3 4
MUSC 313 Music History: 1825 to the Present 3 4
MUSC 328 Choral Literature 3

Secondary Instruments
MUSC 214 Stringed Instruments Class I 1 4
MUSC 215 High Brass Instruments Class I 1 4
MUSC 217 Woodwind Instruments Class I 1 4

Music Methods
MUSC 335 Basic Conducting 2
MUSED 279 Practical in Music Education 3 2
MUSED 336 Choral Conducting 3 4
MUSC 279 Music in the Elementary and Junior High (or Middle) School 3
MUSED 479 Secondary Music Materials and Approaches 3 4

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

Professional Studies

Education
EDST 201 Education in a Multicultural Society 3 2
EDST 304 Educational Psychology - Social Aspects 3 4
EDST 305 Educational Psychology - Cognitive Aspects 3 4
EDDV 400 Student Teaching 9 4

The Music Education program requires a certain minimum G.P.A. for enrollment in EDDV 400, Student Teaching, a course required for the degree. The teacher education program adviser shall consult with the major professor to recommend courses for the major and electives required.

CREDITS TO TOTAL A MINIMUM OF ........................................... 130

DEGREE: BACHELOR OF MUSIC
MAJOR: THEORY/COMPOSITION
CONCENTRATIONS: THEORY/COMPOSITION

CURRICULUM

CREDITS*

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing** 3 4
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS

Skill Requirements

Writing** 3 4
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 62 credit hours. Appropriate writing courses are normally designated in the semester’s Registration Booklet (See list of courses approved for second writing requirement, page 68.)

* Superior figures indicate year or years in which the course is normally taken, i.e., 1freshman year, 2sophomore year, etc.
** Minimum grade of C required.
# This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 71.
† A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.
MUSC 485 Pedagogy of Theory 3

MUSC 420 Advanced Composition 3

or

MUSC Theory, literature or applied music elective 3

MUSC 421 Special Projects in Music Theory 3

Composition Concentration

MUSC 485 Pedagogy of Theory 3

MUSC 420 Advanced Composition 3

MUSC 420 Advanced Composition 3

MUSC 420 Advanced Composition 3

MUSC 420 Advanced Composition 3

Literature

MUSC 211 Introduction to Music History 3

MUSC 311 Music History: 1490-1750 3

MUSC 312 Music History: 1715-1825 3

MUSC 313 Music History: 1825 to the Present 3

MUSC 407 Twentieth-Century Music 3

Ensemble

A variety of ensembles are recommended, including Chamber ensembles 4

CREDITS TO TOTAL A MINIMUM OF 126

REQUIREMENTS FOR A MINOR IN MUSIC

A minimum grade of C is required in each course for music minors.

MUSIC MINOR: APPLIED MUSIC-PRINCIPAL INSTRUMENT

The Applied Music minor is for nonmusic majors with some musical background who wish to continue their musical training on a more formal basis or music majors who wish to receive formal training on an additional instrument. Places in the minor program are dependent upon the total load of the applied faculty member involved. Admission into the Applied Music minor is determined by audition and musicality testing. The requirements are:

CREDITS

Class Piano*** MUSC 175 1

Applied Music**** MUSC 161, 162, 261, 262 8

Ensemble 4

Theory/Composition - MUSC 185 and 195 5

Music Literature/History [MUSC 101 and 102 do not fulfill this requirement Any other music history course will do] 3

Total Credits 21

FOR PIANO MINORS 20

MUSIC MINOR: JAZZ STUDIES

The Music Minor in Jazz Studies offers a concentrated study of the history, theory, and performance elements of the field of jazz. It is directed towards two groups of students: (1) The non-music major who desires a focused study of jazz and its performance techniques; (2) Music Majors who wish to round out their education in music with a structured study of jazz. For this group, the Minor is an important component in a comprehensive education in Music. The requirements are:

CREDITS

Jazz Styles/Tech MUSC 181 and 281 4

Ensemble MUSC 116 (four semesters), MUSC 321 5

Jazz Improvisation MUSC 293 and 294 6

Harmony and History MUSC 197 and 207 6

Total Credits 21

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 and to develop their personal musicality. The requirements are:

CREDITS

Music History/History 3

Class Piano 1

Elective 1

Performance 1

Total Credits 4

A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.

**Not required of persons minorin in Applied Music/Piano

***Lessons will be 1/2 hour per week and will include a repertoire class.

†††Ensemble and private study must be taken concurrently. See Ensemble Policy in the Department of Music Student Handbook. Music Minors with principal instrument of piano, organ or guitar must refer to the Department for required ensembles.

This title represents 19 applied music minors, the actual titles of which include the name of the instrument of study (e.g. Applied Music-Bassoon). A list of applied music minors can be found in the chart on page viii in the front of this catalog, or can be obtained from the Department or the College of Arts and Science Advisement Center.
of music. No audition is required for admission into the Musical Studies minor. The requirements are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 185</td>
<td>Ear Training and Singing I</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 195</td>
<td>Harmony I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 211</td>
<td>Introduction to Music History</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 311</td>
<td>Music History: 400-1600</td>
<td>3</td>
</tr>
<tr>
<td>or MUSC 312</td>
<td>Music History: 1600-1827</td>
<td>3</td>
</tr>
<tr>
<td>or MUSC 313</td>
<td>Music History: 1825 to Present</td>
<td>2</td>
</tr>
<tr>
<td>MUSC Ensemble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC History/Literature Elective (MUSC 101 and 102 do not fulfill this requirement. Any other music history course will do.)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MUSC Theory Elective (MUSC 186, 196, 197, 287, 385)</td>
<td>2-3</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits: 18-19

PHILOSOPHY

Philosophy provides training in basic methods of reasoning, both clear thinking procedures for everyday decision making and more formal techniques of logical analysis. It examines fundamental issues and ideas about our knowledge and values. It furnishes a critical perspective on the methods and results of other disciplines.

A major, a minor, or a concentration in philosophy is a useful background for many careers including the teaching of philosophy. Majors often go on to graduate work in other arts and science disciplines, as well as to further schooling in law, theology, education, data processing, or business. In general, philosophy offers all students opportunities to develop their critical and analytical skills.

The American Philosophical Association's national headquarters is on the Delaware campus.

DEGREE: BACHELOR OF ARTS

MAJOR: PHILOSOPHY

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 105</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 205</td>
<td>Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Social and Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 203</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 301</td>
<td>Ancient Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 303</td>
<td>Modern Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 305</td>
<td>Twentieth Century Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 320</td>
<td>Theory of Knowledge</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 465</td>
<td>Senior Seminar</td>
<td></td>
</tr>
<tr>
<td>Six additional Philosophy credits at the 300-level or above</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Six additional Philosophy elective credits</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

The student's program must include six hours of multicultural courses, selected in consultation with the advisor, from suitable courses in Philosophy, Black American, Women's, Jewish, Oriental, Latin American or African Studies. The six hours may include courses in Philosophy which count toward completing the major requirements for the degree.

ELECTIVES

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

CREDITS TO TOTAL A MINIMUM OF: 124

REQUIREMENTS FOR A MINOR IN PHILOSOPHY

A minor in philosophy requires a minimum of 15 credits, consisting of PHIL 105 or 205; PHIL 301 or PHIL 303; an additional 300-level PHIL course; and two PHIL electives.

PHYSICAL THERAPY

Prephysical therapy (undergraduate) 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 office in their major department. They receive career counseling from faculty in the Physical Therapy Program. 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.

PHYSICS AND ASTRONOMY

The Department of Physics and Astronomy maintains a balanced program of instruction at all levels from elementary physics through the doctoral degree, 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.

DEGREE: BACHELOR OF ARTS

MAJOR: PHYSICS

CURRICULUM

See page 68 for University and College requirements. Note:

MATH 241 Analytical Geometry and Calculus A satisfies the Mathematics Skills Core requirement and is strongly recommended as the first math course for physics majors, unless the placement exam suggests differently.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 207</td>
<td>Fundamentals of Physics I (strongly recommended)</td>
<td>4 1</td>
</tr>
<tr>
<td>or PHYS 201</td>
<td>Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 208</td>
<td>Fundamentals of Physics II (strongly recommended)</td>
<td>4 1,2</td>
</tr>
<tr>
<td>or PHYS 202</td>
<td>Introductory Physics II</td>
<td>4</td>
</tr>
<tr>
<td>Twenty-two credits in Physics, of which fifteen must be at the 300-level or higher</td>
<td>22 2,4</td>
<td></td>
</tr>
</tbody>
</table>

Within the College

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 241</td>
<td>Analytic Geometry and Calculus A (recommended)</td>
<td>4 1</td>
</tr>
<tr>
<td>or MATH 242</td>
<td>Analytic Geometry and Calculus B</td>
<td>4 1,2</td>
</tr>
<tr>
<td>or MATH 243</td>
<td>Analytic Geometry and Calculus C</td>
<td>4 2</td>
</tr>
<tr>
<td>or MATH 221</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 222</td>
<td>Calculus II</td>
<td>3</td>
</tr>
</tbody>
</table>
ELECTIVES
After required courses are completed, sufficient elective credits must be
taken to meet the minimum credit requirement for the degree.

