Environmental Studies

Program of Study

In the early twenty-first century, environmental challenges—including deforestation, climate change, pollution, water resources, habitat loss, and the food and energy needs of a growing population—are among the most pressing issues facing the world. Many environmental processes operate at a global scale and create natural and human consequences that cannot be addressed solely from within a single area or discipline. At the same time, local and historical conditions are always at issue in addressing environmental processes, problems, and possibilities. The study of critical environmental issues requires both area specific knowledge and knowledge that crosses traditional academic and geographic boundaries. The Environmental Studies program allows students to address these issues through focused interdisciplinary coursework and research.

The undergraduate major is housed in the Social Sciences Collegiate Division and emphasizes interdisciplinary approaches to environmental topics, incorporating models and methods from the humanities and social and natural sciences. The program is designed to be complementary to the Environmental Sciences BA/BS program, although students in Environmental Studies will complete basic course work in both the natural sciences and quantitative analyses as a foundation for studying environmental questions.

Students who are majoring in Environmental Studies are expected to build a foundation for studying environmental questions by completing basic course work both in the natural sciences and in quantitative analyses. The program draws on the existing strengths and interests of College faculty in a variety of disciplines and divisions. The curriculum is organized around required elements that include:

1. a common introductory sequence
2. course work in two broadly conceived thematic tracks
3. a thesis
4. an internship or field studies component

The two thematic tracks are (1) Environmental Economics and Policy, and (2) Socio-natural Systems and Frameworks. Although students will design a program of study that will emphasize one of the tracks, course work from each will be included.

The major in Environmental Studies is coordinated by the Program on the Global Environment, which is housed in the Center for International Studies.

Students in other fields of study may also complete a minor in Environmental Studies. Information follows the description of the major.

NOTE: The BS in Environmental Science that is offered by the Department of Geophysical Sciences may be more appropriate for students who intend to pursue postgraduate studies or professional careers in the natural sciences. Students who matriculated before July 2006 and have questions about Environmental Studies courses that they have already taken should contact the program director of
Environmental Studies, Mark Lycett (702.6040, mlycett@uchicago.edu), to devise their program of study.

**SUMMARY OF PROGRAM**

Students who are majoring in Environmental Studies must take thirteen courses according to the following guidelines.

Environmental Studies Core Sequence

Students are required to take the two-course core sequence in Environmental Studies:

ENST 21201 Human Impact on the Environment

& ENST 21301 Making the Natural World: Foundations of Human Ecology

ENST 21201 Human Impact on the Environment and ENST 21301 Making the Natural World: Foundations of Human Ecology are required of students who are majoring in Environmental Studies and may be taken in any order.

One course provides an overview of fundamental issues in environmental studies while the other stresses contemporary concerns and policy applications. Each course is oriented toward one of the basic thematic tracks. Students are strongly encouraged to complete the sequence in their second year.

Thematic Tracks

Students must take four courses in their area of emphasis and two courses in their supporting track for a total of six courses.

A. **Environmental Economics and Policy Track**: This concentration emphasizes issues such as environmental law, development, globalization, and policy studies. This track has a more applied focus and is inclined more toward present-day issues and strategies in the context of politics, law, and economics. A detailed course list can be found at pge.uchicago.edu/undergraduate/tracks.

B. **Socio-natural Systems and Frameworks Track**: This concentration emphasizes environmental history; landscape studies; human ecology and demography; and environmental ethics, philosophy, and representation. Included in this track are courses on cultural and historical constructions of the natural and the human; this track emphasizes intellectual frameworks as well as the use of substantive information from the social sciences, sciences, and humanities. A detailed course list can be found at pge.uchicago.edu/undergraduate/tracks.

Most courses taken beyond the general education requirement that have significant environmental content may be counted in one of the two thematic tracks for the Environmental Studies major or minor. Approved courses for each of these tracks and for the Environmental Sciences course work requirement are selected quarterly by the faculty. No course may be counted for more than one requirement. For the complete list of approved courses, consult the program adviser or visit pge.uchicago.edu.
Quantitative Analysis

One course must be taken to demonstrate competence in quantitative analysis. Students may choose to take either STAT 22000 Statistical Methods and Applications or an equivalent.

Environmental Sciences

Students must take three courses in environmental sciences. This supporting course work must be chosen from an approved list. A detailed course list can be found at pge.uchicago.edu/undergraduate/tracks.

BA Thesis

Students are required to take one course that emphasizes research design and skills and the writing process. Students are expected to develop significant independent research projects in close consultation with their preceptor and faculty adviser. In consultation with Environmental Studies preceptors, students prepare a topic page that is due eighth week of Spring Quarter in their third year.

Students are required to secure a faculty adviser and a second reader. The thesis adviser and second reader may be chosen from among the faculty teaching in Environmental Studies and related fields. Where appropriate, outside scholars, scientists, or policy experts may be added as additional readers with the approval of the program director. The second reader may also be an Environmental Studies preceptor.

In Autumn Quarter of their fourth year, students register for ENST 29801 BA Colloquium I, which is designed to teach research skills and more generally to aid the research and writing process. The final version of the BA thesis is due by the second Friday of the quarter in which the student plans to graduate.

This program may accept a BA paper or project used to satisfy the same requirement in another major if certain conditions are met and with the consent of the other program director. Approval from both program directors is required. Students should consult with the directors by the earliest BA proposal deadline (or by the end of their third year, when neither program publishes a deadline). A consent form, to be signed by the directors, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

Internship or Field Studies Program

In addition to course work, students will be required to participate in an approved internship or field studies program with significant links to their program of study. More details can be found at pge.uchicago.edu/undergraduates/internships.

