

ENVIRONMENTAL STUDIES

Program Overview

The Bachelor of Arts Degree in Environmental Studies is designed to meet the interests of students wishing to address environmental issues through multiple disciplinary perspectives, including relevant sciences as well as social and political aspects. The program is meant for students who are interested in careers in environmental policy, advocacy, justice, nonprofit organizations, ecotourism, and other related career opportunities; or graduate school in non-science focused environmental disciplines, for example environmental law.

Note: This B.A. program is not designed to prepare students for graduate-level science programs, nor is it designed to enable students to gain employment as professional scientists. Consider the B.S. in Environmental Sciences if you plan to pursue either of these career paths.

Curriculum Overview

The curriculum for this major focuses on the interdisciplinary nature of the environment by offering classes that give students a strong basis of science preparatory material while also offering a unique, hands-on approach to learning. Students take introductory courses in foundational classes in environmental and geology, chemistry, physics, and biology, followed by more in-depth course work focused on the environmental sciences as well as social and political disciplines.

Student Learning Outcomes

Graduates of the Environmental Studies major will be able to:

1. The student can combine relevant data with scientific principles to compose an explanation of natural phenomena in environmental studies.
2. The student can use physical, chemical, and biological characteristics to identify materials or organisms that form the foundation of their discipline.
3. The student can properly use technical equipment and associated techniques to collect, organize, and interpret field data.
4. The student can identify, find, evaluate, and use information to produce scientific reports, both written and orally, for scientific research and communication.

Honors Program in Environmental Studies

Graduation with honors in Environmental Studies is awarded in recognition of majors who have demonstrated outstanding academic ability. Enrollment in the program is by invitation of the department faculty. Eligibility requirements include a minimum GPA of 3.5 in courses required for the major and the satisfactory completion of a senior thesis or a three- or four-credit Independent Research and Study course related to their major. In addition, an honors candidate must maintain an overall minimum GPA of 3.0.

Degrees Offered

- B.A. in Environmental Studies

Contact

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Program Website: Environmental Studies (<https://www.rider.edu/academics/colleges-schools/college-liberal-arts-sciences/undergraduate/environmental-studies/>)

Associated Department: Earth and Chemical Sciences (<https://www.rider.edu/academics/colleges-schools/college-arts-sciences/science-technology-math/faculty-departments/>)

Related Programs

- [Earth and Environmental Sciences \(http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/earth-environmental-sciences/\)](http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/earth-environmental-sciences/)
- [Environmental Sciences \(http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/environmental-sciences/\)](http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/environmental-sciences/)
- [Geology \(http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/geology/\)](http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/geology/)
- [Integrated Sciences and Math \(http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/integrated-sciences-math/\)](http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/integrated-sciences-math/)
- [Marine Sciences \(http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/marine-sciences/\)](http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/marine-sciences/)
- [Education \(http://catalog.rider.edu/undergraduate/colleges-schools/education/\)](http://catalog.rider.edu/undergraduate/colleges-schools/education/)

Environmental Studies Major Requirements

(52-53 credits)

Code	Title	Credits
CLAS General Education Curriculum		
See CLAS General Education Curriculum Page (http://catalog.rider.edu/undergraduate/colleges-schools/liberal-arts-sciences/general_education_requirements/)		
Geological and Marine Sciences (18 credits)		
ENV 100	Introduction to Environmental Sciences	4
ENV 200	Statistical and Computer Applications in the Natural Sciences	4
ENV 205	Introduction to Geographic Information Systems	3
ENV 220	Weather and Climate Change	3
GEO 100	Earth Systems Science	3
or GEO 113	Environmental Geology	
GEO 102	Earth Materials and Processes Lab	1
GEMS Upper Level Elective (select one)		3-4
ENV 340	Environmental Field Methods and Data Analysis	
ENV 375		
GEO 350	Soil and Surficial Processes	
GEO 407	Hydrology and Water Resources	
Biology		
BIO 115	Principles of Biology I	4