CREDITS TO TOTAL A MINIMUM OF 124

DEGREE: BACHELOR OF SCIENCE
MAJOR: PHYSICS

CURRICULUM

CREDITS*

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing** 3-1
Three credits in an approved course or courses stressing 3-1
multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS

Skill Requirements

Writing** 3-3
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 62 credit hours. Appropriate writing
courses are normally designated in the semester’s Registration Booklet
[See list of courses approved for second writing requirement, page 68 ]

Foreign Language: 0-12 1-4
Completion of the intermediate-level course (107 or 112 or 214) in a
given language. Students with four or more years of high school work in a
single foreign language may attempt to fulfill the requirement in that lan-
guage by taking an exemption examination

Breath Requirements† [See page 70]
A total of twenty-one credits from Groups A, B and C is 21 1-4
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§

PHYS 207 Fundamentals of Physics I 4
PHYS 208 Fundamentals of Physics II 4
PHYS 209 Fundamentals of Physics III 3
PHYS 313 Physical Optics 4
PHYS 419 Classical Mechanics I 4
PHYS 603 Electricity and Magnetism I 3
PHYS 604 Electricity and Magnetism II 3
PHYS 616 Kinetic Theory and Thermodynamics 3 1-4
PHYS 616 Atomic and Nuclear Physics Laboratory 1-3 4
PHYS 620 Classical Mechanics II 3
PHYS 621 Fundamentals of Modern Physics I 3 1-4
PHYS 622 Fundamentals of Modern Physics II 3 1-4
PHYS 643 Electronics for Scientists 3
PHYS 646 Instrumentation for Scientists 3

Within the College

Mathematics

MATH 241 Analytic Geometry and Calculus A 4
MATH 242 Analytic Geometry and Calculus B 4 1-2
MATH 243 Analytic Geometry and Calculus C 2
MATH 302 Ordinary Differential Equations 3
MATH 303 Calculus for Applications 3
One of the following three courses:
MATH 349 Elementary Linear Algebra 3
MATH 508 Introduction to Complex Variables and Application 3 1-4
MATH 514 Topics in Advanced Mathematics for Engineers 3

Natural Science

CHEM 103 General Chemistry 4 1-3
CHEM 104 General Chemistry 4 1-3

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: ASTRONOMY

CURRICULUM

CREDITS*

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing** 3-1
Three credits in an approved course or courses stressing 3-1
multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS

Skill Requirements

Writing** 3-3
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 62 credit hours. Appropriate writing
courses are normally designated in the semester’s Registration Booklet
[See list of courses approved for second writing requirement, page 68 ]

Foreign Language: 0-12 1-4
Completion of the intermediate-level course (107 or 112 or 214) in a
given language. Students with four or more years of high school work in a
single foreign language may attempt to fulfill the requirement in that lan-
guage by taking an exemption examination.

Breath Requirements† [See page 70]
A total of twenty-one credits from Groups A, B and C is 21 1-4
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§

PHYS 207 Fundamentals of Physics I 4
PHYS 208 Fundamentals of Physics II 4
PHYS 209 Fundamentals of Physics III 3
PHYS 213 Introduction to Astronomy 3 1-4
PHYS 313 Physical Optics 4
PHYS 419 Classical Mechanics I 3
PHYS 603 Electricity and Magnetism I 3
PHYS 646 Instrumentation for Scientists 3
PHYS 646 Kinetic Theory and Thermodynamics 3
PHYS 133 Introduction to Astronomy 4 1-2
PHYS 134 Introduction to Astronomy 4 1-2

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.

** Minimum grade of C· required.

# This requirement may be fulfilled through a course or courses taken to complete other degree requirements; it cannot be fulfilled by a course taken pass/fail. See page 21.

1 A course may be applied toward both the major requirements and a breadth requirement, but credits are counted only once toward the total credits for graduation.

§ 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.
Within the College

Mathematics:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 241</td>
<td>Analytic Geometry and Calculus A</td>
<td>4</td>
</tr>
<tr>
<td>MATH 242</td>
<td>Analytic Geometry and Calculus B</td>
<td>4, 2</td>
</tr>
<tr>
<td>MATH 243</td>
<td>Analytic Geometry and Calculus C</td>
<td>4</td>
</tr>
<tr>
<td>MATH 302</td>
<td>Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 503</td>
<td>Advanced Calculus for Applications</td>
<td>3, 3</td>
</tr>
</tbody>
</table>

Natural Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 103</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Organic Chemistry</td>
<td>4, 2</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Organic Chemistry</td>
<td>4, 2</td>
</tr>
<tr>
<td>CHEM 457</td>
<td>Inorganic Chemistry</td>
<td>3, 4</td>
</tr>
</tbody>
</table>

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: APPLIED PHYSICS

CREDITS

UNIVERSITY REQUIREMENTS

ENGL 110 Critical Reading and Writing** ............................................. 3, 3, 4
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content.

COLLEGE REQUIREMENTS

Skill Requirements

Writing**.......................................................... 3, 3, 4
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 62 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet (See list of courses approved for second writing requirement, page 68).

Foreign Language.................................................. 0, 12, 1, 4
Completion of the intermediate level course (107 or 112 or 214) in a 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 70]

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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 207</td>
<td>Fundamentals of Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 208</td>
<td>Fundamentals of Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 209</td>
<td>Fundamentals of Physics III</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 419</td>
<td>Classical Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 620</td>
<td>Classical Mechanics II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 603</td>
<td>Electricity and Magnetism I</td>
<td>3, 4</td>
</tr>
<tr>
<td>PHYS 645</td>
<td>Electronics for Scientists</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 646</td>
<td>Instrumentation for Scientists</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 621</td>
<td>Fundamentals of Modern Physics I</td>
<td>3, 4</td>
</tr>
<tr>
<td>PHYS 622</td>
<td>Fundamentals of Modern Physics II</td>
<td>3, 4</td>
</tr>
<tr>
<td>PHYS 616</td>
<td>Kinetic Theory and Thermodynamics</td>
<td>3, 4</td>
</tr>
</tbody>
</table>

Within the College

Mathematics:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 241</td>
<td>Analytic Geometry and Calculus A</td>
<td>4</td>
</tr>
<tr>
<td>MATH 242</td>
<td>Analytic Geometry and Calculus B</td>
<td>4</td>
</tr>
<tr>
<td>MATH 243</td>
<td>Analytic Geometry and Calculus C</td>
<td>4</td>
</tr>
<tr>
<td>MATH 302</td>
<td>Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 503</td>
<td>Advanced Calculus for Applications</td>
<td>3, 3</td>
</tr>
</tbody>
</table>

Natural Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 103</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 321</td>
<td>Organic Chemistry</td>
<td>4, 2</td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Organic Chemistry</td>
<td>4, 2</td>
</tr>
<tr>
<td>CHEM 457</td>
<td>Inorganic Chemistry</td>
<td>3, 4</td>
</tr>
</tbody>
</table>

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
The Geology Department, jointly with the Physics Department, offers gravity, magnetic, and electrical methods to study the structure and tec-

BACHELOR OF SCIENCE DEGREE IN GEOPHYSICS

The Geology Department, jointly with the Physics Department, offers a B.S. degree in geophysics. Geophysics involves the use of seismic, gravity, magnetic, and electrical methods to study the structure and tec-

The Physics Education program requires a certain minimum GPA for enrollment in PHYS 207-208 plus 9 credits from PHYS courses at or above the 300-level. Students considering minoring in physics should consult the physics associate chair for advice or prerequisites for these courses and for assignment to an advisor.

POLITICAL SCIENCE

A major in political science provides liberal arts students with opportunities to acquire a broad education that will equip them to adapt to a wide variety of careers. The program for majors encourages students to analyze the theories, institutions, and processes of political systems in the context provided by the social sciences; exposes students to the broad sweep of political science as a discipline; encourages a continuing and responsible interest in political activity and public affairs; provides students with a fundamental understanding of political science as a basis for citizenship, a career in government, business, journalism, law, or professional study or service; and stimulates the qualified student's interest in graduate study in political science.

Students changing their major to political science must have completed POSC 105 with a grade of C or better and completed at least 12 additional hours of University courses. Students must have a minimum of a 2.3 average to change their major to political science.

The department maintains an advisory program for prelaw students and for students interested in government service.

Except as otherwise indicated, nonmajors may enroll in any political science course without prerequisites.

DEGREE: BACHELOR OF ARTS

MAJOR: POLITICAL SCIENCE

CURRICULUM

See page 68 for University and College requirements. Note: PHYS 207-208 satisfies the Mathematics Skills College requirement and is strongly recommended as the first math course for physics education majors, unless the placement exam suggests differently.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 207</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 208</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 209</td>
<td>4</td>
</tr>
</tbody>
</table>

Nineteen credits, fifteen of which must be at the 300-level or higher

Within the College

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 241</td>
<td>4</td>
</tr>
<tr>
<td>MATH 242</td>
<td>4</td>
</tr>
<tr>
<td>MATH 243</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 103</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 104</td>
<td>4</td>
</tr>
</tbody>
</table>

Professional Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDST 201</td>
<td>3</td>
</tr>
<tr>
<td>EDST 305</td>
<td>3</td>
</tr>
<tr>
<td>SCEN 491</td>
<td>4</td>
</tr>
<tr>
<td>EDST 400</td>
<td>4</td>
</tr>
</tbody>
</table>

The Physics Education program requires a certain minimum GPA for enrollment in EDDV 400, Student Teaching, a course required for the degree. The teacher education program adviser (see list on p. 143) should be consulted for the exact GPA requirements and other policies concerning qualifications for student teaching.

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

DEGREE: BACHELOR OF ARTS

MAJOR: PHYSICS EDUCATION

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEG 205</td>
<td>4</td>
</tr>
<tr>
<td>ELEG 309</td>
<td>4</td>
</tr>
</tbody>
</table>

ELECTIVES

Technical Electives

Nine additional credits of technical engineering or computer science 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 .................................. 130

*Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.