Summary of Requirements

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>ENST 21201</td>
<td>Human Impact on the Environment</td>
<td>100</td>
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<tr>
<td>ENST 21301</td>
<td>Making the Natural World: Foundations of Human Ecology</td>
<td>100</td>
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<tr>
<td>Four courses in the thematic track of emphasis</td>
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Two courses in the supporting thematic track  200
STAT 22000  Statistical Methods and Applications (or equivalent)  100
Three courses in the environmental sciences chosen from an approved list  300
ENST 29801  BA Colloquium I  100
Total Units  1300

Advising

Application for admission to the Environmental Studies program should be made to the program adviser, who explains requirements and arranges a preliminary program of study. Admission to the major or minor is complete when a program of study has been approved by the program director. This program of study, which the student formulates in consultation with both the program adviser and the program director, should be in place by a student’s third year.

Environmental Studies Majors and Minors must submit the Intent to Graduate form no later than the 2nd week of the quarter in which you intend to graduate. The form is available online and must be submitted electronically. See pge.uchicago.edu/undergraduates/requirements/notice-of-intent for more information.

Grading

Students who are majoring in Environmental Studies must receive quality grades in all thirteen courses taken to meet the requirements of the program. Students may apply a maximum of two course credits for supervised individual reading or research to meet the requirements of the program.

Honors

Eligibility for honors requires an overall GPA of 3.0 or higher, a GPA of 3.5 or higher in the courses taken to meet the requirements of the program, and a BA thesis that is judged to be superior by the faculty and preceptor readers.

MINOR PROGRAM IN ENVIRONMENTAL STUDIES

Students who are not Environmental Studies majors may complete a minor in Environmental Studies. Such a minor requires that six courses be taken according to the following guidelines:

ENST 21201  Human Impact on the Environment  100
ENST 21301  Making the Natural World: Foundations of Human Ecology  100
Four courses in one of the two thematic tracks chosen in consultation with the program director  400
Total Units  600

Students who elect the minor program in Environmental Studies should meet with the program director before the end of Spring Quarter of their third year to declare their intention to complete the minor and select appropriate courses. The approval of the program director for the minor program should be submitted to a student’s College adviser by the deadline above on a form obtained from the adviser.
Courses in the minor (1) may not be double counted with the student's major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and at least half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

ENVIRONMENTAL STUDIES COURSES

ENST 12100. Chemistry and the Atmosphere. 100 Units.
This course focuses on aspects of chemistry as they apply to the Earth's atmosphere. The first half considers atmospheric structure and fundamental chemical principles, while the second half presents examples of chemical systems that operate in the atmosphere. Topics include the chemical composition of the atmosphere, the structure of atoms and molecules, the nature of chemical reactions, the interaction of solar radiation with atmospheric gases, the properties of the water molecule, formation of an ozone layer, and the chemistry of urban air pollution.
Terms Offered: Not offered 2015-16
Equivalent Course(s): PHSC 13500

ENST 12300. Global Warming: Understanding the Forecast. 100 Units.
This course presents the science behind the forecast of global warming to enable the student to evaluate the likelihood and potential severity of anthropogenic climate change in the coming centuries. It includes an overview of the physics of the greenhouse effect, including comparisons with Venus and Mars; an overview of the carbon cycle in its role as a global thermostat; predictions and reliability of climate model forecasts of the greenhouse world. (L)
Instructor(s): D. Archer, D. MacAyeal Terms Offered: Autumn, Spring
Prerequisite(s): Some knowledge of chemistry or physics helpful.
Equivalent Course(s): PHSC 13400, GEOS 13400, ENSC 13400

ENST 12402. Life through a Genomic Lens. 100 Units.
The implications of the double helical structure of DNA triggered a revolution in cell biology. More recently, the technology to sequence vast stretches of DNA has offered new vistas in fields ranging from human origins to the study of biodiversity. This course considers a set of these issues, including the impact of a DNA perspective on the legal system, on medicine, and on conservation biology.
Instructor(s): A. Turkewitz, M. Nobrega Terms Offered: Winter
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS, except by petition.
Equivalent Course(s): BIOS 11125
ENST 12404. Environmental Ecology. 100 Units.
This course emphasizes basic scientific understanding of ecological principles that relate most closely to the ways humans interact with their environments. It includes lectures on the main environmental pressures, notably human population growth, disease, pollution, climate change, habitat destruction, and harvesting. We emphasize the ongoing impacts on the natural world, particularly causes of population regulation and extinction and how they might feed back on to humans. Discussion required.
Instructor(s): T. Price Terms Offered: Winter
Prerequisite(s): NTSC 10300 or BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS, except by petition.
Equivalent Course(s): BIOS 13107,NTSC 10400

ENST 13106. The Hungry Earth: Light, Energy, and Subsistence. 100 Units.
This course considers the continuing erosion of the resources of the Earth by the persisting pressures of a growing human population, which makes a broad knowledge and appreciation of biology essential. Discussion includes the principles of energy conversion by plants as primary producers, the evolution of the structures and mechanisms involved in energy conversion, the origin of crop plants, improvements of plants by conventional breeding and genetic engineering, and the interactions of plants with pathogens and herbivores.
Instructor(s): M. Ruddat Terms Offered: Winter
Prerequisite(s): BIOS 10110 or BIOS 10130
Equivalent Course(s): BIOS 13106

ENST 13300. The Atmosphere. 100 Units.
This course introduces the physics, chemistry, and phenomenology of the Earth's atmosphere, with an emphasis on the fundamental science that underlies atmospheric behavior and climate. Topics include (1) atmospheric composition, evolution, and structure; (2) solar and terrestrial radiation in the atmospheric energy balance; (3) the role of water in determining atmospheric structure; and (4) wind systems, including the global circulation, and weather systems.
Instructor(s): D. Abbot Terms Offered: Spring
Prerequisite(s): MATH 13100-MATH 13200
Equivalent Course(s): GEOS 13300,ENSC 13300

