College of Liberal Arts and Sciences

Ross MacKinnon, Ph.D., Dean, College of Liberal Arts and Sciences
Ronald Growney, Ph.D., Associate Dean, College of Liberal Arts and Sciences
Veronica Makowsky, Ph.D., Associate Dean, College of Liberal Arts and Sciences

Admission Requirements

The college requires 16 high school units including:

- 4 years of English
- 3 years of mathematics, with 4 preferred
- 2 years of a single foreign language, with 3 preferred
- 2 years of a laboratory science
- 2 years of social science

The Transfer Admissions Office reviews credits from other institutions. Unless exempted by the Dean and the Vice-President, students shall take all of their course work at the University during the last two semesters.

Bachelor’s Degree Requirements

To graduate a student must:

1. earn a total of 120 credits.
2. earn at least 45 credits numbered 200 or above.
3. meet the General Education and concentration requirements.
4. have an overall grade point average of at least 2.0 and a grade point average of at least 2.0 in the courses presented in satisfaction of major requirements.

Field of Concentration

Students may meet this requirement by completing the courses described in 1, 2, or 3 below. Only courses taken at the University of Connecticut meet the requirement. Students may not use Pass/Fail courses to meet these requirements. Exceptions are made by the dean of the college.

1. Major and related groups. The field of concentration includes both the major and related groups; it must total at least 36 credits, all numbered 200 or above. At least 24 credits in one department, or with the permission of the head of the student’s major department, in two related departments, make up the major group. At least 12 credits in courses closely related to the student’s major, but outside the major department, make up the related group. Students must earn a grade point average of 2.0 or better in the 24 credits making up the major group.

2. Double Major Program. Students may earn a double major by fulfilling all the major requirements of any two departments or programs within the College. Candidates shall choose one of the two departments or programs as their primary major. They shall register with that department or program and receive the degree appropriate to that department or program.

3. Individualized major. Students with a grade point average of 2.0 or higher may apply for an individualized major. The 36 concentration credits numbered 200 or above may come from two or more departments in the University. At least 18 of the credits shall come from departments of this College. Students must earn a grade point average of 2.5 or better in the 36 concentration credits. The student may include no more than 6 credits of independent study nor more than 12 credits of field work.

Students should submit their proposals for individualized majors by the end of the fourth semester, but not later than the end of the sixth semester. Internship, field work, research, or study abroad are recommended as part of the proposed plan of study. The proposed field of concentration must show coherence of subject matter or principle and have academic merit. For further information and application forms, contact Dr. Jennie Talbot in the Family Studies Building, Room 320, (860) 486-3631.

Plan of Study

Students shall file with the department of their major, after approval by their major academic advisor, a tentative plan of study on a form provided by the advisor. Students must file the tentative plan of study by the beginning of advance registration in their fifth semester.

Students shall file a final plan of study with the Registrar by the end of the fourth week of the semester in which they expect to graduate. The advisor and the department head shall approve the final plan of study.

Students completing a double major must file a plan of study for each major.

Bachelor of Arts (BA) & Bachelor of Science (BS)

Students may earn a Bachelor of Arts in most majors. Bachelor of Science candidates must major in Biology, Chemistry, Geology and Geophysics, Individualized, Mathematics, Physics, Psychology or Statistics.

The following areas are required of all students in the College of Liberal Arts and Sciences. These courses also fulfill University General Education requirements, if they are not taken pass/fail.

Foreign Language (Group 1)

All students must have either (1) passed a third-year high-school-level course in a single foreign language, (2) high school work and an added year of intermediate level college courses, or (3) two years of a single foreign language through the intermediate level in college.

Expository Writing (Group 2)

ENGL 105 and 109 or either ENGL 110 or 111
Three “W” courses, two required at the 200 level. No student who has not passed the writing component may pass the course.

Mathematics (Group 3)

Passing score on Q-course readiness test or Math 101.
Three Q-courses and one C-course.
If not a high pass, one Q-course must be in mathematics or statistics.

Literature and the Arts (Group 4)

Literature one course from:
- CAMS 103, 211*, 221*, 244
- ENGL 112, 113, 127, 205, 206, 210, 212, 216, 219, 230
- FREN 261*, 262*, 270W
- GERM 240W, 252*, 253*, 254*, 255*
- ILCS 101, 243*, 244*
- PORT 140
- RUSS 231, 232
- SPAN 187, 281*, 282*

Arts one course from:
- ART 135
- ARTH 137, 138, 141, 191, 285, ARTH 256/ANTH 252
- DRAM 101, 110
- FREN 171
- GERM 171, 281
- MUSI 191, 193, 194
- WS 104

Culture and Modern Society (Group 5)

HIST 100 or 101

Western Culture one course from:
- CAMS 101, 102, 243
- ECON 201, 203
- FREN 169, 210*, 211*
- GEOG/URBN 130
- GERM 251
- HEB/JUDS 103
- HIST 121, 206
- INTD 294
- ILCS 238*
- JOUR 102
- POLS 121
- RUSS 241
- SPAN 200*

Non-Western/Latin American Culture one course from:
- ANTH 100, 222, 223, 225, 226, 227, 230, 238
- ENGL 120, 218
- GEOG 160
- LAMS 190
- PHIL 263, 264
- POLS 143, 228, 229, 239, 279, POLS 203/WS 203
- SOCI 226, 227

* Indicates foreign language prerequisite
Biology

The biological sciences are organized into three departments: the Department of Ecology and Evolutionary Biology (EEB), the Department of Molecular and Cell Biology (MCB), and the Department of Physiology and Neurobiology (PNB). Introductory level courses (numbered in the 100's) are shared by the three departments and are listed under General Biology (BIOL). Courses above the 100's level are listed separately under individual departments.

The Bachelor of Science degree is generally recommended for students planning a scientific career in biology, but the Bachelor of Arts degree in Biological Sciences allows a richer liberal arts program and provides good preparation for many careers, including subsequent graduate study.

Credit restriction: In no case may students receive more than 12 credits for courses in biology at the 100’s level.

Biological Sciences Major

The requirements for the major in Biological Sciences are designed to ensure a sound and broad background in biology, with opportunities to explore related fields. Biological Sciences majors should take BIOL 107 and 108, but majors interested primarily in botany may wish to take BIOL 110 in addition or may substitute BIOL 110 for BIOL 108. Students wishing to complete this major must take at least 24 credits of 200's level courses from Biology:EEB, MCB, and PNB. It is strongly recommended that at least four courses include laboratory or field work. In addition to laboratory work associated directly with courses, Independent Study (course #299 in any of the three biology departments) will provide majors with a means of gaining specific research experience. Courses chosen for the major must include at least one course or course sequence from each of the following three groups:

A. Biology: MCB 200, MCB 210, or MCB 213
B. Biology: EEB 244/244W or EEB 245/245W
C. Biology: PNB 250, MCB 259, or PNB 274-275. (Note: PNB 274-275 must be taken in sequence to be counted towards the Biology major.)

A minor in Biological Sciences is described in the “Minors” section.

Biotechnology Concentration: Students interested in a career in biotechnology are encouraged to follow a program emphasizing biochemistry, microbiology and molecular genetics and leading to a B.S. degree in Biology with concentration in Biotechnology. It will be difficult to complete the Biotechnology curriculum unless the following courses have been completed by the end of the second semester: English 105, 109, Mathematics 115, 116 (or MATH 112, 113, 114), Chemistry 127-128, Biology 107 and either Biology 108 or 110. The major in Molecular and Cell Biology (see below) is also appropriate preparation for further study in biotechnology.

Biophysics Major

This B.S. program emphasizes the physical and chemical foundations of molecular biology. Prerequisite courses are Chemistry 127, 128, Mathematics 115, 116 (or MATH 112, 113, 114), 210, 211, and Physics 131, 132 or equivalent. For the major, the following courses should be taken: Chemistry 243, 244 (or 248, 249), 245, 263, 264, (265 optional), Biology: MCB 204, 208, 209. One or more of the following are recommended for breadth of background: Biology: MCB 210, 212, 213, 226, 229, Chemistry 232, Computer Science 110, 130. Students are encouraged to contact biophysics faculty in the sophomore year or early in the junior year about participating in research programs, as Biology: MCB 292 or 299.

Ecology and Evolutionary Biology Major

Students majoring in Ecology and Evolutionary Biology may opt for either a Bachelor of Arts degree or Bachelor of Science degree. Both BA and BS degree candidates must complete the following courses in addition to the general CLAS requirements for these degrees:

Ecology and Evolutionary Biology (EEB) Major

I. Both of the following core courses:
EEB 244 or 244W General Ecology (4 cr.)
EEB 245 or 245W Evolutionary Biology (3-4 cr.)

II. At least one of the following animal diversity courses:
EEB 200 Biology of Fishes (4 cr.)
EEB 214 Biology of the Vertebrates (3 cr.)

Anthropology

Anthropology studies human beings of all times and places. It examines human biological, cultural and social similarities and differences, and tries to explain them. Because of its broad perspective – stressing writing, critical thinking, and social analysis – anthropology provides an excellent preparation for a variety of professional and business careers. Anthropology can also be an integral part of the training for life that is the goal of the University’s liberal arts program.

All majors must take the following courses: a 100 level Anthropology course, as well as, ANTH 212 and a course in methodology. These two courses should be taken during the student’s senior year, if possible. Students may choose from a wide variety of related courses in other departments.

A minor in Anthropology is described in the “Minors” section.