POLITICAL SCIENCE • COLLEGE OF ARTS AND SCIENCE
No more than three courses at the 200-level can be counted toward the thirty credits required for completion of the major.

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

CREDITS TO TOTAL A MINIMUM OF: 124

DEGREE: BACHELOR OF ARTS
MAJOR: POLITICAL SCIENCE
EDUCATION
CURRICULUM
See page 68 for University and College requirements.

MAJOR REQUIREMENTS
Within the Department
POSC 105 The American Political System 3

Eighteen credits distributed as follows: 18 1/4
Nine credits from courses at the 400-level; nine credits from courses at the 300 or 400-level
A student must take at least one course numbered at the 300 or 400-level in four of the five fields listed below:

a. American Government and Politics
b. Comparative Government and Politics
c. International Relations
d. Public Administration and Public Policy
e. Political Theory

Political Science courses including POSC 302 Research Methods (Recommended)
No more than three courses at the 200-level can be counted toward the thirty credits required for completion of the major.

Within the College
Twenty-four credits in the following social sciences with at least three credits in each department
Anthropology course 3
Economics course 3
Geography course 3
History course 3
Sociology course 3
PSYC 201 General Psychology 3
Six additional credits selected from the departments listed above 6 1/4

Professional Studies
EDST 201 Education in a Multicultural Society 3 1/4
EDST 304 Educational Psychology — Social Aspects 3 1/4
EDST 305 Educational Psychology — Cognitive Aspects 3 1/4
HIST 491 Planning a Course of Instruction 3
HIST 493 Seminar: Problems in Teaching History and Social Sciences 3
EDST 420 Reading in the Content Areas 1 1/4
EDDY 400 Student Teaching 9

The Political Science Education program requires a certain minimum G.P.A. for enrollment in EDDY 400. Student Teaching, a course required for the degree. The teacher education program adviser (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

CREDITS TO TOTAL A MINIMUM OF: 124

DEGREE: BACHELOR OF ARTS
MAJOR: FRENCH, GERMAN, OR SPANISH/POLITICAL SCIENCE
CURRICULUM
See page 68 for University and College requirements.

MAJOR REQUIREMENTS
Within the Department of Political Science and International Relations
POSC 105 The American Political System 3
POSC 240 Introduction to International Relations 3

Within the Department of Foreign Languages and Literatures
In addition to completing the courses listed below, students are required to participate in a semester abroad program sponsored by the Department of Foreign Languages and Literatures (in Caen, or the equivalent, for French; in Granada, or the equivalent, for Spanish).

FREN
FREN 2xx, 3xx, 4xx 6
FREN 3xx, 4xx 12
FREN 4xx (literature)‡ 3

GERMAN
GRMN 2xx, 3xx, 4xx 6
GRMN 3xx, 4xx 12
GRMN 4xx (literature)‡ 3

SPANISH
SPAN 2xx, 3xx, 4xx 6
SPAN 3xx, 4xx 12
SPAN 4xx (literature)‡ 3

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

Political Science
POSC 441

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

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

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

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

CREDITS TO TOTAL A MINIMUM OF: 124

Admission and Financial Aid. The departments of Political Science and International Relations and Foreign Languages and Literatures will jointly make decisions regarding admission of students to the program and recommendations for financial aid.

REQUIREMENTS FOR A MINOR IN POLITICAL SCIENCE
The required 15 credits for a minor are distributed as follows:

Lower-division courses: POSC 105.

Field requirements: Three courses numbered 300 or above are required and must be taken in two of the five fields of political science, as indicated below for the requirements for the major. Two of these courses must be at the 400-level. Students are required to take one additional political science course.

* Superior figures indicate year or years in which the course is normally taken, i.e., 1. Freshman year, 2. Sophomore year, etc.
† 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 a grade of C or better.
‡ This 400-level literature course must be taken on the Newark Campus.
REQUIREMENTS FOR A MINOR IN PUBLIC ADMINISTRATION

The required 18 credits for this minor are distributed as follows:

**Lower-division course**: PSOC 105, 302, 303.

**Field requirements**: Any two of three courses numbered 400 or above in Public Budgeting and Financial Management, Organization Theory, and Public Personnel Administration are required. Students are also required to take one additional course from a list of nine political science electives.

**PSYCHOLOGY**

Psychology is a biological, behavioral, social, and applied science, whose theories are integral to an understanding of ourselves and our place in the world.

The Department of Psychology provides 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.

In addition to a B.A. degree with a major in psychology, an interdepartmental major between psychology and biology with an emphasis on neuroscience is also available. 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.

**DEGREE: BACHELOR OF ARTS MAJOR: PSYCHOLOGY**

**CREDITS**

*See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

**Within the Department**

One of the following four courses:
- PSYC 350 Developmental Psychology
- PSYC 370 Research in Personality
- PSYC 380 Psychopathology
- PSYC 390 Social Psychology

Two of the following four courses:
- PSYC 310 Sensation and Perception
- PSYC 312 Learning and Motivation
- PSYC 314 Brain and Behavior
- PSYC 340 Cognition

**Electives**

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

**CREDITS TO TOTAL A MINIMUM OF**

124

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

**CREDITS**

*See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

**Within the Department**

PSYC 201 General Psychology
PSYC 209 Measurement and Statistics
PSYC 415 History and Systems of Psychology

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

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 however, PSYC 466 and 468 may not be used to fulfill this requirement.

Three credits of any Psychology course (except PSYC 301, 303, 325 and 334)

Within the College

Twenty-four credits in the following social sciences with at least three credits in each department:

Anthropology course
Economics course
Geography course
History course
Political Science course
Sociology course

Six additional credits selected from the departments listed above

**Professional Studies**

EDST 201 Education in a Multicultural Society
EDST 304 Educational Psychology - Social Aspects
EDST 305 Educational Psychology - Cognitive Aspects

*Superior figures indicate year or years in which the course is normally taken. i.e., 1 sophomore year, 2 sophomore year, etc.

†Prerequisite: PSYC 201
‡Prerequisite: PSYC 209 and PSYC 309 (Measurement and Statistics)
§Prerequisite: Students must have completed the 300-level course requirements.

Note the following restrictions:

- If PSYC 350 is used for the major, PSYC 325 may not be used.
- If PSYC 370 is used for the major, PSYC 301 may not be used.
- If PSYC 380 is used for the major, PSYC 334 may not be used.
- If PSYC 390 is used for the major, PSYC 360 may not be used.
- If both courses in one of the above pairs are taken, only the lower numbered course will count toward the 30 credits required for the major. However, both courses in each pair may be counted toward the 124 credit minimum for the Bachelor of Arts degree.
The Psychology Education program requires a certain minimum G.P.A. for enrollment in EDDV 400, Student Teaching, a course required for the degree. The teacher education program advisor (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

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

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

**REQUIREMENTS FOR A MINOR IN PSYCHOLOGY**
A minor in psychology requires 18 credits including PSYC 201; PSYC 309; one course chosen from PSYC 301, 303, 325, or 334; one course chosen from PSYC 310, 312, 314, or 340; one course chosen from PSYC 350, 370, 380, or 390; AND any three credits in psychology (with the following restrictions):

- If PSYC 301 is taken, PSYC 370 may not be counted for the minor.
- If PSYC 303 is taken, PSYC 390 may not be counted for the minor.
- If PSYC 325 is taken, PSYC 350 may not be counted for the minor.
- If PSYC 334 is taken, PSYC 380 may not be counted for the minor.

**SOCIOLGY**
Undergraduate courses in sociology acquaint students with the sociological point of view, a distinct way of looking at social phenomena. They contribute to students' understanding of social behavior and the setting in which it occurs. Thus, they include the study of social relationships, groups, organizations and institutions, communities, and societies.

The major in sociology combines a liberal arts foundation with extensive interdisciplinary study. For those students who are interested, it complements this study with on-the-job experiences in professional organizations. These experiences are tailored to meet individual career interests in such areas as urban planning, health services, public administration, social work, and social services.

The undergraduate program in sociology, therefore, provides its majors with several options. In addition to pursuing a regular major in sociology, students may choose to specialize in any of six concentrations: 1) pregraduate school preparation, 2) social welfare, 3) applied urban studies, 4) health services, 5) law and society, and 6) data analysis. In addition, a student may earn a secondary school teaching credential through the sociology education major: The concentrations, the sociology education major, and the regular major are described below.

**DEGREE: BACHELOR OF ARTS**
**MAJOR: SOCIOLOGY**

**CURRICULUM**

**See page 68 for University and College requirements.**

**MAJOR REQUIREMENTS**

Within the Department

- **SOCI 201 Introduction to Sociology** 3.14
- **SOCI 301 Introduction of Sociological Research** 3.14
- **SOCI 312 Theories of Society** 3.14
- **SOCI 342 Sociology of Aging** 3.14
- **SOCI 441 Social Welfare Practicum and Seminar** 3.14

No more than 12 credits at the 200-level. At least 6 credits must be at the 200-level, 314, or 400-level or higher, but cannot be fulfilled with 400-level directed study courses (466). 