ENST 20500. Introduction to Population. 100 Units.
This course provides an introduction to the field of demography, which examines the growth and characteristics of human populations. It also provides an overview of our knowledge of three fundamental population processes: fertility, mortality, and migration. We cover marriage, cohabitation, marital disruption, aging, and population and environment. In each case we examine historical trends. We also discuss causes and consequences of recent trends in population growth, and the current demographic situation in developing and developed countries.
Instructor(s): L. Waite Terms Offered: Spring
Equivalent Course(s): SOCI 30122,GNSE 20120,GNSE 30120,SOCI 20122
ENST 21201. Human Impact on the Environment. 100 Units.
The goal of this course is to analyze the impact of the human enterprise on the
world that sustains it. Topics include human population dynamics, historical trends
in human well-being, and our use of natural resources—especially in relation to the
provision of energy, water, and food—and the impacts that these activities have on
the range of goods and services provided by geological/ecological systems. We read
and discuss diverse sources and write short weekly papers.
Instructor(s): Staff Terms Offered: Autumn
Note(s): ENST 21201 and 21301 are required of students who are majoring in
Environmental Studies and may be taken in any order.
Equivalent Course(s): NCDV 21201

ENST 21301. Making the Natural World: Foundations of Human Ecology. 100
Units.
This course considers the conceptual underpinnings of contemporary Western
notions of ecology, environment, and balance, but it also examines several specific
historical trajectories of anthropogenic landscape change. We approach these
issues from the vantage of several different disciplinary traditions, including
environmental history, philosophy, ecological anthropology, and paleoecology.
Instructor(s): M. Lycett Terms Offered: Winter
Note(s): ENST 21201 and 21301 are required of students who are majoring in
Environmental Studies and may be taken in any order.
Equivalent Course(s): ANTH 21303

ENST 21800. Economics and Environmental Policy. 100 Units.
This course combines basic microeconomic theory and tools with contemporary
environmental and resources issues and controversies to examine and analyze
public policy decisions. Theoretical points include externalities, public goods,
common-property resources, valuing resources, benefit/cost analysis, and
risk assessment. Topics include pollution, global climate change, energy use
and conservation, recycling and waste management, endangered species and
biodiversity, nonrenewable resources, congestion, economic growth and the
environment, and equity impacts of public policies.
Instructor(s): S. Shaikh Terms Offered: Autumn
Prerequisite(s): ECON 19800 or higher, or PBPL 20000
Equivalent Course(s): LLSO 26201, PBPL 21800

ENST 22000. The Anthropology of Development. 100 Units.
This course applies anthropological understanding to development programs
in "underdeveloped" and "developing" societies. Topics include the history of
development; different perspectives on development within the world system; the
role of principal development agencies and their use of anthropological knowledge;
the problems of ethnographic field inquiry in the context of development programs;
the social organization and politics of underdevelopment; the culture construction
of "well-being;" economic, social, and political critiques of development; population,
consumption, and the environment; and the future of development.
Instructor(s): A. Kolata Terms Offered: Not offered 2015-16; will be offered 2016-17
Equivalent Course(s): ANTH 22000, ANTH 35500
ENST 22506. The Natures of the Factory Farm. 100 Units.
This course looks at the culture, technology, politics, and ecology of industrial agriculture through the lens of the animal-based "factory" farm. Over the quarter we will trace key steps along the process of manufacturing industrialized animals from life to death in order to think about the factory farm's logic, value, and consequences for rural environments (primarily) within the United States. By emphasizing the historical and cultural conditions of possibility that enable the modern-day factory farm, this course illustrates how mass-producing life forms is more than just a matter of technology, profit-making, or necessity. Instead, we will see how legal definitions of the "farm" versus the "factory," ideological notions of animal (and human) "nature," labor law, animal confinement, and the corporate ownership of genetic breeds contribute to its growing ascendency as a global norm of animal production. But the factory farm has also led to new ideals for rural life that go far beyond classic forms of American agrarianism. As such, we will look to a series of case studies that take up the ecological politics of heritage-breed animals, raw milk production, and recent (Europe-based) projects that try to redeem certain elements of industrial agriculture. Along the way, students will receive an introduction to the analysis of food chains, applied ethology, animal studies, agrarian studies, and rural environmental politics.
Instructor(s): A. Blanchette Terms Offered: not offered 2015–16

ENST 23100. Environmental Law. 100 Units.
This lecture/discussion course examines the development of laws and legal institutions that address environmental problems and advance environmental policies. Topics include the common law background to traditional environmental regulation, the explosive growth and impact of federal environmental laws in the second half of the twentieth century, regulations and the urban environment, and the evolution of local and national legal structures in response to environmental challenges.
Instructor(s): R. Lodato Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing, or consent of instructor
Equivalent Course(s): LLSO 23100, PBPL 23100

ENST 23289. Marine Ecology. 100 Units.
This course provides an introduction into the physical, chemical, and biological forces controlling the function of marine ecosystems and how marine communities are organized. The structures of various types of marine ecosystems are described and contrasted, and the lectures highlight aspects of marine ecology relevant to applied issues such as conservation and harvesting.
Instructor(s): T. Wootton Terms Offered: Winter
Prerequisite(s): Prior introductory course in ecology or consent of instructor
Equivalent Course(s): BIOS 23289
ENST 23500. Political Sociology. 100 Units.
This course provides analytical perspectives on citizen preference theory, public choice, group theory, bureaucrats and state-centered theory, coalition theory, elite theories, and political culture. These competing analytical perspectives are assessed in considering middle-range theories and empirical studies on central themes of political sociology. Local, national, and cross-national analyses are explored. The course covers readings for the Sociology Ph.D Prelim exam in political sociology. Instructor(s): T. Clark Terms Offered: Spring
Prerequisite(s): Completion of the general education requirement in social sciences Equivalent Course(s): SOCI 20106, PBPL 23600, SOCI 30106