* Indicates foreign language prerequisite
EEB 252 Field Entomology (var. credits)
EEB 273 Comparative Vertebrate Anatomy (4 cr.)
EEB 275 Invertebrate Zoology (4 cr.)
EEB 281 & 287 Ornithology & Ornithology Lab (4 cr.)
EEB 283 Introduction to Parasitology
EEB 286 General Entomology (4 cr.)
EEB 454 Mammalogy (4 cr)
EEB 465 Herpetology (4 cr.)

III. At least one of the following plant diversity courses:
EEB 203 Developmental Plant Morphology (4 cr.)
EEB 204 Aquatic Plant Biology (4 cr.)
EEB 227 Biology of Plants (3 cr.)
EEB 240 Biology of Bryophytes and Lichens (4 cr.)
EEB 271 Plant Systematics (4 cr.)
EEB 272 The Summer Flora (3 cr.)
EEB 280 Evolution of Green Plants (4 cr.)
EEB 290 Biology of the Algae (4 cr.)

IV. A course in physiology - EEB 296 Physiological Ecology (students who take PNB 250 as a related course are not required to take EEB 296).

V. It is recommended that students take at least four EEB courses that require extensive laboratory or field work.

VI. Students are encouraged to complete a course in statistics.

VII. At least 24 credits of EEB courses at the 200-level or above, which may include courses in I - IV above.

VIII. Related Course Requirements: At least 12 credits of 200-level science courses outside EEB, which must include either MCB 200 (Human Genetics) or 213 (Concepts of Genetic Analysis). One semester of organic chemistry is recommended.

A minor in Ecology and Evolutionary Biology is described in the “Minors” section.

Molecular and Cell Biology Major

This B.S. program is suitable for students with interests in biology at the cellular and subcellular level, including the areas of biochemistry, cell biology, developmental biology, molecular genetics, and microbiology, and their applications in biotechnology and medical science. Many opportunities for independent research projects in these areas are open for undergraduates.

The following 100's level courses are required: BIOL 107; CHEM 127, 128; MATH 115, 116 or 112, 113, and 114; and PHYS 131-132 or 121-122-123 or 141-142-143.

At least 3 laboratory courses chosen from the following list:

- MCB 203 Introduction to Biochemistry
- MCB 204 Biochemistry
- MCB 213 Concepts of Genetic Analysis
- MCB 214 Experiments in DNA identification
- MCB 215 Experiments in Molecular Genetics
- MCB 226 Advanced Biochemistry Laboratory
- MCB 229 Fundamentals of Microbiology
- MCB 233 Pathogenic Microbiology
- MCB 235 Applied Microbiology
- MCB 240W Bacterial Diversity and Ecology
- MCB 299 Independent Study (may be repeated, but only 3 credits may count toward the 24 credits of required MCB courses)

A minor in Molecular and Cell Biology is described in the “Minors” section of this Catalog.

Physiology and Neurobiology Major

This major, which leads to a Bachelor of Science, is suitable for students interested in the physiology and neurobiology of humans and animals. Coursework and independent study opportunities span the fields of comparative physiology, neurobiology, molecular endocrinology, reproductive endocrinology, developmental neurobiology and neurochemistry.

The following 100's level courses are required:
- BIOL 107, 108; CHEM 127-128; MATH 115-116 or 112-113-114;
- PHYS 131-132 or 121-122-123 or 141-142-143.

PNB majors must take no fewer than 24 credits in PNB courses numbered 200 and above. These must include all of the following core courses: PNB 274-275, 251, 262. The remaining credits needed to fulfill this requirement should be selected from the available PNB courses, including PNB 225, 250, 253, 260, 292W, 298, 299. (At most 3 credits from among PNB 292W, 298 and 299 may count towards the 24 credit requirement.)

PNB majors must also take all of the following courses, which count as the related group:
- CHEM 243, 244; MCB 204 and either 200 or 213.

In addition, students are urged to take:
- CHEM 245; EEB 244 or 244W or 245 or 245W; MCB 210.

There is a minor in Physiology and Neurobiology. Additionally, a minor in Neuroscience is offered jointly by the Physiology and Neurobiology Department and the Psychology Department. Both programs are described in the “Minors” section of this Catalog.

Chemistry

Programs in the Department of Chemistry may lead to either the Bachelor of Arts or the Bachelor of Science degree. The American Chemical Society certifies a rigorous professional program which is an option for B.S. students. The B.A. degree is appropriate for students who are interested in chemistry but do not wish to pursue a career as a laboratory scientist. The B.S. degree prepares students to pursue graduate study in Chemistry or to find employment in technologically oriented industries.

Prospective majors with a high school chemistry background should take CHEM 153 and 154 in their first year. Other prospective majors should take 127-128.

Chemistry majors must complete the following mathematics and physics sequences:
- MATH 115 and 116 (or MATH 112, 113, and 114)
- MATH 210 (or 220)
- MATH 211 (or 221)
- PHYS 131-132 (or PHYS 121-122, and 123)

Failure to complete these sequences by the end of the fourth semester may delay completion of the degree.

A minor in Chemistry is described in the “Minors” section.

Field of concentration requirements for the B.A. and B.S. degrees are as follows:

Bachelor of Science

At least 35 credits of Chemistry courses numbered 200 and above must be successfully completed for the Bachelor of Science in Chemistry in addition to the College requirements. The field of concentration requirements include CHEM 243, 244, 245, (Organic), 263, 264, 265 (Physical), 210, 214, 215 (Inorganic) and 232, 234 (Analytical).

Bachelor of Arts

At least 28 credits of Chemistry courses numbered 200 or above must be successfully completed for the Bachelor of Arts in Chemistry in addition to the College requirements. The field of concentration requirements include those listed above for the B.S. degree with the exception of CHEM 215 and 234.

For the degree certified by the American Chemical Society, two courses designated by the department as advanced courses must be taken in addition to the B.S. requirements. Also, these or other courses beyond the core curriculum must include at least 80 contact hours of laboratory work. The grade point average in all of the required chemistry courses must be at least 2.300.

Undergraduate students are encouraged to participate in research.

Communication Sciences

The Department of Communication Sciences is concerned with the human communication process and its analysis. Courses are offered leading to an undergraduate major in the communication sciences and to the following graduate degrees in the field of Communication Sciences: the M.A. with concentrations in Speech, Language and Hearing, and in Communication, and the Ph.D. with
A minor in Communication Processes is described in the “Minors” section.

Communication Disorders. The undergraduate major is a pre-professional program within the liberal arts curriculum. It permits the student to apply for graduate studies in one of two specialty areas: audiology or speech-language pathology.

Students who elect to major in Communication Disorders must take:
- COMS 201, 202, 247, 248, 249, and 250.
In addition, students must take at least two (2) of the following courses:
- COMS 244, 251, and 253.

Communication Processes. The program in Communication Processes is designed to produce students capable of analyzing human communication behavior from a scientific and behavioral standpoint. It emphasizes the empirical investigation of human communication, stressing developments in communication theory and research with a special emphasis on interpersonal, mass, organizational and international communication. Students who elect to take the Communication Processes program must take:
- COMS 102 The Process of Communication
- COMS 231Q Research Methods in Communication
In addition, students must take at least two (2) of the following Core courses:
- COMS 205 Interpersonal Communication
- COMS 210 Persuasion
- COMS 235 Effects of Mass Media

Students who take only two (2) Core courses must take five (5) more 200-level courses in COMS; those taking three (3) Core courses must take four (4) more 200-level courses in COMS. No more than two of these courses can be from:
- COMS 211, 212, 215, 220 and 233.

Students must declare their intention to become a Communication Processes major by applying for admission during the first two weeks of each semester. Forms can be obtained in Room 223 PCSB. The decision to admit will depend on several criteria, including the applicant’s academic record, coursework completed and space availability.

A minor in Communication Processes is described in the “Minors” section.

Economics

A student majoring in economics should acquire a thorough grounding in basic principles and methods of analysis, plus a working competence in several of the specialized and applied fields. Examples of such fields are industrial organization, law-and-economics, money and banking, international trade and finance, public finance, comparative economic systems, labor economics, health economics, urban and regional economics, and economic development.

Economics majors must earn twenty-four credits in 200 level courses, including two intermediate theory courses (ECON 218 or 218Q and ECON 219 or 219Q), plus at least nine credits in either quantitative skills courses (ECON 211-217) or applied theory courses which have an intermediate theory course as a prerequisite, and have a calculus course recommended (ECON 237-289). ECON 300 level courses may count as part of the nine required credits in the ECON 211-217 and ECON 237-289 series. Economics majors are also required to take twelve credits in 200 level courses in fields related to economics or a minor related to economics, plus STAT 100V or 110V and one of the following: MATH 106Q, 113Q, 115Q, 118Q, or 120Q. MATH 106Q or MATH 115Q and STAT 110V are preferred.

The intermediate theory courses are open to sophomores and should be taken early in the student’s major program. Recommended courses for economics majors include ECON 212 and ENGL 249. Qualified students may substitute some 300 level courses for 200 level courses with the consent of instructor and the student’s faculty advisor. The department has special requirements for economic majors in the University Honors and Degree with Distinction Programs, and for majors who qualify for the department’s Economics Scholars and Quantitative Certificate Program.

Course work in economics serves a wide variety of vocational objectives.

An economics major (supplemented by a rigorous calculus and statistics course sequence) is excellent preparation for graduate work in economics, which qualifies a person for academic, business, or government employment. Majors and others with strong economics training are attractive prospects for business firms and government agencies, and for professional graduate study in business or public policy. An economics background is especially desirable for the study and practice of law.