BIO 115L	Principles of Biology I Lab	0
BIO 116	Principles of Biology II	4
BIO 116L	Principles of Biology II Lab	0
BIO 350	General Ecology	4
Chemistry		
CHE 120	Principles of Chemistry	3
CHE 121	Principles of Chemistry Lab	1
Physics		
PHY 100	Principles of Physics I	3
PHY 100L	Principles of Physics I Lab	1
Policy and Humanities (select three)		9
HIS 224	American Environmental History	
PHL 215	Environmental Ethics	
POL 328	Environmental Politics	
POL 329	Comparative Environmental Policy	
Policy and Humanities Electives (select two not chosen above)		6
AMS 304	Technology and Science in America	
BHP 231		
BHP 232		
BHP 259	Honors Seminar: The Environment: a Conflict of Interest	
PHL 215	Environmental Ethics	
HIS 224	American Environmental History	
IND 316	Nature's Business	
POL 215	Global Politics	
POL 328	Environmental Politics	
POL 329	Comparative Environmental Policy	
POL 330	Geopolitics of Energy	
SOC 225	Population Study	
Total Credits		56-57

Majors will also take either MTH 105 or MTH 210 to fulfill their math core requirement.

Academic Plan of Study

The following educational plan is provided as a sample only. Rider students who do not declare a major during their freshman year; who are in a Continuing Education Program; who change their major; or those who transfer to Rider may follow a different plan to ensure a timely graduation. Each student, with guidance from his or her academic advisor, will develop a personalized educational plan.

Course	Title	Credits
Year 1		
Fall Semester		
CMP 120	Seminar in Writing and Rhetoric	3
BIO 115	Principles of Biology I	4
BIO 115L	Principles of Biology I Lab	0
ENV 100	Introduction to Environmental Sciences	4
ENV 100L	Introduction to Environmental Sciences Lab	0
MTH 105	Algebra and Trigonometry ¹	4
Semester Credit Hours		15
Spring Semester		
CMP 125	Seminar in Writing and Research	3

GEO 102	Earth Materials and Processes Lab	1
BIO 116	Principles of Biology II	4
BIO 116L	Principles of Biology II Lab	0
Foreign Language ¹		3
Select one of the following:		3
GEO 100	Earth Systems Science	
GEO 113	Environmental Geology	
Semester Credit Hours		14

Year 2

Fall Semester

CHE 120	Principles of Chemistry	3
CHE 121	Principles of Chemistry Lab	1
ENV 200	Statistical and Computer Applications in the Natural Sciences	4
ENV 200L	Statistical and Computer Applications in the Natural Sciences Lab	0
HIS 150	World History to 1500	3
Foreign Language		3
Semester Credit Hours		14

Spring Semester

ENV 220	Weather and Climate Change	3
GEMS Upper Level Elective		3-4
HIS 151	World History Since 1500	3
Social Perspectives		3
Philosophical Perspectives		3
Semester Credit Hours		15-16

Year 3

Fall Semester

PHY 100	Principles of Physics I	3
PHY 100L	Principles of Physics I Lab	1
ENV 205	Introduction to Geographic Information Systems	3
Aesthetic Perspectives: Fine Arts		3
Social Perspectives		3
Aesthetic Perspectives: Literature		3
Semester Credit Hours		16

Spring Semester

Select one of the following:		4
GEO 350	Soil and Surficial Processes	
GEO 350L	Soil and Surficial Processes Lab	
GEO 407	Hydrology and Water Resources	
GEO 407L	Hydrology and Water Resources Lab	
Policy and Humanities Course		3
Three Elective Courses ²		9
Semester Credit Hours		16

Year 4

Fall Semester

Policy and Humanities Course		3
Policy and Humanities Elective Course		3
Three Elective Courses ²		9
Semester Credit Hours		15

Spring Semester

Policy and Humanities Courses	6
Two Elective Courses ²	6
Select one of the following:	4
GEO 350 Soil and Surficial Processes	
GEO 350L Soil and Surficial Processes Lab	
GEO 407 Hydrology and Water Resources	
GEO 407L Hydrology and Water Resources Lab	
Semester Credit Hours	16
Total Credit Hours for Graduation	121-122

Note: Natural and Physical Science core requirements are included in the major.

¹ For course placement information see <http://www.rider.edu/offices-services/orientation/course-placement> (<http://www.rider.edu/offices-services/orientation/course-placement/>)

² Please note that elective credits may be used to complete requirements in a second major or minor.

Courses and Descriptions**ENV 100 Introduction to Environmental Sciences 4 Credits**

Examines how ecosystems function, with emphasis on the interactions between biological organisms and their physical environment, and the chemical processes that govern these interactions. The impact of human populations on natural ecosystems is investigated in detail using case studies from history and current events. The laboratory provides for hands-on experiences and/or short field trips to local sites for a better understanding of many of the concepts discussed. Weekday and weekend field trips may be required. Three hours of lecture and one three-hour lab per week. CLAS general education areas addressed: DP, SP, GP. **Corequisite(s):** ENV 100L.