Within the College

Five courses in related subjects chosen in consultation with the adviser, normally from among the following departments: Economics, Black American Studies, Criminal Justice, Geography, History, Philosophy, Political 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... 124**

**DEGREE: BACHELOR OF ARTS**
**MAJOR: SOCIOLOGY**

**CONCENTRATION: PREGRADUATE WORK**

**CURRICULUM**

**See page 68 for University and College requirements.**

**MAJOR REQUIREMENTS**

Within the Department

- **SOCI 201 Introduction to Sociology** 3.14
- **SOCI 301 Introduction of Sociological Research** 3.14
- **SOCI 312 Theories of Society** 3.14
- **SOCI 342 Sociology of Aging** 3.14
- **SOCI 441 Social Welfare Practicum and Seminar** 3.14

Any four additional Sociology courses. 12.14

No more than 12 credits at the 200-level. At least 6 credits must be at the 200-level or higher, but cannot be fulfilled with 400-level directed study courses (466).

Within the College

- Statistics course 3.14
- Four courses from Group C chosen with the approval of the student's adviser. 12.14

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

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

**DEGREE: BACHELOR OF ARTS**
**MAJOR: SOCIOLOGY**

**CONCENTRATION: SOCIAL WELFARE**

**CURRICULUM**

**See page 68 for University and College requirements.**

**MAJOR REQUIREMENTS**

Within the Department

- **SOCI 201 Introduction to Sociology** 3.14
- **SOCI 301 Introduction of Sociological Research** 3.14
- **SOCI 312 Theories of Society** 3.14
- **SOCI 346 Sociology of Aging** 3.14
- **SOCI 448 Community Based Treatment** 3.14

Any five courses in Sociology, the following are recommended.

- **SOCI 204 Urban Communities** 3
- **SOCI 303 Juvenile Delinquency** 3
- **SOCI 304 Criminology** 3
- **SOCI 305 Social Class and Inequality** 3
- **SOCI 306 The Family** 3
- **SOCI 346 Sociology of Aging** 3
- **SOCI 361 Race, Power and Social Conflict** 3
- **SOCI 448 Community Based Treatment** 3

This course is required but does not count as part of the thirty Sociology credits for the major.
Related Work
Eleven additional credits of related work are required and may include
the following:
POSC 411 Politics and Poverty ........................................... 3 1/4
PSYC 301 Personality ..................................................... 3 1/4
PSYC 322 Psychology of Adjustment ................................. 3 1/4
PSYC 323 Child Psychology ............................................. 3 1/4
PSYC 334 Abnormal Psychology ....................................... 3 1/4
EDDV 374 Experiential Education ..................................... 3
FIST 235 Survey in Child and Family Services .................. 3
or
Other courses chosen with the approval of the adviser.

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

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

---

DEGREE: BACHELOR OF ARTS
MAJOR: SOCIOLOGY
CONCENTRATION: APPLIED URBAN STUDIES

CURRICULUM
See page 68 for University and College requirements.

MAJOR REQUIREMENTS
Within the Department
SOCI 201 Introduction to Sociology .................................. 3 1/4
SOCI 204 Urban Communities .......................................... 3 1/4
SOCI 205 Population Problems ......................................... 3 1/4
SOCI 301 Introduction of Sociological Research .................. 3 1/4
SOCI 312 Theories of Society ......................................... 3 1/4
Four Sociology courses .................................................. 12 1/4
No more than 12 credits at the 200-level. At least 6 credits must be at
the 400-level or higher, but cannot be fulfilled with 400-level directed
study courses (466)
SOCI 402 Urban Studies Practicum and Seminar .................. 4 3/4
This course is required but does not count as part of the thirty Sociology
credits for the major.

Related Work
Eleven additional credits of related work are required and may include
the following:
POSC 355 Urban Politics ................................................. 3 1/4
GEOG 325 Urban Geography ............................................ 3
HIST 459 U.S. Urban History ........................................... 3 1/4
POSC 452 Problems in Urban Politics ................................. 3
ECON 393 Urban Economics ............................................. 3
CRJU 455 The Ecology of Crime ....................................... 3
or
Other courses chosen with the approval of the adviser.

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

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

---

DEGREE: BACHELOR OF ARTS
MAJOR: SOCIOLOGY
CONCENTRATION: LAW AND SOCIETY

CURRICULUM
See page 68 for University and College requirements.

MAJOR REQUIREMENTS
Within the Department
SOCI 201 Introduction to Sociology .................................. 3 1/4
SOCI 301 Introduction of Sociological Research .................. 3 1/4
SOCI 312 Theories of Society ......................................... 3 1/4
SOCI 345 Sociology of Law ............................................. 3 1/4
SOCI 456 Lawyers and Society ........................................ 3 1/4
Any five other courses in Sociology .................................. 15 1/4
Suggested courses for the study of family/gender include:
SOCI 202 Social Deviance .............................................. 3
SOCI 213 Men and Women in American Society .................... 3
SOCI 303 Juvenile Delinquency ........................................ 3
SOCI 308 The Family ....................................................... 3
SOCI 330 Population, Law and Society ............................... 3
SOCI 407 Sociology of Sex and Gender ............................... 3
Suggested courses in the organization/work area:
SOCI 327 Sociology of Organizations ................................ 3
SOCI 330 Population, Law and Society ............................... 3
SOCI 355 Computers, Ethics and Society ............................ 3
SOCI 428 Corporate Crime .............................................. 3
SOCI 450 Political Sociology ......................................... 3
No more than 12 credits at the 200-level. At least 6 credits must be at
the 400-level or higher, but cannot be fulfilled with 400-level directed
study courses (466)
SOCI 495 Law and Society Practicum and Seminar ................ 4 3/4
This course is required but does not count as part of the thirty Sociology
credits for the major.

Related Work
Twelve credits from the following courses are recommended: .... 12 1/4
CRJU 320 Introduction to Criminal Law ............................. 3
CRJU 347 The Jury: Guilty or Not Guilty ............................. 3
CRJU 357 Seminar on the Police ....................................... 3
CRJU 425 Criminal Law and Social Policy ........................... 3
CRJU 467 Contemporary Debates ..................................... 3
POSC 402 Civil Liberties I .............................................. 3
POSC 404 The Judicial Process ......................................... 3
POSC 405 Constitutional Law of the U.S ................................ 3
POSC 406 Civil Liberties II ............................................. 3
PHIL 201 Social and Political Philosophy ........................... 3
PHIL 446 Philosophy of Law ............................................ 3
HIST 301 The Worker in American Life .............................. 3
HIST 309 U.S. Business and Political Economy .................... 3
A second writing course in any department ........................ 3 1/4
A course in oral communication is suggested ........................ 3

*Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshman year, 2 sophomore year, etc.
ELECTIVES
After required courses are completed, sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

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

DEGREE: BACHELOR OF ARTS
MAJOR: SOCIOLOGY
CONCENTRATION: DATA ANALYSIS
CURRICULUM
See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

SOCI 201 Introduction to Sociology ........................................ 3 1-4
SOCI 301 Introduction of Sociological Research .......................... 3 3-4
SOCI 312 Theories of Society .................................................. 3 3-4
SOCI 401 Advanced Sociological Methods ................................. 3 3-4
SOCI 411 Techniques of Demographic Analysis .......................... 3 3-4
SOCI 414 Data Analysis ....................................................... 3 3-4

Any five other courses in Sociology .......................................... 15 1-4

No more than 12 credits at the 200-level. At least 6 credits must be at the 400-level or higher, but cannot be fulfilled with 400-level directed study courses (466)

SOCI 412 Practicum ............................................................. 4 3-4

This course is required but does not count as part of the thirty-three Sociology credits for the major

Related Work

STAT 201 Introduction to Statistics I *** ...................................... 3
STAT 202 Introduction to Statistics II *** .................................... 3

Nine additional credits chosen from the following:

GEOG 250 Computer Methods in Geography ........................... 3
GEOG 470 Computer Cartography ........................................... 3
PHIL 245 Ethical Issues in Social Research ............................... 3
PHIL 302 Theory of Knowledge .............................................. 3
ECON 422 Econometric Methods and Models I ......................... 3
STAT 418 Sampling Methods .................................................. 3
STAT 420 Data Analysis and Nonparametric Statistics ................ 3

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

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

DEGREE: BACHELOR OF ARTS
MAJOR: SOCIOLOGY EDUCATION
CURRICULUM
See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

SOCI 201 Introduction to Sociology ........................................ 3 1-4
SOCI 301 Introduction of Sociological Research .......................... 3 3-4
SOCI 312 Theories of Society .................................................. 3 3-4

Seven Sociology Courses ..................................................... 21 1-4

No more than 12 credits at the 200-level. At least 6 credits must be at the 400-level or higher, but cannot be fulfilled with 400-level directed study courses (466)

Related Work

Twenty-four credits in the following social sciences with at least three credits in each department

Anthropology course .......................................................... 3
Economics course ............................................................... 3
Geography course .............................................................. 3
History course ................................................................. 3
Political Science course ....................................................... 3
PSYC 201 General Psychology .............................................. 3 1-4
Six additional credits selected from the departments listed above ......... 6 1-4

The Sociology Education program requires a certain minimum G.P.A. for enrollment in EDDY 400, Student Teaching, a course required for the degree. The teacher education program adviser (see list on p. 143) should be consulted for the exact G.P.A. requirements and other policies concerning qualifications for student teaching.

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

Field Experience: One important feature of the program is a field experience in the applied urban studies, social welfare, health services, law and society, and data analysis 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 Program

1. While all students will receive a B.A. degree in sociology, this program provides preprofessional training within selected areas of the student's choice.

2. The program offers future job-related experience with academic supervision and for academic credit.

3. It includes certification of these concentrations by the department, which may be beneficial in obtaining employment.

4. It offers increased flexibility for the student by allowing choices among various focused, directed concentrations.

REQUIREMENTS FOR A MINOR IN SOCIOLOGY

The minor in sociology requires SOCI 201 plus 15 credits in sociology, with at least 9 credits at or above the 300-level. SOCI 301 or 312 is required or an equivalent course in another social science discipline, such as PSYC 309, 405, ECON 422, 426, STAT 205, POSC 302, 434 or 435.