A minor in Economics is described in the “Minors” section.

English

The English Department offers broad and intensive study of literature, language, and the art of writing. Some careers include graduate work in English. Students interested in public-school teaching should consult the English Education advisor in the Neag School of Education, and those who intend careers in business, law, medicine, or government service should consult the English Department Advisory Center.

Among the 24 credits of English courses numbered 200 or above needed for a major, courses must be selected to fill the following requirements:

1. 210 (poetry)
2. 230 (Shakespeare)
3. Two from the following, at least one of which must be from the first three in the list: 220/220W, 221/221W, 222/222W, 223/223W, 226/226W, and 227/227W (British period survey courses)
4. Either: 270/370W or 271/271W (American period survey courses)
5. One course from the following: 204, 231, 232, or 264 (major authors courses)
6. One course from the following: 218 (Third World Literature); 233, 234 (Irish Literature courses); 266 (critical theory); 274 (Asian American Literature); 276W, 277W (Black writers courses); 278 (Ethnic American Literature); 285, and 286 (Women/ Literature)
7. Any additional course

A minor in English is described in the “Minors” section.

Concentration in Irish Literature. English majors may choose to pursue a concentration in Irish Literature. Within the requirements for all English majors, these students will select four courses in Irish literature approved by their advisors in Irish literature and by the Irish Literature Coordinator.

Study Abroad in London. The University sponsors an academic program at The City University in London. Students take university-level courses in the history of London, British art history, British history, English literature and other subjects in the humanities.

Environmental Science

The major in Environmental Science is based in the physical and biological sciences, but also includes course work in selected areas of the social sciences. The major leads to a Bachelor of Science degree, and may be adopted by students in either the College of Agriculture and Natural Resources or the College of Liberal Arts and Sciences. This curriculum offers a comprehensive approach to the study of environmental problems, including not only a rigorous scientific background, but also detailed analyses of the social and economic implications of environmental issues. The complexity and interdisciplinary nature of environmental science is reflected in the core requirements of the major. These courses, assembled from several different academic departments representing two colleges, provide both breadth and depth, preparing students for careers that deal with environmental issues, and for graduate study in environmental science and related fields.

Environmental Science majors must pass the following core requirements:

A. 100's Level Course Work (49-52 credits)
- BIOL 107, 108 or 110
- CHEM 127, 128
- ECON 112 or ARE 150
- GEOL 102
- MARN 170
- MATH 115, 116 or 112, 113, 114
- PHYS 131, 132 or 121, 122, 123
- STAT 100, 110 or 220

B. 200's Level Course Work (30-31 credits)
Environmental Science also offers the following concentrations through the College of Agriculture and Natural Resources. For complete requirements, refer to the Environmental Science description in the “College of Agriculture and Natural Resources” section of this Catalog.

**Resource Economics (Resource Economics)**
- Environmental Health (Animal Science)
- Natural Resources (Natural Resources Management and Engineering)
- Soil Science (Plant Science)

**Geography**

Geography is a field of study that investigates the surface of the earth as the scene of human activity. Because our living environment has its origins in physical processes and human activities, geographers use both natural and social science concepts.

Geography students are prepared to enter a wide range of careers in business, planning, government, and teaching. In private sector firms, geographers select locations for capital investment, determine market or service areas, assess the impact on the environment of proposed changes in land use, and develop effective strategies for planning. At all levels of government geographers work in teams with other disciplinary experts. Many geographers work for Federal mapping agencies, the Bureau of the Census, the Department of State, the U.S. Geological Survey, or other agencies. The undergraduate program also provides students with the background to pursue graduate degrees in geography or related fields such as urban and regional planning. At the University of Connecticut, graduate study in regional analysis and geographic information systems leads to the M.A. and Ph.D. degrees.

**Requirements for the Major.** The geography major requires 24 credits in 200-level geography courses and 12 credits of related course work in other departments. Majors complete a basic core of courses (Geography 200 or 204, Geography 240, and Geography 242Q) and select 15 additional geography credits, including at least one “W” course numbered 280 or higher in consultation with their departmental advisor.

A minor in Geographic Information Science is described in the “Minors” section.

**Geology and Geophysics**

Geology is the science of the earth. Integrating principles from biology, chemistry and physics, Geology investigates the processes responsible for creating the Earth and for the co-evolution of Earth and life. The Department of Geology and Geophysics offers students an opportunity to explore these ideas in all of our courses and programs of study. The curriculum is designed to meet the needs of a variety of students from those who wish to broaden their educational backgrounds with a science elective, to those who wish to pursue technical or professional careers in the earth sciences. The Department strives to give students both an appreciation of the natural world and the analytical skills required to investigate environmental problems.

The Bachelor of Science degree program introduces students to fundamental geological principles and to basic research. The Bachelor of Arts degree program is designed to give students a broad understanding of the earth sciences. The Department recommends the Bachelor of Science degree program for students planning to attend graduate school and/or pursue professional careers in the earth sciences.

**Bachelor of Arts Degree**

Students intending to obtain a Bachelor of Arts degree must take at least 36 credits in courses numbered 200 or above. Twenty-four of these credits must be in courses offered by the Department and 12 must be in courses outside the Department but in closely related fields.

**Bachelor of Science Degree**

The Department offers two options for students deciding to pursue the Bachelor of Science degree: a geology option and a geophysics option.

Each option requires at least 48 credits in courses numbered 200 or above in science (including mathematics, engineering, agriculture, and natural resources management and engineering). Twelve of these credits must be from outside the Department.

**Geology Option.** (1) GEOL 102, (2) GEOL 212, 250, 251, 252, 253, and (3) four courses from the following: GEOL 2142, 215V, 217, 219, 220, 223, 227, 229, 234, 235, 240, 261, 264, 266, 267, and 268.

**Environmental Policy and Law**

Select one course from:
- ARE 234(W) - Environmental and Resource Policy
- NRME 240 - Environmental Law

**Environmental Economics**

- AEE 235 - Environmental and Resource Economics

**Atmospheric Science**

Select one course from:
- NRME 241 - Meteorology
- NRME 271 - Environmental Meteorology

**Terrestrial Systems**

- GEOG 251 - Earth Surface Processes
- PLSC 250 - Soils

**Hydrospheric Dynamics**

Select one course from:
- EEB 247 - Limnology
- MARN 234 - Introduction to Ground Water Hydrology
- MARN 220Q - Environmental Reaction and Transport
- MARN 270 - Descriptive Physical Oceanography
- NRME 211 - Watershed Hydrology

**Ecological Interactions**

- EEB 244(W) - General Ecology

**Human Impact**

- GEOG 236 - Human Modifications of Natural Environments

**Environmental Health**

- ANSC 226 - Environmental Health

**Chemical and Microbial Reactions**

Select one of the following two-course options:
1. CHEM 243, 244 (Organic Chemistry)
2. CHEM 141 (Organic Chemistry) and MCB 229 (Fundamentals of Microbiology) or MCB 203 (Introduction to Biochemistry)
3. CHEM 141 (Organic Chemistry) and MARN 235 (Chemical Hydrogeology).

In addition to these core requirements, all students majoring in Environmental Science must also fulfill the requirements of a concentration in a discipline associated with the program before graduation. Approved concentrations are listed below: all consist of 4 or 5 courses in a specialized field, including a field course or an internship experience.

**Environmental Chemistry (Chemistry)**

- CHEM 232Q, 245, 263Q, 264Q, 370

**Environmental Biology (Ecology and Evolutionary Biology)**

- Students must pass the following courses: CHEM 232Q, 245, 263Q, 264Q, 370

**Environmental Geography (Geography)**

- Students must pass the following courses: GEOG 232, 238, 285W, 286W

**Environmental Geoscience (Geology)**

- Students must pass the following courses: GEOG 236 - Human Modifications of Natural Environments
History

The study of history aims at the understanding and disciplined reconstruction of past human activities, institutions, ideas, and aspirations in the light of present knowledge and in the hope of usefulness for the future. History belongs both to the humanities and to the social sciences. It is studied both for its own sake and for the light it throws on the present problems and future prospects of particular societies and of humankind in general.

A major in history in combination with work in foreign languages, philosophy, literature, and the social sciences provides a broad foundation for informed citizenship. History majors find employment in many fields of human endeavor from arts and business to public service and zymurgy. Specialization in history is especially valuable as pre-professional training for law, government, diplomacy, and journalism and for library, archival, and museum administration.

Honors students who plan to major in history will normally take History 203.

Requirements for the Major in History: Undergraduate majors are required to take at least 27 credits in 200-level courses, which must include one three-credit course from each of Groups A, B, and C, and two three-credit courses from Group D. All majors must take HIST 211 in the semester following their declaration as majors, and all majors except Honors students must take HIST 297W in their senior year.

With the consent of the undergraduate major’s advisor, 300-level courses may be used to fulfill the distribution requirement.

Group A – Ancient, Medieval, and Early Modern

Group B – Modern Europe

Group C – United States

Group D – Africa, Asia, Latin America, and Middle East

With the approval of the department head, HIST 292W, HIST 295W, HIST 298, and HIST 299 may be related to the chronological or geographical categories and be counted for credit in that category.

A minor in History is described in the “Minors” section.

Journalism

This department offers professional preparation for students who are planning careers in journalism. It also offers other students the chance to improve their writing, interviewing and research skills and to learn about the news media. Students in writing courses are expected to produce work of professional quality and to publish that work when possible.