ENV 100L Introduction to Environmental Sciences Lab 0 Credits

This lab is a co-requisite and must be taken with the corresponding course.

Corequisite(s): ENV 100.

ENV 200 Statistical and Computer Applications in the Natural Sciences 4 Credits

This course introduces important statistical concepts, their application, and the usage of computer technology relevant to biological, environmental, geological, and marine problems. Students will learn various graphical and statistical techniques and how to execute them on personal computers. The curriculum emphasizes the integrated nature of these techniques and their importance to meaningful data evaluation and representation. Laboratory exercises are designed to emphasize useful solutions to problems found in many scientific disciplines using computer-based methodologies. Three hours of lecture and one three-hour lab per week.

Corequisite(s): ENV 200L.

ENV 200L Statistical and Computer Applications in the Natural Sciences Lab 0 Credits

This lab is a co-requisite and must be taken with the corresponding course.

Corequisite(s): ENV 200.

ENV 205 Introduction to Geographic Information Systems 3 Credits

This course introduces the computer-based concepts and skills of Geographic Information Systems (GIS). It covers the basic GIS concepts, such as map characteristics and projections, spatial data models and analysis, and relational databases. It explores data sources, data quality, and metadata, as well as implementation and management of specific GIS projects. Hands-on experience with ArcGIS software is provided through a series of student exercises completed throughout the semester. Students will also be taught how to process both vector and raster data using ArcGIS software. The course is relevant for students from numerous disciplines in the natural sciences, social sciences, and business, which require the analysis and graphical representation of spatial data. Three hours of lecture per week.

ENV 220 Weather and Climate Change 3 Credits

This course introduces students to the concepts of weather and climate change. These concepts frame a continuum from short-term or daily changes in the atmosphere (meteorology) to those changes averaged over much longer periods of time (climatology). Students will learn the fundamentals of weather forecasting, the causes of natural variation in the Earth's climate, and the impact of human actions on the Earth's climate. Connections will be drawn to other current issues in the Earth system, including land use change, biodiversity, and pollution. Three hours of lecture per week.

Prerequisite(s): GEO 100 or permission of instructor.

ENV 290 Directed Research and Study in Environmental Sciences 1-4 Credits

Provides an opportunity for freshman and sophomore students to gain hands-on research experience in the environmental sciences. This is an individual program of study and each student will work with a selected faculty member on a topic of mutual interest. The course consists of a combination of project meetings, supervised research, and guided readings. The focus will be on formulating research questions, designing and conducting experiments, collecting the necessary data, reviewing the scientific literature as it relates to each student's research topic in weekly meetings with the instructor, and communicating the findings by writing a final project report.

ENV 320 Global Biogeochemistry 4 Credits

This course introduces students to global biogeochemical processes in the earth system and their influences on marine and terrestrial ecosystems. With a focus on systems thinking and interdisciplinary science, students will learn about the interactions of the biosphere, lithosphere, hydrosphere and atmosphere through elemental cycling and energy transfers. The course extends from the origin of our planet to the modern earth system and considers the anthropogenic impacts of climate change and pollution on humans and other species. Students will analyze scientific data with examples in regulatory and research settings. Students will also gain first-hand experience with field methods including sampling ocean and freshwater using various techniques and equipment and interpreting chemical data. Field trips may be required for this course. Course

Prerequisites: GEO 100 or GEO 113; GEO 102; CHE 120 & 121.

ENV 320L Global Biogeochemistry Lab 0 Credits

This course introduces students to global biogeochemical processes in the earth system and their influences on marine and terrestrial ecosystems. With a focus on systems thinking and interdisciplinary science, students will learn about the interactions of the biosphere, lithosphere, hydrosphere and atmosphere through elemental cycling and energy transfers. The course extends from the origin of our planet to the modern earth system and considers the anthropogenic impacts of climate change and pollution on humans and other species. Students will analyze scientific data with examples in regulatory and research settings. Students will also gain first-hand experience with field methods including sampling ocean and freshwater using various techniques and equipment and interpreting chemical data. Field trips may be required for this course. Course

Prerequisites: GEO 100 or GEO 113; GEO 102; CHE 120 & 121.