ENST 23900. Environmental Chemistry. 100 Units.
The focus of this course is the fundamental science underlying issues of local and regional scale pollution. In particular, the lifetimes of important pollutants in the air, water, and soils are examined by considering the roles played by photochemistry, surface chemistry, biological processes, and dispersal into the surrounding environment. Specific topics include urban air quality, water quality, long-lived organic toxins, heavy metals, and indoor air pollution. Control measures are also considered. (L)
Instructor(s): A. Colman, D. Archer Terms Offered: Autumn
Prerequisite(s): CHEM 11101-11201 or equivalent, and prior calculus course Equivalent Course(s): GEOS 23900, GEOS 33900, ENSC 23900

ENST 24102. Environmental Politics. 100 Units.
This course examines the different theoretical underpinnings of environmental activism and elucidates the manner in which they lead to different ends. We explore several contrasting views of environmentalism, including the land ethic, social ecology, and deep ecology. Discussions are based on questions posed about the readings and the implications they suggest. Class participation is required. Instructor(s): R. Lodato Terms Offered: Spring
ENST 24203. Paradise and Parks: Art, Science, Politics. 100 Units.
This course will address representations of the blissful life on Earth. How did the concept of paradise—etymologically, an enclosed royal hunting park—rapidly transform from a hyperlocal place into a practical aspiration that could be transported, translated, and, by dint of art and science, or perceptual and experimental insights, actually forged? Our readings will be anchored in Europe and the Atlantic world, 1500-1800, at a time when paradise was widely reconceived as re-creatable. We’ll sample works of early modern political philosophy, theology, and colportage, though our emphasis will be on what we’ve since come to separate as the imaginations of art and the accounts of science: poems, prose fictions, fables, plays, essays, and scientific treatises. Along the way, we’ll weigh the notion of paradise against its close relations (the Golden Age, Arcadia, pastoral, Utopia), in order to test the thesis that paradise is uniquely earthbound—from the first, an envisioning of earthly bodies that are intimately implicated. And we’ll see if we can build a kind of alphabet for our theme, discovering across our readings its core formal elements, such as beauty, pleasure, health, and peaceable activity.
Instructor(s): O’Connell, Caryn Terms Offered: Spring
Equivalent Course(s): ENGL 24110, INST 24103, GLST 24103

ENST 24701. U.S. Environmental Policy. 100 Units.
Making environmental policy is a diverse and complex process. Environmental advocacy engages different governmental agencies, congressional committees, and courts, depending on the issue. This course examines how such differentiation has affected policy making over the last several decades.
Instructor(s): R. Lodato Terms Offered: Autumn
Equivalent Course(s): PBPL 24701, LLSO 24901

ENST 24705. Energy: Science, Technology, and Human Usage. 100 Units.
This course covers the technologies by which humans appropriate energy for industrial and societal use, from steam turbines to internal combustion engines to photovoltaics. We also discuss the physics and economics of the resulting human energy system: fuel sources and relationship to energy flows in the Earth system; and modeling and simulation of energy production and use. Our goal is to provide a technical foundation for students interested in careers in the energy industry or in energy policy. Field trips required to major energy converters (e.g., coal-fired and nuclear power plants, oil refinery, biogas digester) and users (e.g., steel, fertilizer production).
Instructor(s): E. Moyer Terms Offered: Spring
Prerequisite(s): Knowledge of physics or consent of instructor
Equivalent Course(s): GEOS 24705, GEOS 34705, ENSC 21100
ENST 25100. Ecological Applications to Conservation Biology. 100 Units.
This course focuses on the contribution of ecological theory to the understanding of current issues in conservation biology. We emphasize quantitative methods and their use for applied problems in ecology (e.g., design of natural reserves, risk of extinction, impact of harvesting, dynamics of species invasions, role of species interaction). Course material is drawn mostly from the current primary literature. One Saturday field trip and computer modeling labs required in addition to scheduled class time. (L)
Instructor(s): C. Pfister, E. Larsen
Terms Offered: Autumn
Prerequisite(s): Completion of the general education requirement for the biological sciences and consent of instructor
Equivalent Course(s): BIOS 23351, ECEV 31300

ENST 25300. The Planetary Footprint of Farming. 100 Units.
This course draws on a ten-day field study of small, organic farms in the Berkshires to explore the environmental impact of modern industrial agriculture and realistic alternatives. Of interest are the roles of natural setting (i.e., geology, climate, meteorology); energy use and material flow; techniques of food production; dietary choices; and development and conservation strategies. Students are financially responsible for travel in December. A classroom component of lectures, readings, and exercises precedes the field trip.
Instructor(s): P. Martin
Terms Offered: Autumn, Winter
Prerequisite(s): Third- or fourth-year standing, or consent of instructor
Equivalent Course(s): GEOS 25300

ENST 25500. Biogeography. 100 Units.
This course examines factors governing the distribution and abundance of animals and plants. Topics include patterns and processes in historical biogeography, island biogeography, geographical ecology, areography, and conservation biology (e.g., design and effectiveness of nature reserves).
Instructor(s): B. Patterson (odd years, lab). L., Heaney (even years, discussion)
Terms Offered: Winter
Prerequisite(s): Completion of the general education requirement in the biological sciences and a course in either ecology, evolution, or earth history; or consent of instructor
Equivalent Course(s): BIOS 23406, EVOL 45500, GEOG 25500, GEOG 35500