CRIMINAL JUSTICE

The Criminal Justice Program at the University of Delaware offers undergraduate students an opportunity to pursue studies leading to law school, graduate school, or a career in the administration of justice. The 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. Since any criminal justice system does not exist in isolation but naturally reflects the structure, ideas, and concerns of the society in which it operates, the
Criminal Justice Program draws from a wide variety of academic disciplines. Therefore, although administratively housed within the Department of Sociology and Criminal Justice, the Criminal Justice curriculum includes courses in political science, psychology, and at least one foreign language, as well as in sociology.

At the University of Delaware, a Bachelor of Arts degree in criminal justice is viewed as a social science/liberal arts degree. Students receive no "hands-on" training in self defense, fingerprint analysis, ballistics, or any other kind of vocational skill. The emphasis is placed on theory, research, and the analysis of substantive law. The curriculum also stresses the importance of representative courses in the arts and humanities, mathematics, and science. Consequently, graduating criminal justice majors will have achieved the skills and breadth of knowledge expected of well educated men and women in a complex and pluralistic society.

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 adviser 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 if their overall cumulative average at their previous college of higher education is at least 2.3.

**DEGREE: BACHELOR OF ARTS MAJOR: CRIMINAL JUSTICE**

**CURRICULUM**

See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

**Within the Department**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJU 110</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>CRJU 201</td>
<td>Problems of Law Enforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>CRJU 202</td>
<td>Problems of Criminal Judiciary</td>
<td>3.0</td>
</tr>
<tr>
<td>CRJU 203</td>
<td>Problems of Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>Criminal Justice courses at the 300 or 400-level</td>
<td>18.0</td>
<td></td>
</tr>
</tbody>
</table>

**Within the College**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI 201</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOCI 301</td>
<td>Introduction to Sociological Research</td>
<td>3.0</td>
</tr>
<tr>
<td>PSOC 105</td>
<td>The American Political System</td>
<td>3.0</td>
</tr>
<tr>
<td>PSOC 303</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>One of the following four courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 301</td>
<td>Personality</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 303</td>
<td>Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 325</td>
<td>Child Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 334</td>
<td>Abnormal Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>One of the following three courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSOC 402</td>
<td>Civil Liberties I</td>
<td>3.0</td>
</tr>
<tr>
<td>PSOC 405</td>
<td>Constitutional Law of the United States</td>
<td>3.0</td>
</tr>
<tr>
<td>PSOC 406</td>
<td>Civil Liberties II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**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**

**DOUBLE MAJOR OR INTERDEPARTMENTAL MAJOR**

**Double Major:** With the permission of the dean of the college and the department chair a student may elect to fulfill requirements for two majors such as criminal justice and English (for a career in journalism), criminal justice and chemistry (for a career in forensic science), criminal justice and political science (for a career in court administration), criminal justice and psychology (for a career in corrections), or criminal justice and sociology (for a career in related fields).

**THEATRE**

The B.A. in Theatre Production is designed for those students who are interested in learning about the production areas of the theatre, i.e., Costume Production, Stage Management and Technical Production, and who desire the opportunity to explore these production areas through the prescribed course work and laboratory experiences of a major. Students' practical experiences in the production areas described above will include participating in the production of plays of the Professional Theatre Training Program.

The Professional Theatre Training Program (PTTP) confers the Master of Fine Arts degree. Through its production offerings, the PTTP provides an extraordinary cultural resource to the student body by affording undergraduates the opportunity to see quality productions of the major plays and playwrights that comprise our dramatic heritage.

The PTTP also provides the University with a variety of general education courses in theatre designed to expand appreciation for, and future participation in, theatre. These courses are regularly taught by members of the nationally respected faculty of the PTTP.

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. Students interested in performance opportunities should contact one of the amateur theatre groups on campus: E-52, Harrington Theatre Arts, Bacchus Theatre Players, Black Student Theatre, or Montage Repertory Theatre.

**DEGREE: BACHELOR OF ARTS MAJOR: THEATRE PRODUCTION**

**CURRICULUM**

See page 68 for University and College requirements.

**MAJOR REQUIREMENTS**

**Within the Department**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 102</td>
<td>Introduction to Performance</td>
<td>3.0</td>
</tr>
<tr>
<td>THEA 104</td>
<td>Introduction to Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td>THEA 200</td>
<td>Introduction to Theatre Production</td>
<td>3.0</td>
</tr>
<tr>
<td>THEA 202</td>
<td>Introduction to Theatre Design</td>
<td>3.0</td>
</tr>
<tr>
<td>THEA 203</td>
<td>Introduction to Costuming for the Stage</td>
<td>3.0</td>
</tr>
<tr>
<td>THEA 407</td>
<td>Theatre Practicum for Majors</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Six credits from the following:

Select two three-credit courses; minimum one credit concurrent registration in THEA 407 Practicum for Majors is required with each course; Practicum credits applied in core above.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 300</td>
<td>Fundamentals of Stagecraft</td>
<td>3.0</td>
</tr>
<tr>
<td>THEA 302</td>
<td>Fundamentals of Stage Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>THEA 305</td>
<td>Fundamentals of Costume Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Or other courses as approved by adviser.

Within the College

Six credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 208</td>
<td>Introduction to Drama</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 324</td>
<td>Shakespeare</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Or Other courses as approved by adviser.

**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**

*Superior figures indicate year or years in which the course is normally taken, i.e., 1freshman year, 2 sophomore year, etc.*
REQUIREMENTS FOR MINOR IN THEATRE
THEA 104 Introduction to Theatre ................................. 3
THEA 226 Fundamentals of Acting ................................ 3
Theatre Electives at the 200-level ................................... 6
TOTAL CREDITS .................................................................. 18

COURSES FOR NON-MAJORS
Many Theatre courses are on the list of approved courses for fulfilling the general education requirements in the College of Arts and Science. The following Theatre courses fulfill group requirements:
Group A: 102, 104, 106, 200, 202, 203, 206, 410
Group B: 341, 342, 343, 344, 345, 346
In addition, the Theatre Department offers general electives in dance, acting, voice, speech, mime and production practice.

MAJORS IN AREA STUDIES
Students who may wish a broader course of study than that offered by the departmental major have the option of fulfilling their concentration requirements through area studies. Three area programs leading to majors—Comparative Literature, International Relations and Latin American Studies—are described below.

COMPARATIVE LITERATURE
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 adviser, 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.

Degree: Bachelor of Arts
Major: Comparative Literature

CURRICULUM

UNIVERSITY REQUIREMENTS
ENGL 110 Critical Reading and Writing** .......................... 3
Three credits in an approved course or courses stressing multicultural, ethnic, and/or gender-related content #

COLLEGE REQUIREMENTS

Skill Requirements

Writing:** 3,4
A second writing course involving significant writing experience including two papers with a combined minimum of 5,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 62 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet (See list of courses approved for second writing requirement, page 68.)

Foreign Language:
Completion of the intermediate-level course (1107 or 1112) in a given 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.

Mathematics:
MATH 114 Elementary Mathematics and Statistics ............. 3
(designed for students who do not intend to continue the study of mathematics)
MATH 115 Pre-Calculus .................................................. 3
(designed for students who intend to continue the study of mathematics)

One of the following:
MATH 221 Calculus I .................................................... 3
MATH 241 Analytic Geometry and Calculus A ................. 4
Successful performance on the college proficiency exam

Breadth Requirements** (See page 70)
Group A
Understanding and appreciation of the creative arts and humanities
Twelve credits representing at least two areas

Group B
The study of culture and institutions over time Twelve credits representing at least two areas

Group C
Empirically based study of human beings and their environment Twelve credits representing at least two areas

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

MAJOR REQUIREMENTS

Within the Department
CLMT 202 Biblical and Classical Literature ................... 3
CLMT 207 Great Writers of the Western World: 1100-1700 .... 3
CLMT 208 Great Writers of the Western World: 1650-1950 .... 3
CLMT 484 Literary Criticism ......................................... 3

Comparative Literature courses or courses in related fields approved by the adviser.

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

ELECTIVES

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

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

Requirements for the Minor in Comparative Literature

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)
INTERNATIONAL RELATIONS

This interdepartmental program of study includes courses in political science, economics, history, sociology, anthropology, and geography. The student follows a curriculum that is specifically oriented toward gaining an understanding of the various problems arising among nations.

Various career opportunities are open to students of this program, such as those with U.S. government departments, U.S. Foreign Service, international organizations, U.S. Information Agency, the intelligence community, international programs of a variety of research groups, academic positions, or international business.

Students changing their major to international relations must have completed POSC 240 with a grade of C or better and completed at least 12 additional hours of university courses. Students must have a minimum of a 2.3 average to change their major to international relations. Students transferring to the major from outside the University of Delaware will have their transcripts evaluated by the director on a case-by-case basis.