ENV 340 Environmental Field Methods and Data Analysis 3 Credits

This course will provide students with practical experience in field methods and data analyses within the environmental sciences. The course will include advanced activities incorporating field-based exercises, GIS analyses, statistical analyses, and database management. Students will also complete an independent project focused on a relevant topic. Local field trips during lab and on weekends may be required.

Prerequisite(s): MTH 105, GEO 100, GEO 102, and ENV 100; or Permission of Instructor.

ENV 480 Senior Thesis 3 Credits

A senior thesis is optional for environmental science majors. However, a senior thesis is required for eligibility to graduate with honors in environmental science. The topic for investigation will be chosen by the student in consultation with the faculty of the Department of Geological, Environmental, and Marine Sciences. The student must initiate consideration of a proposal to the Department. The proposal must contain a discussion of the proposed project and a timetable to be followed in the study. A departmental committee consisting of a major and minor advisor will evaluate the written paper submitted at the conclusion of the study. An oral presentation before the department at the conclusion of the semester in which the study is completed is required. Proposals must be submitted in final form no later than the end of the ninth week of the semester prior to the semester in which the study is undertaken.

Prerequisite(s): senior standing in the geosciences major and permission of instructor.

ENV 490 Independent Study: Research and Creative Expression 1-4 Credits

Immerses the student in field or laboratory research. The student learns to organize material, use the literature, make precise measurements, and obtain reproducible data. If possible, the student will publish the results or present them at a scientific meeting.

ENV 491 Internship in Environmental Sciences 1-4 Credits

A supervised work experience in an approved organization where qualified students gain real-world knowledge and utilize their academic training in a professional environment. Placements may be in private, public, non-profit, or governmental organizations. These can include consulting firms, regulatory agencies, advocacy groups, and educational or research institutions. Normally, 50 hours of internship per credit is required. A mutually agreed upon method of evaluation will be formalized prior to the approval of the internship by the sponsoring faculty and could include a term paper or project report and a poster presentation.

Prerequisite(s): 2.5 GPA and permission of instructor.

GEO 100 Earth Systems Science 3 Credits

Investigates the major global processes that occur on Earth. These processes can be grouped into four major systems: atmosphere, hydrosphere, lithosphere, and cosmosphere. Each system interacts with and affects the other systems creating, in a sense, a single Earth process. With this approach, the student will view the Earth as a whole, and understand that the many seemingly separate components that make up this planet are, in fact, a set of interacting processes, that operate in cycles through time, within a single global system. Three hours of lecture per week. This course counts towards the fulfillment of the Disciplinary Perspectives element of the CLAS general education curriculum.

GEO 102 Earth Materials and Processes Lab 1 Credits

This lab course introduces students to the origin, identification, and significance of geologic materials, processes, and landforms. Hands-on experiences with mineral and rock specimens, topographic and geologic maps, and GPS and other data collection techniques are emphasized, along with field trip and in-lab observations, measurements, and interpretations. One three-hour lab per week.

Prerequisite(s): concurrent enrollment in, or prior completion of, GEO 100 or GEO 113 is required.

GEO 113 Environmental Geology 3 Credits

Examines the fundamental premise that "society exists by geologic consent subject to change without notice" by studying a number of important global geologic processes and cycles, and the hazards and/or resources they present to individuals, societies, and the natural environment. Topics discussed include earthquakes, volcanism, stream flooding, coastal erosion, global climate change, and global water, soil, mineral, and energy resources. Cost/benefit considerations, hazard mitigation concepts, economic and political ramifications, and interactions among the lithosphere, hydrosphere, atmosphere, and biosphere also are presented. The course is designed to give non-science majors a deeper appreciation and understanding of the basic scientific concepts involved, as well as individual and societal connections to the global geologic environment, leading to better, more informed business, political, policy, and personal decisions. This course counts towards the fulfillment of the Disciplinary Perspectives element of the CLAS general education curriculum.

GEO 350 Soil and Surficial Processes 4 Credits

This course examines the physical, chemical, hydrological, and biological aspects of soil and their relation to geomorphologic development. Specific topics include descriptions of soil texture and structures, soil classification, soil colloids, soil redox and pH, and their effect on vadose zone water chemistry. Soil genesis and erosion controls, microbiology/ecology, nutrient cycles, and modern soil pollution from sludge and pesticide applications, as well as domestic and industrial chemical spills, also are discussed. The lab portion of the course introduces the basic techniques of soil analysis, both physical and chemical, and field survey methods. Three hours of lecture and one three-hour lab per week. Prerequisite(s): GEO 100 or GEO 113, and GEO 102.