ENST 25900. Cultural Geography. 100 Units.
This course examines the two main concerns of this field of geography: (1) the logic and pathology revealed in the record of the human use and misuse of the Earth, and (2) the discordant relationship of the world political map with more complicated patterns of linguistic and religious distribution.
Instructor(s): M. Mikesell
Terms Offered: Winter
Equivalent Course(s): GEOG 20100, GEOG 30100
ENST 26100. Roots of the Modern American City. 100 Units.
This course traces the economic, social, and physical development of the city in North America from pre-European times to the mid-twentieth century. We emphasize evolving regional urban systems, the changing spatial organization of people and land use in urban areas, and the developing distinctiveness of American urban landscapes. All-day Illinois field trip required.
Instructor(s): M. Conzen Terms Offered: Autumn
Note(s): This course offered in odd years.
Equivalent Course(s): GEOG 26100,GEOG 36100,HIST 28900,HIST 38900

ENST 26201. Naturalizing Disaster: Nature, Vulnerability, and Social History. 100 Units.
The United Nations International Strategy for Disaster Reduction defines disaster in three crucial terms: hazards, vulnerability, and capacity. While only the first of these can be "natural" in the way that that term is commonly understood, catastrophic events and processes are frequently represented as exogenous, autonomous, and unpredictable elements of a bio-physical world. Beginning from the theorization of disaster as a property of nature, this seminar examines the political ecology of drought, flood, earthquake, and famine in their historical, economic, and cultural contexts, focusing on community vulnerability and capacity as outcomes of socio-natural histories and relations. Drawing on historical and contemporary case studies, we will consider a number of dimensions of the dynamic between nature, dislocation, and communities in an increasingly vulnerable world.
Instructor(s): M. Lycett and P. Drake Terms Offered: Not Offered 2015-16
Equivalent Course(s): ANTH 28200,ANTH 38220

ENST 26220. Southeast Asia and the Environmental Imagination. 100 Units.
This course will explore the major environmental issues that are impacting social and ecological systems in Southeast Asia today. These issues include, but are not limited to, water management, deforestation, pollution control, energy extraction, land rights, development, and disaster vulnerability. We will examine case studies that are representative of various social contexts (e.g., indigenous, national), geographical scales (e.g., local, transnational), and ecological settings (e.g., seas, forests) to examine the ways people understand and relate to different environments in Southeast Asia. To understand the complex political, economic, and cultural factors that shape human-environment interactions in this dynamic region, the class will draw from a set of texts and analytical perspectives that crosses disciplines. Readings will include literary, historical, and theoretical texts by both Southeast Asian and Western writers to consider the various ways nonhuman nature is understood and engaged with across temporal and cultural settings. We will utilize an interdisciplinary set of concepts and analytical tools from the arts, humanities, and environmental sciences to help us think more rigorously and imaginatively about the environment.
Instructor(s): P. Drake Terms Offered: not offered 2015-16
ENST 26300. The Chinese Environment. 100 Units.
This course explores the changing interrelationship between humans and the physical environment in China. We begin by dealing with physical geography and the country’s resource base. We then consider the human response to the opportunities offered by China’s physical environment. Finally, we shift our emphasis to environmental problems. Students are required to attend both sessions. Instructor(s): R. Edmonds Terms Offered: Spring
Equivalent Course(s): GEOG 26300, GEOG 36300

ENST 26404. Literature and the Environment. 100 Units.
Though literature is often thought of as the province of culture, a great many texts are concerned with nature as well. This course explores the relationship between literary and environmental studies by exploring the concept of place in some key examples of environmental literature from around the English-speaking world. How does Wordsworth represent the Lake District? Thoreau his famous New England woods? What is “place” for Derek Walcott? Or the Indian novelist Amitav Ghosh? By exploring a wide range of fictions from Great Britain, the United States, the Caribbean, South Africa and India, the course helps students come to a fuller understanding of the way that Anglophone writers have represented the environment over time. Assignments include regular attendance and participation, bi-weekly blog posts on representations of nature in popular culture, and three short essays. (B)
Instructor(s): B. Smith Terms Offered: Spring
Equivalent Course(s): ENGL 26404

ENST 26420. Sustainable Food Enterprise Lab. 100 Units.
This practicum explores efforts to promote environmental and social sustainability in the food system through market initiatives. Student teams will work on consulting projects for Chicago based client organizations, focusing on the connection between business success and social/environmental impact. Students will address a problem or an innovation challenge for the client and develop actionable, research-based recommendations. Student teams will refine the problem, identify appropriate analytical tools to address it, design data collection methods, collect and analyze data, develop data-driven recommendations and present to the client’s management. Students will be mentored in their work with clients in order to develop their personal and inter-personal skills for working on environmental and social change. Project-based experiential learning will be complemented by readings and discussions that will support the students’ work and invite them to reflect deeply and critically on sustainable food enterprises.
Instructor(s): T. Yifat Terms Offered: Winter
ENST 26500. Environmental Economics. 100 Units.
This course applies theoretical and empirical economic tools to environmental issues. We discuss broad concepts such as externalities, public goods, property rights, market failure, and social cost-benefit analysis. These concepts are applied to areas that include nonrenewable resources, air and water pollution, solid waste management, and hazardous substances. We emphasize analyzing the optimal role for public policy.
Instructor(s): G. Tolley, S. Shaikh Terms Offered: Autumn
Prerequisite(s): ECON 20100
Equivalent Course(s): ECON 26500