DEGREE: BACHELOR OF ARTS

MAJOR: INTERNATIONAL RELATIONS

CURRICULUM CREDITS*

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Departments

Anthropology

Six credits chosen from the following courses: 6-14

ANTH 222 Technology and Culture 3

ANTH 225 Peasanat Sociology 3

ANTH 230 Peoples of the World 3

ANTH 231 Personality and Culture 3

ANTH 235 Applied Anthropology 3

ANTH 260 Sociocultural History of Africa 3

ANTH 261 Peoples and Cultures of the Middle East 3

ANTH 265 High Civilizations of the Americas 3

ANTH 269 Early Civilizations of the Old World 3

ANTH 292 Peoples of Europe 3

ANTH 297 Peoples of the Caribbean 3

ANTH 330 Development and Underdevelopment 3

ANTH 333 Peoples of Africa 3

ANTH 337 South American Indians 3

ANTH 363 Women in Cross-Cultural Perspective 3

ANTH 368 Anthropology of Slavery 3

ANTH 370 Culture of Food Production and Economic Development 3

ANTH 375 Peoples and Cultures of Modern Latin America 3

ANTH 377 Ecological Anthropology 3

ANTH 380 Peoples and Cultures of Mexico and Central America 3

ANTH 401 The Idea of Race 3

Economics

ECON 151 Introduction to Microeconomics: Prices and Markets 3

ECON 152 Introduction to Macroeconomics: National Economy 3

ECON 340 International Economics 3

Three credits chosen from the following courses: 3-14

ECON 305 Comparative Economic Systems 3

ECON 311 Economics of Developing Countries 3

ECON 318 Economic History of France 3

ECON 341 Environment of Multinational Corporations 3

ECON 405 The Planned Economies 3

ECON 411 Economic Theory of Developing Countries 3

ECON 443 International Monetary Economics 3

Geography

Three credits chosen from the following courses: 3-14

GEOG 102 Human Geography 3

GEOG 120 World Regional Geography 3

GEOG 203 Introduction to Cultural Geography 3

GEOG 210 Economic Geography 3

GEOG 220 Geography of Latin America 3

GEOG 227 Historical Geography of Europe 3

GEOG 236 Conservation: Global Issues 3

GEOG 460 Women in International Development 3

History

Six credits chosen from the following courses: 6-14

HIST 304 Western Civilization to 1648 3

HIST 102 Western Civilization 1648 to the Present 3

HIST 134 History of Africa 3

HIST 135 Introduction to Latin American History 3

HIST 137 East Asian Civilization: China 3

HIST 138 East Asian Civilization: Japan 3

HIST 210 War and Society 3

HIST 264 The Jewish Holocaust: 1933-1945 3

HIST 302 The World in Our Time 3

HIST 306 History of American Foreign Policy 3

HIST 330 Peasants and Revolution in Africa 3

HIST 334 History of Mexico 3

HIST 351 Europe in Crisis: 1919-1945. 3

HIST 352 Contemporary European Society 3

HIST 357 Russian History to 1801 3

HIST 358 Russian History: 1801-1917 3

HIST 359 Soviet Russia: 1917-1990 3

HIST 364 Germany in the Twentieth Century: 1914 to Present 3

HIST 373 Modern Ireland: 1534-Present 3

HIST 374 History of England to 1715 3

HIST 376 History of England: 1715 to the Present 3

HIST 376 English Legal and Constitutional History 3

HIST 392 History of Modern Japan 3

HIST 394 Africa Since 1960 3

HIST 395 Pan Africanism 3

HIST 397 History of South Africa 3

HIST 430 Twentieth-Century Latin American Revolutions 3

HIST 440 Africa Under Colonial Rule 3

HIST 470 Studies in English History 3

HIST 475 Seminar in Modern European History 3

HIST 477 Studies in Latin American History 3

HIST 479 Studies in Asian History 3

Political Science

POSC 240 Introduction to International Relations 3-14

Twelve credits chosen from the following courses: 12-14

POSC 270 Comparative Politics 3

POSC 310 European Governments. 3

POSC 311 Politics of Developing Nations 3

POSC 312 East Asian Political Systems 3

POSC 313 American Foreign Policy 3

POSC 314 Making United States Foreign Policy 3

POSC 333 Communism, Fascism and Democracy 3

POSC 334 Liberalism and Conservatism 3

POSC 340 Environmentalism of Multinational Corporations 3

POSC 355 Model United Nations 3

POSC 372 East Central European Politics 3

POSC 377 Arab-Israeli Politics 3

POSC 389 International Organization 3

POSC 409 Contemporary Problems of World Politics 3

POSC 412 Foreign Policy of the Post-Soviet Union 3

POSC 414 Problems in American Foreign Policy 3

POSC 425 Force and World Politics 3

POSC 416 Transnational Relations and World Politics 3

POSC 426 Latin American Political Systems 3

POSC 427 Politics in China 3

POSC 428 Politics in Japan 3

POSC 431 Latin American Politics: Countries 3

POSC 432 Political Systems of the Post-Soviet Union 3

POSC 433 African Politics 3

POSC 441 Problems of Western European Politics by Country 3

POSC 442 Problems of Eastern European Politics 3

POSC 443 China and the World 3

POSC 444 Seminar in World Politics 3

POSC 445 Human Rights and World Politics 3

POSC 446 Theories of International Relations 3

POSC 450 Problems of Latin American Politics 3

POSC 463 International Institutions 3

POSC 465 Model OAS 3

POSC 477 Politics of the Arab World 3

POSC 604 International Law 3

POSC 640 International Development Policy and Administration 3

POSCG651 Communist Political Thought 3

*Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshmen year, 2 sophomore year, etc.

127
Sociology
SOCI 201 Introduction to Sociology ........................................... 3
Three credits chosen from the following courses: .................................. 3
SOCI 210 Population Problems .................................................. 3
SOCI 306 Personality and Society ................................................ 3
SOCI 320 Personality and Politics ............................................... 3
SOCI 360 Sociology of Religion .................................................. 3
SOCI 361 Race, Power and Social Conflict ..................................... 3
SOCI 380 Development and Modernization .................................... 3
SOCI 460 Women in International Development .................................. 3

Other
Three credits chosen from the following courses: .................................. 3
Any course included in the previous listing ........................................ 3
Literature course in a foreign area .............................................. 3
STAT 201 Introduction to Statistics I .......................................... 3
PHIL 102 Introduction to Philosophy ......................................... 3
PHIL 201 Social and Political Philosophy ..................................... 3
PHIL 202 Contemporary Moral Problems ..................................... 3
PHIL 204 World Religions ....................................................... 3
PHIL 309 Indian Religion and Philosophy ..................................... 3
PHIL 310 Chinese Religion and Philosophy ................................... 3
Course in a second foreign language ........................................... 3
ARSC 127 Shaping of the Modern World .................................... 3
FREC 410 International Agricultural Trade and Marketing ................. 3
FREC 420 Agriculture in Economic Development .......................... 3

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

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

LATIN AMERICAN STUDIES

The 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.

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

DEGREE: BACHELOR OF ARTS
MAJOR: LATIN AMERICAN STUDIES

CURRICULUM CREDITS*

See page 68 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

Within the College

Required courses:

ANTH 265 High Civilizations in the Americas ................................ 3
ANTH 375 Peoples and Cultures of Modern Latin America ................. 3
or

ANTH 380 Peoples and Cultures of Mexico and Central America .......... 3
GEOG 226 Geography of Latin America ...................................... 3
HIST 135 Introduction to Latin American History .......................... 3
POSC 426 Latin American Political Systems .................................. 3
SPAN 326 Latin American Civilization and Culture ....................... 3
SPAN 328 Survey of Spanish-American Literature I ....................... 3
or

SPAN 304
and Survey of Spanish-American Literature II .......................... 3

One of the following seven courses:

ANTH 333 Prehistory of South America .................................... 3
ANTH 370 Peoples of the Caribbean ......................................... 3
ANTH 337 South American Indians .......................................... 3
ANTH 338 Arts and Crafts of Native South America ....................... 3
HIST 334 History of Mexico .................................................. 3
HIST 430 20th Century Latin American Revolutions ....................... 3
HIST 477 Studies in Latin American History ................................ 3

One of the following two courses:

POSC 431 Latin American Politics: Countries ................................ 3
POSC 450 Problems in Latin American Politics ............................. 3

One of the following three courses:

SPAN 415 Latin American Literature in its Political Context .......... 3
SPAN 430 Latin American Novel and Cinema ................................ 3
SPAN 443 Mexican Literature .................................................. 3

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 adviser, to meet the minimum credit requirement for the degree.

Study Abroad

Latin American Studies majors should plan to attend a semester or winter session at a Latin American site

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

MINORS IN AREA STUDIES

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

REQUIREMENTS FOR THE MINOR IN AFRICAN STUDIES

Eighteen credit hours drawn from the list of courses below. 12 credit hours must be from courses that deal with Africa proper. (Students must consult with the program coordinator on making their selection of courses. It should be noted that not all courses are offered every semester.)

6 credits in Anthropology, selected from the following:

ANTH 260 Socio Cultural History of Africa ................................ 3
ANTH 333 Peoples of Africa ................................................... 3
ANTH 368 Anthropology of Slavery ......................................... 3
ANTH 457/657 Survey of African Art ......................................... 3

6 credits in History, selected from the following:

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

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

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

3 credits from other areas, which may include:

POSC 433 African Political Systems ........................................... 3

Any request for changes or exceptions to these requirements must be made in writing to Dr. W. Maloba, Program Coordinator, 316 Ewing (Ext. 2189)
BLACK AMERICAN STUDIES

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

Although a major in Black American Studies is not available, special arrangements within the Bachelor of Arts in Liberal Studies degree program are possible. A minor in Black American Studies is available for those students wishing to pursue related careers in this area.

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 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.

REQUIREMENTS FOR A MINOR IN BLACK AMERICAN STUDIES

Students 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 2.1. The courses for the minor program are BAMS 110, 304, 306, and one BAMS elective at or above the 300-level with the approval of an adviser.