Students who major in journalism should also take related courses in history, economics, political science and other liberal arts disciplines as a sound preparation for news reporting. The department strongly urges students to complete a second major. Students also should gain professional experience before graduation, either through part-time jobs, the Co-operative Education Program or the department's internship program. Internships are available at newspapers, radio and television stations, magazines, public relations offices and political press offices.

In addition to satisfying the requirements of the College, majors must complete JOUR 200W, 210W, 220, 230W and 230W. JOUR 102 is a prerequisite for JOUR 202.

Latin American Language and Area Studies

The major in Latin American Studies responds to a need in the New England region and nationally for a deeper understanding of the peoples and cultures of Latin America, its history and contemporary economic, social, and political problems, and its relations with the United States. Completion of the B.A. in Latin American Studies prepares the student to work in government, international organizations, business, journalism and communications, or to pursue graduate studies that lead to careers in research and teaching.

The Center for Latin American and Caribbean Studies administers the undergraduate major in Latin American Studies, a program of study leading to the B.A. degree. The major in Latin American Studies consists of a minimum of 36 credit hours of interdisciplinary course work built around 5 core courses (15 credit hours) as follows:

Core Courses

Anthropology: One course selected from 221 (Anthropological Perspectives on Latin America Today), 222 (Peoples of South America), or 227 (Contemporary Mexico), or 229 (Caribbean Cultures).

History: One course selected from 281 (Latin America in the Colonial Period), 282 (Latin America in the National Period), or 283 (Hispanic World in the Ages of Reason and Revolution).

Humanities: One course in Latin American literature or art:
SPAN 295 (Spanish-American Literature: the Formative Years), 296 (Great Works of Spanish-American Literature), 297 (Spanish-American Fiction); PORT 236 (Modern Brazilian Literature), 242 (Studies in Brazilian Literature I), 243 (Studies in Brazilian Literature II); ARTH 277 (Art of Mesosamerica), 278 (Colonial Mexican Art), or 279 (Modern American Art).

Political Science: 235 (Latin American Politics)

Latin American Studies: LAMS 290 (Latin American Studies Research Seminar).

Language Requirement

Successful completion of two Spanish 278, 279, 290, or 291 or two of the following: Portuguese 221, 236, 242, 243.

Students select the remaining courses (a minimum of 21 credit hours) needed to complete the major in consultation with an advisor, who will assure that the student’s program is coherent and comprehensive.

Study Abroad.

While study abroad is not mandatory, we strongly urge all Latin American Studies majors and minors to spend at least a semester in Latin America. The University sponsors academic programs in Mexico at the Universidad de las Américas, Puebla, in the Dominican Republic, at the Pontificia Universidad Católica Madre y Maestra, Santiago de los Caballeros, at the Universidad de Costa Rica in San José, Costa Rica, at the Pontificia Universidad Católica de Chile and the Universidad de Chile in Santiago, Chile and at the Universidad de Buenos Aires, Argentina. Students may go for either a semester or a full academic year. The University also sponsors an academic year and a one-semester program in Brazil at the Universidade de São Paulo. For further information, contact the Center for Latin American and Caribbean Studies or the Study Abroad Office.

A minor in Latin American Studies is described in the “Minors” section.

Linguistics

The Department of Linguistics offers two joint majors, one together with the Department of Philosophy in Linguistics and Philosophy, and the other with the Department of Psychology in Linguistics and Psychology. For either major, a minimum of four courses (twelve credits) at the 200 level from each department is required.

For the Linguistics and Philosophy joint major, specifically required courses are Linguistics 206 (Syntax and Semantics) and Philosophy 241 (Language: Meaning and Truth).

For the Linguistics and Psychology joint major, specifically required courses are: LING 202 and 215C, and at least two out of the other 200 level linguistics courses; and specifically required psychology courses are: PSYC 202Q and 221, and at least two out of PSYC 210W, 215W, 220, 236, 254, and 256. All students in the Linguistics/Psychology Major are strongly encouraged to take LING/PSYC 305 in their senior year. A minimum of four courses (12 credits) at the 200 level from each department is required.
A minor in Linguistics is described in the “Minors” section. Other students interested in Linguistics should consider forming their major group from the courses in another field, and using courses in linguistics for their related group, as described under “Field of Concentration,” item 1.

**Marine Sciences**

- **Bachelor of Science in Coastal Studies:** The B.S. in Coastal Studies requires a foundation of courses including 28 credits of Marine Science courses, and 12 credits of defined social science courses constituting the Related Area. Coastal Studies majors must pass the following courses, in addition to the General Education requirements of the College.

I. **100’s Level:** BIOL 107, 108; CHEM 127Q-128Q; MATH 115Q, 116Q; PHYS 131Q, 132Q; MARN 170

Coastal Studies requires a course in data analysis and interpretation. This requirement may be fulfilled with STAT 110V or another course approved by the Department.

Students are encouraged to fulfill some of their General Education requirements with the following choices:

- For Group 6: SCI 240 or for Group 5a: HIST 206
- For Group 7: ECON 112 or ARE 150

II. **Coastal Studies B.S. Major Requirements**

The following courses constitute the major requirements: MARN 210, 211, 212C, 220Q, 255W, 256, and 3 electives. The electives must represent different areas of Marine Sciences. At least one course must be chosen from each of the following groups:

- **Group 1:** MARN 230, 270;
- **Group 2:** MARN 236, 282, 294, 241, 242;
- **Group 3:** MARN 256, 282, 275W, 280W, 325.

Note, however, that only one of MARN 236 and 282 may be counted as an elective. It can satisfy either the Group 2 or 3 requirement, but not both.

III. **Coastal Studies B.S. Related Area**

In consultation with their faculty advisor, students choose Related Area courses appropriate to their interests, one from each of four subject areas: Environmental Policy, Economic Development, Law and Regulation, and Coastal Issues. The department maintains a list of courses acceptable for each subject area.

**Bachelor of Arts in Coastal Studies:** The B.A. in Coastal Studies requires a foundation of courses including 25 credits of Marine Science courses, and 18 credits of defined social science courses constituting the Related Area.

The B.A. plan of study allows interested students to take additional social science courses. Coastal Studies majors must pass the following courses, in addition to the General Education requirements of the College.

I. **100’s Level:** BIOL 107, 108; CHEM 127Q-128Q or CHÉM 122 and GEOL 102; MATH 109Q, 118Q; PHYS 121Q, 122Q; MARN 170

Coastal Studies requires a course in data analysis and interpretation. This requirement may be fulfilled with STAT 110V or another approved course.

Students are encouraged to fulfill some of their General Education requirements with the following choices:

- For Group 6: SCI 240 or for Group 5a: HIST 206
- For Group 7: ECON 112 or ARE 150

II. **Coastal Studies B.A. Major Requirements**

The following courses constitute the major requirements: MARN 210, 211, 212C, 255W, 256, and 3 electives. The electives are: MARN 220Q, 230, 236 or 282, 255W, 256, and 3 electives. The electives must represent different areas of Marine Sciences. At least one course must be chosen from each of the following groups:

- **Group 1:** MARN 230, 270;
- **Group 2:** MARN 236, 282, 294, 241, 242;
- **Group 3:** MARN 256, 282, 275W, 280W, 325.

III. **Coastal Studies B.A. Related Area**

In consultation with their faculty advisor, students choose Related Area courses appropriate to their interests, one from each of four subject areas, plus two additional courses from any of the following areas: Environmental Policy, Economic Development, Law and Regulation, Coastal Issues. The department maintains a list of courses acceptable for each subject area.

**Concentration in Marine Sciences**

The department is associated with the Environmental Sciences Program, and faculty serve as advisors to students pursing a concentration in Marine Sciences. Students are required to complete four courses from the following list, but with no more than two courses from a single group.

- **Group A:** 294, 236, 380, 331, 332
- **Group B:** 280W, 371, 325

*Note: Some Marine Sciences courses may only be offered at the Avery Point campus. Please refer to the “Directory of Courses” in this Catalog.*

**Group C:** 275W

**Group D:** 270, 372, 376

Both a minor in Marine Biology and a minor in Oceanography are described in the “Minors” section.

**Mathematics**

The Mathematics Department offers programs of study in Mathematics, Applied Mathematical Sciences, Actuarial Science (in cooperation with the School of Business), and Mathematical Statistics (in cooperation with the Department of Statistics).

Mathematics 242W, 247, and 248 may not be counted in any of the major groups listed below.

The Department offers both a Bachelor of Science and a Bachelor of Arts degree in Mathematics, Applied Mathematical Sciences, Mathematics-Statistics, and Mathematics-Actuarial Science. The Bachelor of Science program provides in-depth training in Mathematics as preparation for graduate study or for participation in scientific and engineering teams in government, industry, or research laboratories. The Bachelor of Arts degree is designed to provide training in contemporary mathematics without the depth and concentrated specialization required for the Bachelor of Science program.

**Bachelor of Science in Mathematics:**

The requirements for the B.S. in Mathematics are Mathematics 220 and 221 (or 210, 211 and 227), 215, 216, 273-274, and at least 9 additional credits from any of the following courses: Mathematics 204, 217, 223, 231, 235, 237, 250, 252, 255, 258, 272, 277, 278, 281, 282, 286, and approved sections of 297 and 298. In addition, at least 12 credits at the 200 level in approved related areas are required.