ENST 26505. Non-Industrial Agriculture. 100 Units.
Agriculture is, fundamentally, a human manipulation of the environment, a deliberately maintained successional state designed to serve human needs and desires. In this course, we use the history of non-industrial agriculture to think through some contemporary concerns about environmental change and the sources of our food—including topics such as genetically modified plants, fertilizers, sustainability, and invasive species. Beginning with the origins of agriculture in the early Holocene, we examine several forms of so-called "traditional" agriculture in the tropics and elsewhere, from swidden to intensive cropping. While the course is framed in terms of contemporary concerns, our focus is primarily historical and ethnographic, focusing on the experiences of agriculturalists over the last ten thousand years, including non-industrial farmers today. Students will be expected to produce and present a research paper.
Instructor(s): K. Morrison Terms Offered: Winter
Equivalent Course(s): ANTH 26505, ANTH 46505
ENST 26530. Environment, Agriculture, and Food: Economic and Policy Analysis. 100 Units.
The connections between environment, agriculture, and food are inherent in our social, cultural, and economic networks. Land use, natural resource management, energy balances, and environmental impacts are all important components in the evolution of agricultural systems. Therefore it is important to develop ways in which to understand these connections in order to design effective agricultural programs and policies. This course is designed to provide students with guidance on the models and tools needed to conduct an economic research study on the intersecting topics of environment, agriculture, and food. Students learn how to develop original research ideas using a quantitative and applied economic policy analysis for professional and scholarly audiences. Students collect, synthesize, and analyze data using economic and statistical tools. Students provide outcomes and recommendations based on scholarly, objective, and policy relevant research rather than on advocacy or opinions, and produce a final professional-quality report for a workshop presentation and publication. This small seminar course is open by instructor consent to undergraduate and graduate students who meet the prerequisites. For consideration, please submit a one-page proposal of research to pge@uchicago.edu.
Instructor(s): S. Shaikh Terms Offered: Winter
Prerequisite(s): ECON 20000 or ECON 20100 or PBPL 20000 or PBPL 22200 (or equivalent), STAT 22000 or STAT 23400 or PBPL 26400 (or equivalent); for ECON Enrollment: ECON 20000 and ECON 20100, STAT 23400
Equivalent Course(s): ECON 26530, PBPL 26530, PPHA 32510

ENST 26531. Environment, Agriculture, and Food: Advanced Economic and Policy Analysis. 100 Units.
This course is an extension of ENST 26530 but also stands alone as a complete course itself. Students don’t need to take ENST 26530 to enroll in this course. This small seminar course is open by instructor consent to undergraduate and graduate students who meet the prerequisites. For consideration, please submit a one-page proposal of research to pge@uchicago.edu.
Instructor(s): S. Shaikh Terms Offered: Spring
Prerequisite(s): ECON 20000 or ECON 20100 or PBPL 20000 or PBPL 22200 (or equivalent), STAT 22000 or STAT 23400 or PBPL 26400 (or equivalent); for ECON Enrollment: ECON 20000 and ECON 20100, STAT 23400
Equivalent Course(s): ECON 26540, PBPL 26531, PPHA 32520
ENST 26701. Tropical Ecology. 100 Units.
This course will provide an introduction to tropical ecology. We will cover topics ranging from the biogeochemical properties that create tropical ecosystems to the structure of tropical forests to the factors that contribute to the high biodiversity characteristic of tropical zones. We will also look at interspecific interactions important in tropical systems, including trophic dynamics, chemically mediated plant-insect relationships, pollination, and decomposition. We will also discuss issues of conservation concern in tropical forests. The course will draw from a comprehensive textbook as well as a selection of primary literature.
Instructor(s): T. Massad Terms Offered: Not Offered 2015-16
Prerequisite(s): Completion of the general education requirement in biological sciences or consent of instructor
Equivalent Course(s): BIOS 23257

ENST 27100-27201-27220-27301-27320. Integrative Research Seminar: Calumet; Food Security and Agriculture: Calumet; Environmental Management and Planning in the Calumet Region; Restoration Ecology; Topics in the Ecology of the Calumet Region.
This full-time, one-quarter sequence is intended to help students bridge theory and practice in environmental studies. The program features four integrated courses, projects, field trips, guest lectures, and presentations. Students will work in the classroom and field as they integrate perspectives from the sciences, humanities, and social sciences in the study of local environments and communities. Enrollment is based on acceptance into the Calumet Quarter Program. Visit pge.uchicago.edu/calumet for an application, which requires an unofficial transcript and letter of recommendation. Students must enroll in the three core Calumet Quarter courses ENST 27100-27201-27301 and may also enroll in the optional readings course ENST 29720. The Calumet Quarter will be offered in Spring 2015-16.

ENST 27100. Integrative Research Seminar: Calumet. 100 Units.
This course examines the history of land use and social and environmental issues in the Calumet region. In addition to discussing the Calumet region broadly, students develop final projects grounded in research from all courses in the field studies program. Talks and discussions are led each week by guest lecturers who represent industry, nonprofit organizations, or Chicago government, or who are conducting research within the Calumet region.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.
ENST 27201. Food Security and Agriculture: Calumet. 100 Units.
Do you know where your next meal will come from? Many people around the
world, and even close to home, do not. The Food and Agricultural Organization
explains that food security exists when all people, at all times, have physical,
social, and economic access to sufficient, safe and nutritious food to meet their
dietary needs and food preferences for an active and healthy life. Food security
is thus a complex issue involving aspects of food production and distribution,
poverty, buying power, and social networks, and cultural choice. In this course
we use the Calumet region as a case study to examine some aspects of the food
security debate, especially the basic conceptual divide between the framework
of food security, as defined by international organizations above, and the more
ground-root notion of food sovereignty. Though we will aim for an overview
of the issues, we focus this quarter more specifically on issues of agriculture
and the food system, including urban agriculture, permaculture, and other
challenges to the dominant industrial model. In a region with significant
economic distress and area of “food desert,” the Calumet presents examples of
both challenge and response to this critical topic.
Instructor(s): K. Morrison Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter
Program.