Alternative arrangements for a minor in Black American Studies are available but must be approved in advance by a program adviser 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.

EAST ASIAN STUDIES

This is an interdisciplinary program designed to provide graduates 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 138 East Asian Civilization: Japan
- HIST 270 History of Modern Asia
- HIST 390 History of Modern Southeast Asia
- POSC 312 East Asian Political Systems

B. Advanced Courses

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

- ECON 3xx East Asian Economic Systems
- HIST 369 Modern China: 1600-1920s
- HIST 369 China Since 1900
- HIST 392 History of Modern Japan
- HIST 393 History of Modern Vietnam
- HIST 3xx China and the West
- HIST 479 Studies in Asian History
- LING 470 Structure of Chinese
- LING 475 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.

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

EAST ASIAN STUDIES 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 students' language placement.

IRISH STUDIES

A student may minor in Irish Studies by earning 15 credits in recommended courses, all at or above the 300-level. Required courses include ENGL 351 and HIST 373. For further information, contact Professor Bonnie Scott at (302) 831-6230.

LATIN AMERICAN STUDIES

Purpose. This is an interdisciplinary program designed to provide graduates 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.

129
INTERDISCIPLINARY PROGRAMS

ART CONSERVATION

Artistic, cultural, historic, natural science, and technological objects are made of materials that are subject, as are all materials, to the processes of deterioration. These changes are both chemical and physical. The primary purpose of art conservation is to extend the life of our material heritage.

The art conservator is responsible for the care of objects. In order to do this job effectively, the conservator must combine the skills of the artist and craftsman, the archaeologist, the art and cultural historian, the chemist and the environmentalist. The primary purpose of this interdisciplinary Bachelor of Arts degree program in Art Conservation is to prepare students who wish to pursue graduate training in art conservation for such advanced preprofessional study. Other work venues after completion of the degree include museum work as art handlers, registrars, conservation assistants, collections managers and in the private sector; in the commercial art gallery, antiques, photographic, matting and framing industries. Working closely with the coordinator of this major, the student elects a program of coordinated courses in the Departments of Anthropology, Art, Art Conservation, Art History, Chemistry and Biochemistry, among several others. Since the University of Delaware is one of the three universities in this country with a master's program and the only one with a doctoral degree program in art conservation research, students benefit from this unique opportunity to take special courses in art materials and techniques and to intern with the conservation staff at the Winterthur Museum, among other local conservation environments.

DEGREE: BACHELOR OF ARTS
MAJOR: ART CONSERVATION

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

Art Conservation:

Twenty-one credits as follows:

ARTC 301 Care and Preservation of Cultural Properties ........................................... 3
ARTC 680 Studio in the Materials and Techniques of Drawing ................................. 3
ARTC 685 Color Mixing and Matching ................................................................. 3
ARTC 688 Studio in the Materials and Techniques of Painting I ............................ 3
ARTC 689 Studio in the Materials and Techniques of Painting II ........................ 3
ARTC 690 Studio in the Materials and Techniques of Printmaking I ..................... 3
ARTC 466 Independent Study: Conservation Internship I & II ............................ 6
(Junior and/or Senior status only)

Within the College

Art:

Nine credits as follows:

ART 110 Foundation Drawing .......................................................... 3
ART 130 Drawing I: Tools and Techniques ........................................... 3
ART 280 Beginning Photography ........................................................ 3
ART 250 Beginning Sculpture .......................................................... 3
ART 290 Beginning Ceramics .............................................................. 3
ART 260 Metals I ............................................................................. 3
ART 373 On Loom Weaving .............................................................. 3

Six credits of Anthropology and/or Art History courses from the following:

ANTH 103 Introduction to Prehistoric Archaeology ............................................. 3
ANTH 139 Introduction to Art History I .................................................... 3
ANTH 154 Introduction to Art History II ..................................................... 3
ANTH 155 Asian Art ............................................................................ 3
ANTH 161 Art in the East and West ......................................................... 3
ANTH 162 History of Architecture .......................................................... 3

Eighteen credits, at least four courses at or above the 300-level, of Anthropology, Art History, Black American Studies, Museum Studies, and/or Textiles, Design and Consumer Economics courses from the following:

Anthropology

ANTH 222 Technology and Culture ......................................................... 3
ANTH 229 Indians of North America .......................................................... 3
ANTH 231 Introduction to Ethnic Arts ....................................................... 3
ANTH 316 Introduction to Material Culture Studies ....................................... 3
ANTH 324 Old World Archaeology ......................................................... 3
ANTH 338 Arts & Crafts: Native South America ........................................... 3
ANTH 340 Historical Archaeology .......................................................... 3
ANTH 379 Historical Archaeology of the Eastern United States ..................... 3

Art History

ARTH 207 Origins of Art ........................................................................ 3
ARTH 208 Greek and Roman Art .............................................................. 3
ARTH 209 Early Medieval Art 200-1100 AD .............................................. 3
ARTH 212 Later Medieval Art 1000-1400 AD ............................................. 3
ARTH 213 Art of the Northern Renaissance ............................................... 3
ARTH 217 Early Renaissance Art ............................................................. 3
ARTH 218 High Renaissance and Mannerist Art ......................................... 3
ARTH 220 Italian Renaissance Architecture ............................................. 3
ARTH 222 Baroque Art ........................................................................ 3
ARTH 223 Baroque and Rococo Architecture and Urbanism ...................... 3
ARTH 225 Eighteenth Century Art .......................................................... 3
ARTH 227 Modern Art I ..................................................................... 3
ARTH 228 Modern Art II .................................................................... 3
ARTH 230 American Art: 1607-1865 ....................................................... 3
ARTH 231 American Art: 1865-present ..................................................... 3
ARTH 233 Art of China ......................................................................... 3
ARTH 234 Art of Japan ......................................................................... 3
ARTH 235 Art of India .......................................................................... 3
ARTH 236 The Arts of Islam ................................................................. 3
ARTH 301 Research and Methodology in Art History .................................. 3
ARTH 302 Prints and Society ................................................................. 3
ARTH 304 Northern Baroque Art .............................................................. 3
ARTH 305 Italian Baroque Art ................................................................. 3
ARTH 308 Modern Architecture I: 1750-1900 ........................................... 3
ARTH 309 Modern Architecture II: The Twentieth Century ......................... 3
ARTH 310 The Role of the Artist in Society ............................................. 3
ARTH 318 History of Photography .......................................................... 3
ARTH 339 Art & Architecture of Europe .................................................. 3

Black American Studies

BAMS 320 History of Afro-American Art ................................................... 3

Museum Studies

MSST 403 History, Philosophy, Functions & Future of Museums ............... 3

Textiles Design and Consumer Economics

TDCE 214 Costume History Before 1700 ..................................................... 3
TDCE 224 Clothing Design and Production Since 1700 ............................ 3

Chemistry and Biochemistry

19-20 credits of chemistry courses ......................................................... 19-20

Track A:

CHEM 103 General Chemistry ................................................................. 4
CHEM 104 General Chemistry ................................................................. 4
CHEM 220 Quantitative Analysis ............................................................. 3
CHEM 221 Quantitative Analysis Laboratory ............................................ 1
CHEM 321 Organic Chemistry ................................................................. 4
CHEM 322 Organic Chemistry ................................................................. 3

Track B:

CHEM 111 General Chemistry ................................................................. 3
CHEM 119 Quantitative Chemistry I ........................................................ 2

*Superior figures indicate year or years in which the course is normally taken, i.e., 1freshman year, 2 sophomore year, etc.
CHEM 112 General Chemistry ................................................. 3
CHEM 120 Quantitative Chemistry II ....................................... 3
CHEM 321 Organic Chemistry ............................................... 4
CHEM 322 Organic Chemistry ............................................... 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

JEWISH STUDIES

Jewish Studies developed alongside and within Western and non-Western civilization. The minor involves the study of the texts, histories, and culture of the peoples. 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.

REQUIREMENTS FOR THE MINOR IN JEWISH STUDIES

The interdisciplinary minor in Jewish Studies requires 15 credits of Jewish Studies courses (all of which are cross-listed with other departments, such as history or philosophy or English), including the following:

JWST/ENGL 360 Introduction to Jewish Sources .................................. 3
JWST/PHIL 208 Introduction to Jewish Philosophy .................................. 3

The remaining 9 credits may be distributed among the other Jewish Studies courses, including independent studies (with approval of the Program Director). Only 3 credits of Hebrew language can count towards the minor. For further information, contact Professor Sara R. Horowitz, Program Director, (302) 831-6731

LEGAL STUDIES

The law is an essential topic in philosophic, social science, and public policy inquiry. Courses that are substantially concerned with law are available in a variety of disciplines including political science, sociology, philosophy, history, business, communication, economics, and psychology. This program, which allows students to minor in Legal Studies, provides students with the opportunity to explore the law from an interdisciplinary perspective within the framework of the liberal arts curriculum.

The program supplies coherence and guidance in the study of law in at least four ways. First, each Legal Studies minor is provided with an adviser who guides the student in constructing a coherent program. Second, the minor provides students with an opportunity to examine legal phenomena from a variety of discipline perspectives. Third, the program offers both a substantive introduction to law and an interdisciplinary introductory course in legal studies. Finally, it offers an interdisciplinary culmination by way of a senior seminar that will require 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.