**Bachelor of Arts in Mathematics:** The requirements for the B.A. in Mathematics are 27 credits of 200-level course work in Mathematics and 12 credits of course work in approved related areas. The required courses are Mathematics 210 and 211 (or 220 and 221), 213, 215, 216, and 273. The remaining credits may come from any 200-level Mathematics courses, except Mathematics 242W, 247 and 248.

**Bachelor of Science in Applied Mathematical Sciences:**

The requirements for the B.S. in Applied Mathematical Sciences are Mathematics 220 (or 210 and 211), 213, 227, 272, 273, 281, and 282. The mathematics program is designed to provide training in Mathematics as preparation for graduate study or for participation in scientific and engineering teams in government, industry, or research laboratories. The Bachelor of Arts degree is designed to provide training in contemporary mathematics without the depth and concentrated specialization required for the Bachelor of Science program.

**Group A:** MARN 230, 270, 272, 275, 280, 325

Note, however, that only one of MARN 236 and 282 may be counted as an elective. It can satisfy either the Group 2 or 3 requirement, but not both.
Modern and Classical Languages

The Department of Modern and Classical Languages offers courses in French, German, Hebrew, Italian, Portuguese, Spanish, the classical languages, and selected critical languages. Students may major in Classics and Ancient Mediterranean Studies, French, German, Italian Literary and Cultural Studies, Portuguese, or Spanish or a combination of languages. The department aims to give students a working knowledge of foreign languages for teaching, research, travel, business, diplomatic or governmental work, and for graduate or undergraduate study of the civilization and literature of a foreign country.

Ordinarily study abroad or internship in the major modern language for at least one semester (or approved equivalent time period) will be required for all majors. With the advisor's consent students may choose from a variety of programs. The department conducts programs in Austria, France, Italy, Spain and Germany, sponsors a resident study program in Mexico and offers credit arrangements for study at a Goethe Institute in Germany. Such study normally is most valuable during the junior year, but unusually qualified sophomores and some seniors are also eligible. (The year abroad program in Italy welcomes applications by sophomores, juniors and seniors.) Additional language experience is available through residence in the University's Foreign Language dormitory. Students interested in any of these possibilities should consult early with their advisors.

Courses numbered in the 200's are open to freshmen and sophomores if they meet the prerequisites for the course. In the modern languages, classwork is conducted in the foreign language unless otherwise indicated.

Classics and Ancient Mediterranean Studies

The major in Classics and Ancient Mediterranean Studies allows students to pursue an interest in the Greek, Latin, and Ancient Hebrew/Biblical world. Students may choose to pursue a traditional, language-oriented (Greek or Latin) concentration in Classics or a concentration in Ancient Mediterranean Studies. Students who concentrate in Classics may take courses in Ancient Mediterranean Studies in addition to their language and literature requirements. Those who concentrate in Ancient Mediterranean Studies may also pursue some relevant language study (Greek, Latin, or Biblical Hebrew). Either concentration will lead to a major in Classics and Ancient Mediterranean Studies.

Concentration in Classics

Students must complete a minimum of 8 courses from the following:

A. At least two courses involving reading in Greek and/or Latin: CAMS 207, 208, 210, 211, 212, 213, 214, 215, 220, 221, 224, 225, 226, 230, 231, 232, 293*, 295*, 296*, 299*.

B. At least one writing course on Classical literature in English: CAMS 241W, 242W.

C. At least two other courses dealing with the ancient world CAMS 243, 244, 251, 252, 253, 254, 255, 256, 257, 293*, 295*, 296*, 299*.

(These may be cross-listed under Art History, History, Judaic Studies, and Philosophy.) JUDS/HEB 201 and INTD 294 may also be included.

(*May count toward major only with consent of advisor.)

Concentration in Ancient Mediterranean Studies

Students must complete a minimum of 8 courses from the following:

CAMS 243, 244, 251, 252, 253, 254, 255, 256, 257, 293*, 295*, 296*, 299*.

(These may have cross-listings under Art History, History, Judaic Studies, and Philosophy.) JUDS/HEB 201 and INTD 294 may also be included.

(*May count toward major only with consent of advisor.)

A minor in Classics and Ancient Mediterranean Studies is described in the “Minors” section.

French

Students majoring in French must complete the following courses: 210 and 211, 261 and 262, 268, 272 and two from 218, 220, 221, 222, 223, 224, 230, 231, 232, 233, 234, 235, 257, 280, 281, and 282. Each major is advised to complete a Senior Seminar. No more than 15 credits earned at Paris may count toward the major.

Study Abroad in France. Students participating in the Paris Program attend the University of Paris and may earn a full academic year’s credit at the University of Connecticut and a maximum of 15 credits toward the major in French. The department encourages interdisciplinary work in this program and wishes students to take non-literary courses whenever possible.

A minor in French is described in the “Minors” section.

German

Students majoring in German have a choice between a concentration in German literature or German studies. For the major in literature the following courses are required: 1) 233, 234; 2) three from among the following literature courses: 252, 253, 254, 255, 293 (on a literary topic), 296 (on a literary topic), and 298 (on a literary topic); 3) two from 200, 231, 232, 243, 244, 247, 281, 285, 293 (on a non-literary topic), 296 (on a non-literary topic) and 298 (on a non-literary topic); and 4) one of the following courses taught in English: 251 or 280W. (Only one course taught in English is allowable toward the literature major.)

For the major in German studies the following courses are required: 1) 233, 234, 251; 2) four from among 200, 231, 232, 243, 244, 271, 280W, 281, 285, 293 (on a non-literary topic) and 296 (on a non-literary topic) and 298 (on a non-literary topic); 3) one of the following literature courses: 252, 253, 254, 255, 293 (on a literary topic), 296 (on a literary topic) and 298 (on a literary topic). (Only two courses taught in English are allowable toward the German studies major.)

Eurotech. In collaboration with the School of Engineering, the German Section offers Eurotech, a carefully structured five-year, double-degree program enabling students who have been admitted to the School of Engineering to earn both a B.A. in German and a B.S. in Engineering. The program includes German language courses specially designed to include engineering content, engineering courses partly taught in German, and a six-month internship in a German-speaking company. There is a special emphasis on environmental engineering and pollution prevention. Eurotech students may substitute GERM 220, 221, and 222 for one of the courses in category 3 required of majors in German literature; and for one of the courses in category 2 required of majors in German Studies.

Study Abroad in Austria and Germany. The University of Connecticut sponsors a variety of programs in Salzburg, Regensburg and a number of universities in the State of Baden-Württemberg that allow students to follow their own concentration and interests. Students also have the possibility of work-study programs and internships.

A minor in German is described in the “Minors” section.

Italian Literary and Cultural Studies

The major allows students to pursue a traditional concentration in Italian literary studies or a concentration in Italian cultural studies. Students who concentrate in Italian literary studies may take courses in Italian cultural studies in addition to their language and literature requirements. Those who concentrate in Italian cultural studies may also pursue relevant Italian literary studies.

Concentration in Italian Literary Studies

Students must complete a minimum of 8 courses (the equivalent of 24 credits) to be chosen among the following: ILCS 237, 238, 239, 240, 243, 244, 250, 251-252, 253, 254, 261, 262. No more than 15 credits earned in Florence may count toward the major.

Concentration in Italian Cultural Studies

Students must complete a minimum of eight courses (the equivalent of 24 credits) from the following:

A. Three 200 level Italian courses, with the exception of 239 and 240
B. Two courses from the following: HIST 267, 269, 271, 297
C. Three courses to be chosen from the following: ARTH 251, 272, 273, or MUSI 292, 213; or ENGL 278W

Students must demonstrate proficiency in Italian at a level equivalent to ILCS 147.

Study Abroad in Italy. Students participating in the Florence Study Program may earn up to 30 credits during the academic year they spend in Florence; participants register at the University of Florence where they may take courses in any discipline. The program also offers courses designed exclusively for its participants and taught by Italian professors. No more than 15 credits taken in Florence may count toward a major in Italian at this University.

A minor in Italian Cultural Studies and a minor in Italian Literary Studies are described in the “Minors” section.

Portuguese

The Portuguese major consists of a minimum of 8 courses or 24 credits, all 200-level, in Portuguese, and an additional 4 courses or 12 credits, all 200-level, of related courses.


A. At least 4 courses must be taken from the literature group: 236, 237, 240, 241, 242, 243, 244.
Within the total of 24 credits, students must pass both Philosophy 241 and earn 12 credits or more at the 200's level from each of the two Departments.

Students majoring in Philosophy must earn 24 or more credits in philosophy, along with 12 credits of elective physics courses. (PHYS 242Q and 255Q together may replace PHYS 209Q.) All students are strongly encouraged to participate in an undergraduate research project. An experimental research project (PHYS 299) may count towards the advanced laboratory requirement. No more than two credits from PHYS 291, and no more than six credits from PHYS 299 may be counted towards this degree option.

A total of 48 credits from 200-level courses in physics, other sciences, mathematics, or engineering are required. Among these, 30 credits must be physics courses. The 30 credits must include PHYS 209Q, 210Q, 230Q, 258Z, and 271Q, plus a minimum of nine credits from the following eight courses: PHYS 256Q, 259Z, 273Q, 274Q, 275Q, 281Q, 285Z, and 325, with at least three of the nine credits being from an advanced laboratory (PHYS 256Q, 259Z, or 285Z).