Corequisite(s): GEO 350L.

GEO 350L Soil and Surficial Processes Lab 0 Credits

This lab is a co-requisite and must be taken with the corresponding course.

Corequisite(s): GEO 350.

GEO 407 Hydrology and Water Resources 4 Credits

This course introduces the principles that govern both surface water and groundwater flows that have applications to societal water needs. Surface water topics cover the basics of the hydrologic cycle, the processes of precipitation, evapotranspiration, runoff, and infiltration, and various factors affecting water supply and water quality issues in a modern watershed. Groundwater topics examine the principles that govern flow through a porous medium and the basics of well hydraulics under different pumping conditions that community development requires. Laboratory exercises will give students hands-on experience with the delineation of watersheds, analysis of precipitation data, and flow contaminant transport modeling. The field portion of the laboratory includes runoff and stream discharge measurements, as well as hydraulic conductivity estimations from both slug and pumping tests. Three hours of lecture and one three-hour lab per week. Prerequisite(s): GEO 100 or GEO 113, GEO 102, and MTH 105 or higher.

Corequisite(s): GEO 407L.

GEO 407L Hydrology and Water Resources Lab 0 Credits

This lab is a co-requisite and must be taken with the corresponding course.

Corequisite(s): GEO 407.

BIO 115 Principles of Biology I 4 Credits

An introductory biology course focusing on major themes of biology: what is life?; Cells as fundamental structure and functional unit of life; information transmission, storage and retrieval; Diversity and unity of life explained by evolution. Three hours of lecture and one three-hour lab per week.

Corequisite(s): BIO 115L.

BIO 115L Principles of Biology I Lab 0 Credits

This lab is a co-requisite and must be taken with the corresponding course.

Corequisite(s): BIO 115.

BIO 116 Principles of Biology II 4 Credits

An introductory biology course focusing on major themes of biology: Energy and matter to carry out life's essential functions; Interdependent relationships characterize biological systems (homeostasis, growth & development); Behavior of living things; Ecology and the environment. Three hours of lecture and one three-hour lab per week.

Corequisite(s): BIO 116L.

BIO 116L Principles of Biology II Lab 0 Credits

This lab is a co-requisite and must be taken with the corresponding course.

Corequisite(s): BIO 116.

BIO 350 General Ecology 4 Credits

An investigation of the processes that regulate the distribution of plants and animals throughout the biosphere. Relationships among species and their interactions with the environment are stressed. Quantitative analyses of experimental results and current research in basic and applied ecology are discussed. Laboratory activities explore conceptual models using both field activities and computer simulations. Three hours of lecture and one three-hour lab per week. One Saturday field trip (laboratory time will be adjusted accordingly). Prerequisite(s): BIO 115, BIO 116, with a grade of "C" or better in each course.

Corequisite(s): BIO 350L.

BIO 350L General Ecology Lab 0 Credits

This lab is a co-requisite and must be taken with the corresponding course.

Corequisite(s): BIO 350.

CHE 120 Principles of Chemistry 3 Credits

For students who have successfully completed one year of high school chemistry. This systematic study of the fundamental principles and concepts of chemistry covers atomic structure, bonding, stoichiometric relationships, including solution and oxidation-reduction reactions, and molecular structure. Three hours of lecture per week. Prerequisite(s): High school chemistry or CHE 100 is recommended before taking this course.

Corequisite(s): CHE 121.

CHE 121 Principles of Chemistry Lab 1 Credits

For students concurrently taking CHE 120. Experiments involve gravimetric, volumetric, and spectrophotometric quantitative analysis. One three-hour lab per week. Fall.

PHY 100 Principles of Physics I 3 Credits

Introductory noncalculus physics with applications for pre-professional, biology, and geological, environmental and marine sciences majors. Classical mechanics, energy, mechanical waves, fluid statics and dynamics, thermodynamics. Elements of modern physics are interwoven with those of classical physics from the beginning. Not open to chemistry, physics, or mathematics majors. Three hours of lecture per week. Prerequisite(s): MTH 105, MTH 210, MTH 211 or MTH 212.

Corequisite(s): PHY 100L.

PHY 100L Principles of Physics I Lab 1 Credits

For students concurrently taking PHY 100. One three-hour lab per week.

Corequisite(s): PHY 100.