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

REQUIREMENTS FOR A MINOR IN LEGAL STUDIES

CURRICULUM

POSC 380 Introduction to Law ............................................. 3

LEST 301 Introduction to Legal Studies .................................. 3
LEST 401 Senior Seminar .................................................. 3
Three courses from the following list. At least two of these
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 .................................................. 3
ACCT 351 Business Law .................................................. 3
ACCT 352 Law and Social Issues in Business ......................... 3

Communication
COMM 365 Legal Issues of the Mass Media .................................. 3

Criminal Justice
CRJU 202 Problems of Criminal Judiciary .......................... 3
CRJU 203 Problems of Corrections ...................................... 3
CRJU 320 Introduction to Criminal Law .................................. 3
CRJU 346 Psychology and the Law (same as PSYC 346) ............. 3
CRJU 347 The Jury: Guilty or Not Guilty .................................. 3
CRJU 375 Criminal Procedure ............................................ 3
CRJU 423 Criminal Law and Social Policy ............................... 3
CRJU 428 Corporate Crime (same as SOCI 428) ......................... 3
CRJU 450 Prisoners and the Law ........................................... 3
CRJU 456 Lawyers and Society (same as SOCI 456) ..................... 3

Economics
ECON 306 Economic Theory of Politics (same as POSC 306) ......... 3
ECON 301 Government Regulation of Business .......................... 3
ECON 408 Economics of Law .............................................. 3
ECON 461 Industrial Organization and Antitrust ....................... 3
ECON 463 Economics of Regulation ........................................ 3

History
HIST 309 U.S. Business and Political Economy ......................... 3
HIST 376 English Legal and Constitutional History ..................... 3

Philosophy
PHIL 202 Contemporary Moral Problems .................................. 3
PHIL 308 Justice and Equality ............................................. 3
PHIL 446 Philosophy of Law .............................................. 3

Political Science and International Relations
POSC 306 Economic Theory of Politics (same as ECON 306) .......... 3
POSC 380 Introduction to Law ............................................. 3
POSC 402 Civil Liberties I .................................................. 3
POSC 404 Judicial Processes .............................................. 3
POSC 405 Constitutional Law of the United States$ ...................... 3
POSC 406 Civil Liberties II ................................................... 3
POSC 423 Congress and Public Policy ...................................... 3
POSC 413 Problems in American Government: Gender, Sex and Law 3

Psychology
PSYC 346 Psychology and the Law (same as CRJU 346) ............... 3
PSYC 347 The Jury: Guilty or Not Guilty (taken with CRJU 347) ....... 3

Sociology
SOCI 330 Population, Law and Society ..................................... 3
SOCI 342 Sociology of Law .................................................. 3
SOCI 428 Corporate Crime (same as CRJU 428) ......................... 3
SOCI 456 Lawyers and Society (same as CRJU 456) ..................... 3

Women's Studies
WOMS 413 Gender, Sex and American Law (same as POSC 413) ........ 3

MEDICAL HUMANITIES

The 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.

REQUIREMENTS FOR A MINOR IN MEDICAL HUMANITIES

CSCC/PHIL 246 Philosophical Perspectives of Medicine ...................... 3
CSCC/ENGL 369 Literature and Medicine ..................................... 3
CSCC/HIST 382 History of Western Medicine .................................. 3
CSCC 366 Independent Study in Medical Humanities ......................... 1

* Superior figures indicate year or years in which the course is normally taken, i.e., freshman year, sophomore year, etc.
$A course that is usually filled by majors or by students fulfilling major requirements.
Two courses from the following:
CSCC/WOMS 233 Women, Biology and Medicine .................. 3
CSCC/PHIL 241 Ethical & Moral Dimensions of Health Care 3
CSCC/SOCI 242 Society and the Health Professions ............ 3
CSCC/SOCI 243 Society, Politics, and Health Care 3
CSCC 271 Comparative Medical Systems 3
CSCC/SOCI 310 Sociology of Health Care 3
CSCC/SOCI 311 Hospitals .................................. 3
CSCC/ENGL 358 Literature and Science ....................... 3
CSCC/HIST 385 History of Biological Ideas 3
CSCC/PHIL 444 Medical Ethics 3

Students wishing to complete a minor in Medical Humanities are encouraged to enroll as soon as possible. For information, contact Professor Ronald Martin in the Department of English, (302) 831-3068.

MEDIEVAL STUDIES

Students interested in the Middle Ages 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, 210, 213, 406/606, 408/608
CMLT 320 (on medieval topics), 321
ENGL 321, 322
FLIT 320 (on medieval topics)
FREN 423/623
HIST 241, 245, 342, 343, 344, 471/671
MUSC 311
PHIL 302
SPAN 435/635

Substitutions may be arranged with the permission of the faculty coordinator, provided that the required disciplinary distribution is maintained. For further information, consult Professor Daniel Callahan, program coordinator, Department of History, (302) 831-6501.

RELIGIOUS STUDIES

The Religious Studies 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 Alan Fox, Department of Philosophy, 831-8077, or email at AFOX@BRAHMS UDEL.EDU.

WOMEN'S STUDIES

This program offers introductory core courses, upper-division courses, seminars, and colloquia. An internship is also available which provides students an opportunity to integrate what they have learned in the classroom with the practical competencies which can only be gained from actual experience. Both the courses and the internship introduce and analyze areas of scholarship and knowledge which have largely been excluded from conventional disciplines.

Students may enter the program at any time. No minimum grade point average is required to begin, but students must not be on probation at the time. To join the program, students need the permission of the director, who must also approve any waiver or substitution of requirements.

DEGREE: BACHELOR OF ARTS

MAJOR: WOMEN'S STUDIES

CURRICULUM

See page 68 for University and College requirements.

MAJOR REQUIREMENTS

Within the Department

Introductory Courses
WOMS 201 Introduction to Women's Studies ................. 3
WOMS/PHIL 216 Introduction to Feminist Theory ......... 3

Distribution Requirements - Humanities
Six credits in Women's Studies courses cross-listed with History and/or humanities departments chosen from the following list:
WOMS/ENGL 202 Contemporary Moral Problems† .......... 3
WOMS/PHIL 210 Women and Religion ...................... 3
WOMS/ENGL 214 Literature and Gender ..................... 3
WOMS/EDST/HIST 290 History of Women and Education 3
WOMS/ART 293 Honors Short Course ........................ 1
WOMS/HIST 300 Women in American History .......... 3
WOMS/ENGL 318 Studies in Film† .......................... 3
WOMS/PHIL 323 Introduction to Women and Politics .... 3
WOMS/FLIT 324 Topics: French Literature in Translation† 3
WOMS/FLIT 325 Topics: German Literature in Translation† 3
WOMS/FLIT 326 Topics: Hispanic Literature in Translation† 3
WOMS/FLIT 330 Varying Authors, Themes, and Movements† 3
WOMS/ENGL 338 Topics in Philosophy and Gender .... 3
WOMS/ENGL 380 Women Writers .............................. 3
WOMS/ENGL 381 Women in Literature ...................... 3
WOMS/ENGL 382 Studies in Multicultural Literature in English† 3
WOMS/HIST 409 Varieties of Modern Feminism ............ 3
WOMS/PHIL 413 Problems in American Government† .... 3
WOMS/ENGL 465 Studies in Literature Genres, Types, and Movements† 3
WOMS/HIST 473 Studies in Early Modern European History† 3
WOMS/ENGL 480 Seminar† ........................................ 3

Social Sciences
Six credits in Women's Studies courses cross-listed with social science departments chosen from the following list:
WOMS/SOCI 205 Women and Work .......................... 3
WOMS/SOCI 211 Men, Conflict, and Social Change .... 3
WOMS/JING 222 Language and Gender ..................... 3
WOMS/240 Women and Violence .............................. 3
WOMS/SOCI 213 Men and Women in American Society .... 3
WOMS/SOCI 407 Sociology of Sex and Gender .......... 3
WOMS/PSC 233 Psychology of Women ........................ 3
WOMS/CRJU 350 Women and Criminal Justice ............ 3
WOMS/ANTH 363 Women in Cross-cultural Perspective .... 3
WOMS/SOCI 415 Race, Class, and Gender .................. 3
WOMS/FST 430 Teaching Family Life ........................ 3
WOMS/SOCI/GEOG/FST 460 Women in International Development 3
WOMS/SOCI 607 Sociology of Sex and Gender .......... 3

Science-Related Courses
Three credits in WOMS science-related courses chosen from the following list:
WOMS/CSCC 233 Women, Biology, and Medicine ........ 3
WOMS/ANTH 305 The Evolution of Human Sex Roles and Reproduction 3

* Superior figures indicate year or years in which the course is normally taken, i.e., 1 freshmen year, 2 sophomore year, etc.
† Only those sections which are cross-listed with Women's Studies
Women's Studies Elective Requirements
Nine additional credits in courses in Women's Studies or cross-listed with Women's Studies. These may include, but are not limited to, courses listed under Women's Studies Humanities, Social Sciences, and Science-Related Courses, which have not been used to satisfy those requirements.

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

Credits to Total a Minimum of ................................. 124

Requirements for a Minor in Women's Studies
A minimum of 18 credit hours is required, which must include the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOMS 201 Introduction to Women's Studies</td>
<td>3</td>
</tr>
<tr>
<td>Two courses in WOMS or cross-listed with WOMS at or above the 300-level</td>
<td>6</td>
</tr>
<tr>
<td>Three elective courses in WOMS or cross-listed with WOMS</td>
<td>9</td>
</tr>
</tbody>
</table>

Notes: No more than 9 credits may be taken in any one department. No more than 6 credits in WOMS experimental courses (x67-numbered) may be counted toward the 18-credit requirement.

A minimum grade of C is required in each course.