These eight courses involve the application of knowledge from multiple basic subjects, i.e., from mechanics, electricity and magnetism, statistical and thermal physics, and quantum mechanics. (PHYS 242Q and 255Q together may replace PHYS 209Q.) All students are strongly encouraged to participate in an undergraduate research project. An experimental research project (PHYS 299) may count towards the advanced laboratory requirement. The applied option for the Bachelor of Science degree requires a minimum of 12 credits from 200-level related courses in mathematics, other sciences, or engineering. To complete the 48 total required credits for the applied option, the remaining six credits may come from 200-level courses in physics, other sciences, mathematics, or engineering.

A total of 12 credits taken abroad may be counted toward the major.

Programs are also available in Argentina, Chile, and the Dominican Republic for advanced Spanish language students.

Bachelor of Arts in physics is ideal for pre-medical, pre-dental, or pre-veterinary students, students seeking double majors, or students seeking a high school teaching career.

Bachelor of Science, General Option:
A total of 48 credits from 200-level courses in physics, other sciences, mathematics, or engineering are required. Among these, 36 credits must be physics courses. The 36 credits of physics must include PHYS 230Q, 242Q, 255Q, 257Q, 258Z, 261Q, and 271Q, and at least three credits of an advanced laboratory (PHYS 256Q, 259Z, or 285Z). It is strongly recommended that students going on to graduate school in physics take PHYS 262Q. All students are strongly encouraged to participate in an undergraduate research project. An experimental research project (PHYS 299) may count towards the advanced laboratory requirement. No more than two credits from PHYS 291, and no more than six credits from PHYS 299 may be counted towards this degree option.

The general option for the Bachelor of Science degree requires a minimum of 12 credits from 200-level related courses in mathematics, other sciences, or engineering.

Bachelor of Science, Applied Option:
A total of 48 credits from 200-level courses in physics, other sciences, mathematics, or engineering are required. Among these, 30 credits must be physics courses. The 30 credits must include PHYS 209Q, 210Q, 230Q, 258Z, and 271Q, plus a minimum of nine credits from the following eight courses: PHYS 256Q, 259Z, 273Q, 274Q, 275Q, 281Q, 285Z, and 325, with at least three of the nine credits being from an advanced laboratory (PHYS 256Q, 259Z, or 285Z).

Bachelor of Arts:
A total of 36 credits from 200-level courses in physics, other sciences, mathematics, or engineering are required. Among these, 24 credits must be physics courses. These 24 credits must include PHYS 209Q, 210Q, 230Q, and 258Z, along with 12 credits of elective physics courses. (PHYS 242Q and 255Q together may replace PHYS 209Q.) No more than two credits from PHYS 291, and no more than six credits from PHYS 299, may be counted towards this degree option.

A total of 48 credits from 200-level courses in physics, other sciences, mathematics, or engineering are required. Among these, 30 credits must be physics courses. The 30 credits must include PHYS 209Q, 210Q, 230Q, 258Z, and 271Q, plus a minimum of nine credits from the following eight courses: PHYS 256Q, 259Z, 273Q, 274Q, 275Q, 281Q, 285Z, and 325, with at least three of the nine credits being from an advanced laboratory (PHYS 256Q, 259Z, or 285Z).

These eight courses involve the application of knowledge from multiple basic subjects, i.e., from mechanics, electricity and magnetism, statistical and thermal physics, and quantum mechanics. (PHYS 242Q and 255Q together may replace PHYS 209Q.) All students are strongly encouraged to participate in an undergraduate research project. An experimental research project (PHYS 299) may count towards the advanced laboratory requirement. The applied option for the Bachelor of Science degree requires a minimum of 12 credits from 200-level related courses in mathematics, other sciences, or engineering. To complete the 48 total required credits for the applied option, the remaining six credits may come from 200-level courses in physics, other sciences, mathematics, or engineering.

A total of 36 credits from 200-level courses in physics, other sciences, mathematics, or engineering are required. Among these, 24 credits must be physics courses. These 24 credits must include PHYS 209Q, 210Q, 230Q, and 258Z, along with 12 credits of elective physics courses. (PHYS 242Q and 255Q together may replace PHYS 209Q.) No more than two credits from PHYS 291, and no more than six credits from PHYS 299, may be counted towards this degree option.

Bachelor of Science in Engineering Physics:
Offered jointly by the School of Engineering and the Department of Physics in the College of Liberal Arts and Sciences, Engineering Physics majors can concentrate in either (1) Electrical, (2) Mechanical or (3) Metallurgy and Materials Engineering. Students must satisfy the course requirements of both the College of Liberal Arts and Sciences and the School of Engineering to complete this degree.

The major requires 134 credits of course work. The preferred introductory sequence for a major in Engineering Physics, common to all three concentrations, consists of CHEM 127Q and 128Q, MATH 115Q and 116Q, PHYS 151Q and 152Q, CSE 123C, and ENGR 100.

Engineering Physics majors are required to complete the following:
PHYS 230Q, 242Q, 255Q, 257Q, 258Z, 261Q, 285Z
ENGR 295 (4 credits)
MATH 210Q, 211Q, 272Q
A. Electrical Engineering - ECE 201, 202, 204, 209W, 228, 229, 232, 241, 245, and 261; CSE 207 and 208W; MATH 227Q; PHYS 271Q; STAT 224; Elective courses (2 credits).
B. Mechanical Engineering - ME 220, 227, 233, 234, 242, 250 and 253, CE 211, 287; STAT 224; ME Elective Courses (6 credits); PHYS Elective Courses (3 credits); Elective Courses (6 credits).
C. Metallurgy and Materials Engineering - MMAT 243, 244, 255, 256, 265, 266, 267, 283 and 286W; CHEG 256; PHYS 273Q, 281Q; MMAT Elective Courses (6 credits); Elective Courses (3 credits).

Bachelor of Arts degree in physics introduces students to basic philosophical issues and acquaints them with techniques of philosophical inquiry. The program addresses problems in ethics, social and political philosophy, metaphysics, theory of knowledge, philosophy of science, logic, philosophy of religion, and aesthetics from both historical and contemporary perspectives.

Students majoring in philosophy must earn 24 or more credits in philosophy courses numbered above the 100's level, and 12 or more credits in related fields. Within the 24 credits in philosophy, students must pass PHIL 221 and 222, and at least two of the following four courses: PHIL 210, 211, 212, and 215.

A minor in Philosophy is described in the “Minors” section. The Philosophy Department also offers, with the Linguistics Department, a joint major in Philosophy and Linguistics. Students choosing this concentration must earn 12 credits or more at the 200's level from each of the two Departments. Within the total of 24 credits, students must pass both Philosophy 241 and Linguistics 206.

Physics

Physics, a fundamental and quantitative science, involves the study of matter and energy, and interactions between them. The subject is generally divided into mechanics, electricity and magnetism, statistical and thermal physics, and quantum physics. These form the foundation for present-day research areas, which include astrophysics, atomic, molecular and optical physics, condensed matter physics, nuclear physics, and the physics of particles and fields. In addition to a knowledge of physics, students gain a rigorous training in logical thinking and quantitative problem solving. An education in physics can also provide an introduction into many other fields such as biophysics, geophysics, medical physics, and engineering, as well as into less technical fields such as secondary education, technical sales, and science writing. Many students have also found that physics is an excellent preparation for the study of medicine, dentistry, or law.

The preferred introductory sequence for a major in physics, common to all physics degree programs, consists of PHYS 140Q, 141Q, and 142Q. There are two options for the Bachelor of Science degree in physics: (1) the general option for students seeking to further their physics studies in graduate school and/or a career in research, and (2) the applied option, for students seeking graduate study in another field, medicine or dentistry, or a technical career in industry. The
The options for the electives courses are specified in the *Engineering Physics Guide to Course Selection*.

A minor in Physics is described in the “Minors” section.

**Political Science**

Political Science serves students whose primary interest is in some phase of public affairs (law, politics, government service), international relations (foreign service), in gaining a better understanding of the entire field of governmental organization and functions.

Students majoring in Political Science must take introductory 100-level courses in three of the following four subdivisions: Theory and Methodology (106), Comparative Politics (121 or 143), International Relations (132), and American Politics (173). These courses should be taken during the student’s first two years of study.

All majors in political science must distribute their major courses in at least four of the following five subdivisions:

I. Theory and Methodology: 201, 202, 204, 206W, 207, 291
II. Comparative Politics: 203W, 228, 229, 230, 231, 235, 236, 237, 239, 233, 233W, 244, or 244W
III. International Relations: 211, 212, 215, 216, 217, 218, 219, 220, 221, 222, 224, 225, 226, 227, 279
V. Public Policy and Law: 251, 252, 253, 255, 260, 264, 276, 278

POL S 290 and 298 may not be counted toward this distribution except with consent of advisor.

No more than 6 credits of independent study (POL S 299) or field work (POL S 297), or a combination of the two, may be counted toward the 24 credit requirement for the major except by permission of the Department Head.

A minor in Political Science is described in the “Minors” section.

**Psychology**

The Psychology Department recommends that its majors take a broad selection of psychology courses and electives to obtain a well-rounded introduction to the science. In addition, all majors should try to include some course work involving experiments in their programs. The Department encourages students to participate in its research activities, including laboratory courses, research seminars, and independent study experiences.

The Department advises students planning to major in psychology to secure a background in the basic sciences and relevant social sciences, preferably before the junior year. Suggested courses include BIOL 100, 102, or 107; ANTH 106 or 226; and SOCI 107. If at all possible, majors should take STAT 110 (or 100) by their third semester.