AMS 304 Technology and Science in America 3 Credits

An overview of the development and impact of technology and science on American institutions. Topics include innovation, economic growth, science and its relation to technology, social theory, and the politics of science.

BHP 259 Honors Seminar: The Environment: a Conflict of Interest 3 Credits

Examines critical environmental issues such as global warming; food, water and energy resources; population trends; and global industrialization. Topics for context will include the origin of the elements, the origin of solar systems, and the origin of life as well as the basic principles of the current biotechnical revolution. Scientific understanding will be combined with knowledge about strategies for raising community awareness in order to (re)formulate public policy. In teams, students will be asked to define the problems; research available and prospective solutions; identify the technical, social, political, and economic constraints; and finally propose a workable strategy for making progress toward solutions.

HIS 224 American Environmental History 3 Credits

Surveys the history of the North American environment from pre-Columbian times through the 20th century. Topics include Native American uses of the environment; the reshaping of ecosystems under European colonization; U.S. frontier expansion; the ecological impact of industrialization and urbanization; and the rise of the environmental movement.

IND 316 Nature's Business 3 Credits

This interdisciplinary, team-taught, experiential learning course brings together various science, liberal arts, and business perspectives in examining the relationships among biological, social, environmental, economic, geological, and political issues. Topics to be discussed and researched by students can include, but are not limited to, ecotourism, sustainable development, biodiversity, local and regional environmental and historical geology, cultural norms, and the legal and political systems of the country being visited. The study tour component of the course provides students with a first-hand opportunity to observe and record field data from settings outside of the United States and in their discipline of interest. Typically, there are approximately 12 hours of pre-trip lectures, seminars, and/or faculty/student presentations during the fall semester, an international study tour, 9-14 days in length, during January (exact dates and length depend on the international location), and approximately three hours of post-trip meetings, seminars, and student presentations during the spring semester. Students enroll in the course during the spring semester. Note: This course is cross-listed as CBA 316; Students may not get credit for both CBA 316 and IND 316. For Business students who take the course as CBA 316, the course will count as a business course. If taken as IND 316, the Business student will receive credit as a liberal arts and science course.

Prerequisite(s): Permission of Instructor.

PHL 215 Environmental Ethics 3 Credits

A comprehensive introduction to environmental ethics that examines the major theoretical approaches, including anthropocentric (human-centered), zoocentric or sentientist (animal-centered), and biocentric or ecocentric (nature-centered) value systems, as well as the most important critiques of these ethical approaches. We will examine and analyze several classical ethical theories that are particularly relevant to a study of contemporary environmental controversies. We will also address specific issues such as biodiversity and wilderness preservation; human use of animals as food, entertainment, and research subjects; environmental racism and toxic dumping; sustainable development, population and consumption. Students will analyze and discuss the ethical dimensions of several contemporary environmental controversies. This course counts towards the fulfillment of the Disciplinary Perspectives element of the CLAS general education curriculum.

POL 328 Environmental Politics 3 Credits

Environmental Politics examines how policymakers deal with the political challenges of unsustainable resource consumption, which is a primary determinant of environmental problems such as climate change, adverse health effects, and biodiversity loss. The course introduces students to environmental politics and policies at the local, state, national, and international levels. The course is designed to provide students with a framework for understanding how varied interests compete within political institutions in order to transform contending ideas into public policy. With that in mind, students will not only become more informed consumers of political information, but will also become more effective at analyzing and advocating for policies as it relates to the environment.

POL 329 Comparative Environmental Policy 3 Credits

Comparative Environmental Policy analyzes cross-national approaches in developing, implementing, and evaluating policy responses to environmental problems. The course analyzes the political factors, actors, and tools that help and explain why some societies have been more likely to develop effective responses to environmental threats.

POL 330 Geopolitics of Energy 3 Credits

Geopolitics of Energy Security explores the role of energy in shaping global politics, natural resource management practices and volatility in economic markets. The course begins with an overview of energy security and explores issues associated with energy production, national security, energy consumption, and environmental conservation. Throughout the course students will become familiar with basic data, trends, issues and options in the exploration and production of renewable and non-renewable energy sources.

SOC 225 Population Study 3 Credits

Demography; its definition, historical emergence, and growth; population as a social problem in developing and developed nations; population theories, sources and methods of demographic data, population composition, and distribution; demographic processes including fertility, mortality, and migration.

Prerequisite(s): SOC 101.