ENST 27220. Environmental Management and Planning in the Calumet
Region. 100 Units.
This course focuses on the identification and measurement of environmental
outcomes in the Calumet Region of Chicago. Topics include the quantification
of air quality impacts from industrial pollution and the potential for green
infrastructure development to manage stormwater in the region and beyond.
The course will introduce students to the environmental concerns and
opportunities in the area and develop the methods and tools for measurement,
management and planning for improved outcomes for residents and
businesses. The course will draw on economic concepts and tools through
applications of environmental management and policy. Enrollment in this
course requires participation in the Calumet Quarter.
Instructor(s): S. Shaikh Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter
Program.
ENST 27301. Restoration Ecology. 100 Units.
This course will give students a strong foundation in the discipline of restoration ecology, building up from basic ecological principles to concepts and theory applied to restoration of ecosystems. We will evaluate restoration projects based on a discussion of primary literature with a focus on ecosystems found in the Calumet region. The course will also have a strong field component, and students will work on restoration projects in the Calumet area. Wetland restoration will be a primary focus, and projects will include studies of plant and bird diversity as well as water quality evaluations. The fieldwork will form the basis of the students’ own case studies in restoration ecology, and students will write reports on their field work, analyzing their own projects in the context of the larger body of wetland restoration literature.
Instructor(s): T. Massad Terms Offered: not offered 2015-16
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27320. Topics in the Ecology of the Calumet Region. 100 Units.
We consider stewardship of land, habitats, natural areas, communities, and buildings in the Calumet Region of Chicago and Northwest Indiana. The goal of this course is to give students a basic understanding of select ecological principles and concepts, a demonstration of their application to local ecosystems, and the opportunity to collaborate with stewards in the Calumet.
Instructor(s): A. Anastasio Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27120. Historical Ecology of the Calumet Region. 100 Units.
This seminar explores the historical and political ecology of the Calumet Region through a series of interrelated and cumulative moments of incorporation and transformation, including European colonial expansion, urbanization and market expansion, industrialization and deindustrialization, and the advent of urban wilderness. Through readings, discussion, and field studies, we will examine the role of power, equity, and difference in shaping the social and natural ecology of this region over the past 500 years.
Instructor(s): M. Lycett Terms Offered: Spring
Prerequisite(s): PQ: Enrollment is based on acceptance into the Calumet Quarter Program
ENST 27201-27220-27301-27320. Food Security and Agriculture: Calumet; Environmental Management and Planning in the Calumet Region; Restoration Ecology; Topics in the Ecology of the Calumet Region.
This full-time, one-quarter sequence is intended to help students bridge theory and practice in environmental studies. The program features four integrated courses, projects, field trips, guest lectures, and presentations. Students will work in the classroom and field as they integrate perspectives from the sciences, humanities, and social sciences in the study of local environments and communities. Enrollment is based on acceptance into the Calumet Quarter Program. Visit pge.uchicago.edu/calumet for an application, which requires an unofficial transcript and letter of recommendation. Students must enroll in the three core Calumet Quarter courses ENST 27100-27201-27301 and may also enroll in the optional readings course ENST 29720.

ENST 27201. Food Security and Agriculture: Calumet. 100 Units.
Do you know where your next meal will come from? Many people around the world, and even close to home, do not. The Food and Agricultural Organization explains that food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food security is thus a complex issue involving aspects of food production and distribution, poverty, buying power, and social networks, and cultural choice. In this course we use the Calumet region as a case study to examine some aspects of the food security debate, especially the basic conceptual divide between the framework of food security, as defined by international organizations above, and the more grass-roots notion of food sovereignty. Though we will aim for an overview of the issues, we focus this quarter more specifically on issues of agriculture and the food system, including urban agriculture, permaculture, and other challenges to the dominant industrial model. In a region with significant economic distress and area of “food desert,” the Calumet presents examples of both challenge and response to this critical topic.
Instructor(s): K. Morrison Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.
**ENST 27220. Environmental Management and Planning in the Calumet Region. 100 Units.**
This course focuses on the identification and measurement of environmental outcomes in the Calumet Region of Chicago. Topics include the quantification of air quality impacts from industrial pollution and the potential for green infrastructure development to manage stormwater in the region and beyond. The course will introduce students to the environmental concerns and opportunities in the area and develop the methods and tools for measurement, management and planning for improved outcomes for residents and businesses. The course will draw on economic concepts and tools through applications of environmental management and policy. Enrollment in this course requires participation in the Calumet Quarter. 
Instructor(s): S. Shaikh Terms Offered: Spring 
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

**ENST 27301. Restoration Ecology. 100 Units.**
This course will give students a strong foundation in the discipline of restoration ecology, building up from basic ecological principles to concepts and theory applied to restoration of ecosystems. We will evaluate restoration projects based on a discussion of primary literature with a focus on ecosystems found in the Calumet region. The course will also have a strong field component, and students will work on restoration projects in the Calumet area. Wetland restoration will be a primary focus, and projects will include studies of plant and bird diversity as well as water quality evaluations. The fieldwork will form the basis of the students’ own case studies in restoration ecology, and students will write reports on their field work, analyzing their own projects in the context of the larger body of wetland restoration literature. 
Instructor(s): T. Massad Terms Offered: not offered 2015-16 
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

**ENST 27320. Topics in the Ecology of the Calumet Region. 100 Units.**
We consider stewardship of land, habitats, natural areas, communities, and buildings in the Calumet Region of Chicago and Northwest Indiana. The goal of this course is to give students a basic understanding of select ecological principles and concepts, a demonstration of their application to local ecosystems, and the opportunity to collaborate with stewards in the Calumet. 
Instructor(s): A. Anastasio Terms Offered: Spring 
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.
ENST 27220. Environmental Management and Planning in the Calumet Region. 100 Units.
This course focuses on the identification and measurement of environmental outcomes in the Calumet Region of Chicago. Topics include the quantification of air quality impacts from industrial pollution and the potential for green infrastructure development to manage stormwater in the region and beyond. The course will introduce students to the environmental concerns and opportunities in the area and develop the methods and tools for measurement, management and planning for improved outcomes for residents and businesses. The course will draw on economic concepts and tools through applications of environmental management and policy. Enrollment in this course requires participation in the Calumet Quarter.
Instructor(s): S. Shaikh Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27301-27320. Restoration Ecology; Topics in the Ecology of the Calumet Region.
This full-time, one-quarter sequence is intended to help students bridge theory and practice in environmental studies. The program features four integrated courses, projects, field trips, guest lectures, and presentations. Students will work in the classroom and field as they integrate perspectives from the sciences, humanities, and social sciences in the study of local environments and communities. Enrollment is based on acceptance into the Calumet Quarter Program. Visit pge.uchicago.edu/calumet for an application, which requires an unofficial transcript and letter of recommendation. Students must enroll in the three core Calumet Quarter courses ENST 27100-27201-27301 and may also enroll in the optional readings course ENST 29720.