The following core curriculum is required, twenty four 200 level credits including:

**Group I. Foundation.** Both courses: PSYC 202Q and 291.

**Group II. Social and applied science perspectives.** Two courses chosen so that two of the following four areas are represented: (a) Developmental Psychology 236; (b) Social Psychology 240; (c) Personality 243 or Abnormal Psychology 245; (d) Industrial Psychology 268.

**Group III. Natural science perspective.** Two courses chosen so that two of the following four areas are represented: (a) Learning and Cognitive Psychology 220 or 256; (b) Psychology of Language 221; (c) Animal Behavior 253 or Physiological Psychology 257; (d) Sensation-Perception 254.

Students who wish to receive a Bachelor of Science degree with a major in Psychology must do the following: (1) satisfy the general Bachelor of Science requirements, and (2) satisfy a modified version of the major requirements for Psychology. In the modified version, the major requirements are expanded such that (i) three courses must be taken from Group III of the core curriculum, and (ii) two laboratory courses must be taken. A course that is designated as a “laboratory” by its title is considered a laboratory course.

There is a minor in Psychology. A minor in Neuroscience is offered jointly by the Psychology Department and the Physiology and Neurobiology Department. Both programs are described in the “Minors” section of this *Catalog*.

**Sociology**

Sociology is an analytic discipline concerned with understanding people as creators of, and participants in, society. The field is broadly concerned with the study of modern society and its social organization, institutions, groups, and social roles. Sociologists study social influences on human behavior, such as sexuality, ethnic identity, and religious belief, and how individuals become members of families and communities. The field is also concerned with social problems, especially all forms of prejudice, discrimination, and inequality, and with poverty, crime, violence, and the threatened environment. Sociologists emphasize sources of social problems in the organization of society, public policies for their alleviation, and today’s questions of social justice. Finally, they study how individuals, both alone and working in groups, can change the society in which they live.

A major in sociology opens many doors for careers and is excellent background for advanced training in a variety of other fields. Three courses are required of all majors: SOCI 205, 230, 270, and at least one course from each of the following groups:

A) Organizations and Institutions (SOCI 247, 250, 260, 265, 269, 274, 280, 288, or 265)

B) Inequality, Diversity, and Change (SOCI 221, 222, 226, 227, 235, 236, 240, 242, 243, 249, 252, 258, 268, 282, or 290)

The remaining 9 credits of 200-level sociology courses, with the guidance of a faculty advisor, may be chosen either freely, including from among the courses listed in Groups A and B above, or one of five areas of sub-concentration: Social Science Background for Careers in Social Services (social work, health care, teaching, counseling); Background for Careers in Business, Management, Advertising, and Personnel; Background for Careers in Law and Public Policy; Background for Careers in Urban Affairs and Community Development.

A minor in Sociology is described in the “Minors” section.

**Statistics**

The Department of Statistics offers work leading to degrees in theoretical and applied statistics.

At the undergraduate level, the department offers a major in statistics and a major in mathematics-statistics. The latter is offered jointly with the Mathematics Department.

The statistics major requires 24 credits at the 200 level in statistics, including STAT 230 and 231. MATH 215 or 227 and CSE 110 or 130 are strongly recommended. Since STAT 230 has MATH 210 or 220 as a prerequisite, students should begin the calculus sequence as soon as possible.

The mathematics-statistics major requires a total of 36 credits at the 200-level in mathematics and statistics (in addition to MATH 210 or 220), with at least 12 credits in each department. The required courses in the mathematics-statistics concentration are MATH 215 and 227, and 211 or 221, and STAT 230 and 231.

Students without mathematical background who wish some skill in statistical methodology should take STAT 110 followed by 201. Students interested in the statistical analysis of business and economic data should take STAT 100 followed by 201. Students with the appropriate calculus prerequisite should take STAT 220 rather than STAT 110 or 201. STAT 242 and 243 are appropriate continuations for each of these three introductory sequences. Students interested in statistics as a mathematical discipline should complete STAT 230-231.

A minor in Statistics is described in the “Minors” section.

**Urban and Community Studies**

The undergraduate major in Urban and Community Studies is an interdisciplinary program in the College of Liberal Arts and Sciences with a focus on educating citizens on the multiple dimensions of urban and community life and preparing students for careers in public and community service.

The major has three parts. First, students receive a broad education in the study of cities and suburbs, neighborhoods and communities, through courses in Anthropology, Economics, Geography, History, Political Science and Sociology. Second, students acquire a solid foundation in analytical techniques such as statistics, urban and regional analysis, and geographic information systems. Third, students apply these skills in pre-professional courses, capstone projects, and internships.

The requirements of the major constitute a total of 24 credit hours and are listed below. Students also have the option of specifying an area of concentration.
These meet the requirements of the major through a more tightly defined set of courses. The concentrations are in Urban and Regional Planning, Public Policy and Administration, Social and Human Services, and Urban Culture.

**Requirements of the major.**

1. URBN 230
2. One of the following: HIST 241, POLS 263, SOCI 280
3. Either, ECON 259 or GEOG 274
4. One of the following: HDFS 276, POLS 260, or SOCI 285
5. One of the following: ECON 212V, GEOG 242Q, GEOG 246C, HIST 211, POLS 291V, SOCI 205, SOCI 207Q, STAT 201Q
6. Two additional courses selected from groups 2-5 or from the following list: ANTH 248, ARTH 282, ECON 253, GEOG 233, GEOG 239, GEOG 280W, HIST 246, INTD 211, POLS 276, SOCI 283, SOCI 281, SOCI 282, URBN 295
7. One of the following: INTD 210, URBN 232, or a section of URBN 299 that has been designated a "thesis" project by the Director of Urban and Community Studies.

One option for Urban and Community Studies students is to enroll in the 15 credit Urban Semester program. Students interested in pursuing a program in Urban and Community Studies are advised to complete 100-level courses in the social sciences which are prerequisites to the courses in Urban and Community Studies. These include, but are not limited to, URBN 130, ECON 112, POLS 107, POLS 115, and STAT 100/110V. They should also plan on enrolling in URBN 230, which is open to sophomores, as soon as possible.

**Women’s Studies**

The Women’s Studies Program is a flexible interdisciplinary academic program devoted to the critical analysis of gender and the pursuit of knowledge about women. Combining the methods and insights of traditional academic disciplines with the special insights of Women’s Studies scholarship, our courses yield fresh perspectives which help us to understand the origins of and changes in diverse cultural and social arrangements. The Women’s Studies major is broad as well as flexible, and the student’s program can readily reflect individual interests or complement a second major. Gender is a common thread in our offerings, but it always interweaves with race, class, and other factors which contribute to the diversity of women’s lives. The Women’s Studies Program is committed to a vision of women and gender that is truly international and cross-cultural. Without this perspective, our view of the world is profoundly impoverished and stereotypes will continue to distort our understanding.

The Program prepares students to employ critical learning in their private lives, in their public roles as citizens and as members of the work force, and enhances their ability to work with and for women to create a more humane world. Women’s Studies fosters interdisciplinary breadth and critical thinking and thus opens the way to a wide variety of career choices and graduate programs. Women’s Studies students are flourishing in social service agencies, business, law, education, and journalism, and employers appreciate the broad interdisciplinary perspective of a Women’s Studies education.

**Core Courses**

Students are required to take the following Core Courses:

- One 100 level Prerequisite Course: WS 103, WS 104, or WS 124
- WS 201 – Women’s Studies Research Methodology
- PHIL 218 – Feminist Theory or WS 250 – Feminisms
- WS 261/262 – Women’s Studies Internship Program
- WS 289W – Senior Seminar in Women’s Studies

**Supporting Courses**

Students are required to take five Supporting Courses.

Two courses must be taken from Group One which comprises courses on women and gender taught in other departments.

- COMS 226 or WS 268
- ECON 279
- ENGL 227 (specified sections), 264 (appropriate authors), 267 (appropriate themes), 268W (appropriate authors), 285, 286
- FREN 280
- HDFR 250, 259, 260, 270, 271, 272, 279
- HIST 209, 266
- POLS 204
- PSYC 246 or 246W
- SOCI 241, 252 or 252W

**Group Two**

- SPAN 207, 224 (appropriate sections)
- WS 217/ENGL 217
- WS 231/ANTH 231

Three courses must be taken from Group Two which comprises courses with Women’s Studies numbers and their cross-listed departmental equivalents.

- WS 210 or History 210
- WS 215 or History 215
- WS 203W or Political Science 203W
- WS 263, 264, 266, 267, 268, 269, 270, 278, 298, 299
- WS 290 or ARTH 290

Note that special topics courses with Women’s Studies content are offered from time to time in various departments and may be applied to the major with approval of the Program Director.

Students must take an additional 12 credits at the 200 level or above in fields closely related to the major. No required course in the major or in the related area may be taken pass/fail.

A minor in Women’s Studies is described in the “Minors” section.

**Alternative Areas of Study**

**African American Studies Institute.** The primary mission of the Institute is to enlighten and inform people about the history, culture, contributions and experiences of people of African descent in the United States. To achieve this goal, the African American Studies Institute promotes high quality research, scholarship, and teaching of the African American experience and sponsors a wide variety of programs on topics and issues that are critical to Black America and pertinent to a better understanding of the Black world. The Institute is located in Wood Hall. Professor Robert W. Stephens is Director. Phone (860) 486-3630.

**Air Force Studies.** Under Public Law 88-647, the Air Force Reserve Officer Training Corps (AFROTC) offers courses to prepare interested college students for United States Air Force officer commissions; other college students who have no interest in military commissions may also take these courses for credit. Qualified students may apply for Air Force ROTC scholarships. Current Air Force ROTC membership isn’t necessary to apply for these scholarships; however, a student who receives and accepts an AFROTC scholarship must participate in the AFROTC program while in college and serve in the Air Force as an officer upon graduation and commissioning.

The basic Air Force ROTC course, called the General Military Course (GMC), covers the freshman and sophomore years; juniors, seniors and others may also participate. Unless they’ve already accepted AFROTC scholarships, students aren’t obligated to the Air Force at this time. During the two years, students take a one-credit Air Force ROTC class each semester; we recommend the following sequence: AIRF 113, AIRF 114, AIRF 123 and AIRF 124. They also attend Leadership Laboratory, a cadet-run, two-hour-a-week session.

The advanced course, called the Professional Officer Course (POC), covers the junior and senior years. Before entering this phase, students must secure an Air Force allocation and successfully complete a four-week field training camp. Students who don’t complete the entire GMC enroll the same way, but attend field training for five and one-half weeks. If still interested in an Air Force commission, they sign a contract obligating them to the Air Force.

In the POC, students take a three-credit AFROTC class every semester and attend Leadership Laboratory (other students may take the academic classes without obligation to the Air Force); also, they must maintain full-time student status. Students in the POC receive a nontaxable stipend of $200 per month. The Air Force commissions these students as second lieutenants after graduation and completion of all AFROTC requirements. For most AFROTC graduates there is an initial obligation of four years on active duty in the Air Force.

Please contact the Air Force ROTC office at (860) 486-2224 for further information. Information can also be found at: www.airforce.uconn.edu

**Asian American Studies Institute.** The Asian American Studies Institute is an interdisciplinary research, teaching and publication program devoted to study of the Asian American experience within the larger context of an evolving American society. Of special importance is the interment of Americans of Japanese ancestry during World War II. Although the primary focus of the Institute is upon Asians in America, attention is also given to a study of Asia, since the unique cultural sources of Asian Americans are rooted in Asia.

Although not offering a degree program, the Institute does offer a concentration in Asian American Studies at the undergraduate level in the fields of Asian, Health, English, Geography, History and Sociology. These courses, whose common thread is the Asian American experience, offer a comparative analysis of
class, gender and Asian ethnicity. In addition, these courses explore the neglected aspects of the cultural, historical, socioeconomic and political experiences of Asian Americans.

The goal of the Institute is to prepare students for positions of leadership and service by cultivating a broad understanding of America’s racial and cultural diversity. The goal of the Institute is to also prepare students to employ critical learning in their private lives as citizens. To complement its academic mission, the Institute serves the community beyond the University as a resource for information and advocacy.

Students wishing to specialize in Asian American Studies can take the following courses: AASI 221/221W, 239, 274, 277, 287/287W, 288, 294, 298. Check with the Institute to find which AASI Special Topics courses are being offered currently.

Permanent features of the Institute’s programming include: annual publication of the newsletter The Asian American; an annual guest lecture series; the Asian Community in Connecticut Research Publication Series; the Fred Ho Collection and biennial Fred Ho Prize in Asian American History and Culture; the annual Asian American Heritage Observance; the Asian Medicinal Garden; and the Japanese American Internment Resource Library and Oral History Project.

The Institute is directed by Professor Roger N. Buckley, Room 416, Beach Hall. For further information, contact the Asian American Studies Institute, Beach Hall, Room 416. (860) 486-4751; FAX (860) 486-2851.

Comparative Literary and Cultural Studies. Students interested in comparative literature may take a wide range of comparative literature courses (no foreign language requirements) as well as courses offered by the participating literature departments. For advice about integrating the study of several literatures and preparing for further work in comparative literature, students may consult the chair, Lucy McNeece, or any member of the comparative literature faculty.

Judaic Studies. Courses in Judaic Studies are listed under Judaic Studies as well as Hebrew (Modern and Classical Languages), History and Sociology. Students may major in Judaic Studies through the College of Liberal Arts and Sciences Individualized Major. The description of a minor in Judaic Studies is listed in the “Minors” section of this Catalog. For further information about current courses you are invited to contact the Center for Judaic Studies and Contemporary Jewish Life, Unit 1205, Dodd Center; Stuart S. Miller, Associate Director, or Arnold Dashefsky, Director.

Law. Students who hope to enter a law school should seek to establish an undergraduate record of broad intellectual accomplishment. No specific undergraduate courses or programs of study are required. The Law School Admission Test, the student’s scholastic record, and recommendations are the basic considerations used by law schools in determining admissions. The Pre-law Advisory Committee may be consulted for advice and students who apply to law schools for admission should register with the secretary of the committee and I.R. Davis (Chairman).

Medicine and Dentistry. Students planning for a career in medicine or dentistry need a rigorous and broad education in the liberal arts and sciences, as well as a strong record of academic achievement. Guidance in the structuring of academic programs, including selection of a major, should be done in consultation with advisors from the Pre-medical/Pre-dental Advising program.

Students should plan to take courses in general and organic chemistry (one year of each), physics (one year), biochemistry, genetics, and physiology prior to taking admissions tests (e.g. MCAT or DAT). Students are strongly advised to take admission tests in April of their junior years and typically apply for admission into medical or dental school during the summer between their junior and senior years. Students should contact the Pre-medical/Pre-dental Advising Center during the fall of their junior year to arrange for a composite letter of recommendation. Students with questions can access the Pre-medical and Pre-dental web page at: http://www.premed.uconn.edu or contact advisors at or by phone (860) 486-5415.

Medieval Studies. Students wishing to gain broad cultural and scholarly grounding in the Middle Ages in conjunction with a departmental specialization may consult the chairman or one of the members of the Committee for Medieval Studies, T. Jambeck and R. Hasenfratz, (Co-chairs), F. Biggs, J. Givens, S. Olson. Military Science. Under Public Law 88-647, Army Reserve Officers’ Training Corps (AROTC) offers courses to prepare interested and qualified students for an officer commission; other students not interested in a commission may take the first two years of courses. Successful completion of the program can qualify the student for a commission in the United States Army, Army Reserve, or Army National Guard. Army ROTC furnishes uniforms, textbooks, and other related equipment at no expense to the student. The program consists of the basic and the advanced course. There is no military obligation in the basic course. Students desiring to take the basic course need only to register during the normal registration period. Veterans (to include current members of the National Guard or Army Reserve) should consult with the Professor of Military Science (PMS) for possible waiver of the basic course.

A two-year program is available by special application and consent of the PMS during the sophomore year. Qualified students attend a paid, six-week summer camp after the sophomore year instead of the basic course, thereby requiring participation in the last two years of AROTC. The advanced course covers the junior and senior years and includes four three credit courses that meet for one three hour period per week, plus a leadership lab.

Advanced course students attend a five-week summer camp after the junior year. Participation in the advanced course requires a military obligation. Entry into the advanced course is subject to the approval of the PMS. All contracted advanced course cadets receive a subsistence allowance of $200 per month. The Catalog reflects the normal four year track to commissioning.

Scholarships are available to qualified students. Criteria considered include academic performance, major, leadership experience and potential, and physical fitness as evaluated through a board scholarship interview. The minimum qualifying GPA is 2.5.

Interested students should visit the AROTC office or call (860) 486-6081/4538. Information can also be found at: www.armyrotc.uconn.edu

Native American Studies. The University offers interdisciplinary curricula in topics pertaining to Native American cultures of the present and past. Native American studies is an area of concentration within the Individualized Major program. The description of a minor in Native American Studies is listed in the “Minors” section of this Catalog. For further information contact Robert Bee or Kevin McBride, or write to Native American Studies at Unit 2158.

Peace Studies. Peace Studies is dedicated to the academic investigation of issues relating to war and peace, conflict and conflict resolution, social and economic justice, and global security. Students may major in Peace Studies through the Individualized Major program of the College of Liberal Arts and Sciences. Interdepartmental courses in Peace Studies as well as established courses in the departments of the University, may be combined in various ways in order to constitute a major.

Puerto Rican and Latino Studies. The Institute for Puerto Rican and Latino Studies has a flexible interdisciplinary research and teaching program devoted to the comparative, critical analysis of ethnicity and the quest for knowledge about Puerto Ricans on the island and the mainland, as well as about Mexican Americans, and other peoples of Latin American descent in the United States. Although the primary focus of the program is upon the majority segments of the Latino population who, like Puerto Ricans and Mexican Americans, are U.S. citizens, attention is also given to that segment which due to recent immigration or other reasons has not met the formal requirements for U.S. citizenship.

The Institute’s Program prepares students to employ critical learning in their private lives, in their public roles as citizens, and as members of the labor force, and enhances their ability to work with and for peoples of Puerto Rican or Latin American descent to promote the development of fairness and equity in public policy as well as multicultural diversity in state, regional, and national life. Puerto Rican and Latino Studies promotes critical, comparative, interdisciplinary thinking and thus facilitates a wider variety of professional or other career choices for students.

Students wishing to specialize in Puerto Rican/Latino Studies may take 12 credits from the following courses: PRLS 295, 298, 241

Please note that PRLS 295 and 298 may be repeated for credit. Additional courses will become available so it is necessary to check with the Institute’s office to verify current course offerings.

For further information about Puerto Rican and Latino Studies, contact the Institute for Puerto Rican and Latino Studies, Beach Hall, Room 413, (860) 486-3997.