ENST 27301. Restoration Ecology. 100 Units.
This course will give students a strong foundation in the discipline of restoration ecology, building up from basic ecological principles to concepts and theory applied to restoration of ecosystems. We will evaluate restoration projects based on a discussion of primary literature with a focus on ecosystems found in the Calumet region. The course will also have a strong field component, and students will work on restoration projects in the Calumet area. Wetland restoration will be a primary focus, and projects will include studies of plant and bird diversity as well as water quality evaluations. The fieldwork will form the basis of the students’ own case studies in restoration ecology, and students will write reports on their field work, analyzing their own projects in the context of the larger body of wetland restoration literature.
Instructor(s): T. Massad Terms Offered: not offered 2015-16
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.
ENST 27320. Topics in the Ecology of the Calumet Region. 100 Units.
We consider stewardship of land, habitats, natural areas, communities, and buildings in the Calumet Region of Chicago and Northwest Indiana. The goal of this course is to give students a basic understanding of select ecological principles and concepts, a demonstration of their application to local ecosystems, and the opportunity to collaborate with stewards in the Calumet. Instructor(s): A. Anastasio Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27400. Principles of Epidemiology. 100 Units.
This course does not meet requirements for the biological sciences major. Epidemiology is the study of the distribution and determinants of health and disease in human populations. This course introduces the basic principles of epidemiologic study design, analysis, and interpretation through lectures, assignments, and critical appraisal of both classic and contemporary research articles. Instructor(s): B. Lahey Terms Offered: Autumn
Prerequisite(s): Introductory statistics recommended or Consent of Instructor Equivalent Course(s): PBHS 30900, BIOS 29318, PPHA 36400, STAT 35000

ENST 27420. Urban Gardens: Therapeutic, Educational, and Community Building Practicum. 100 Units.
This teaching practicum will consider emerging research on urban gardens for individual, community, and environmental wellness, and will prepare students to design teachable lessons for school-based programs and community building. Course material is drawn from current literature, curricula, and case studies that demonstrate the impacts and methods of garden education, place-based development, and horticultural therapy. We will discuss the perceived individual, societal, and global problems that urban gardens are thought to address and the reported benefits they deliver. Students will evaluate the goals, organization, methodology, values-bias, and efficacy of existing curricula, and design a series of educational workshops that can be adapted to multiple age groups and learning environments. The course will include one or more field trips, and students will be required to volunteer/teach at an area school or community garden program. Instructor(s): M. Mass Terms Offered: not offered 2015-16
Note(s): This course will include off-site field trips and community service/teaching commitment.
ENST 27750-27751. Practicum in Environment, Agriculture, and Food Policy I-II.
This course sequence is designed to acquaint students to real-world policy-making questions. Students will work together, along with an organizational partner, on designing and conducting a research project. Course work will involve academic literature reviews, various forms of data collection, research design, statistical analysis, and presentation of a final report. Previous projects have included certification of green restaurants in Chicago, mapping of campus green roofs in Chicago, transportation research for a Chicago museum exhibit, and design of incentive programs for storm water management in Chicago. Students in the course will also handle all aspects of running the Environment, Agriculture, and Food Working Group (eaf.uchicago.edu), including communication and outreach through website content and social media. Completion of the two-quarter sequence satisfies the undergraduate public policy studies practicum requirement.

ENST 27750. Practicum in Environment, Agriculture, and Food Policy I. 100 Units.
This course sequence is designed to acquaint students to real-world policy-making questions. Students will work together, along with an organizational partner, on designing and conducting a research project. Course work will involve academic literature reviews, various forms of data collection, research design, statistical analysis, and presentation of a final report. Previous projects have included certification of green restaurants in Chicago, mapping of campus green roofs in Chicago, transportation research for a Chicago museum exhibit, and design of incentive programs for storm water management in Chicago. Students in the course will also handle all aspects of running the Environment, Agriculture, and Food Working Group (eaf.uchicago.edu), including communication and outreach through website content and social media. Completion of the two-quarter sequence satisfies the undergraduate public policy studies practicum requirement.
Instructor(s): S. Shaikh
Terms Offered: Autumn
Prerequisite(s): Open only to Public Policy majors and Environmental Studies majors and minors
Equivalent Course(s): PBPL 27750

ENST 27751. Practicum in Environment, Agriculture, and Food Policy II. 100 Units.
No description available.
Instructor(s): S. Shaikh
Terms Offered: Winter
Prerequisite(s): Open only to Public Policy majors and Environmental Studies majors and minors
Equivalent Course(s): PBPL 27751
ENST 27751. Practicum in Environment, Agriculture, and Food Policy II. 100 Units.
No description available.
Instructor(s): S. Shaikh Terms Offered: Winter
Prerequisite(s): Open only to Public Policy majors and Environmental Studies majors and minors
Equivalent Course(s): PBPL 27751

ENST 28210. Colonial Ecologies. 100 Units.
This seminar explores the historical ecology of European colonial expansion in a comparative framework, concentrating on the production of periphery and the transformation of incorporated societies and environments. In the first half of the quarter, we consider the theoretical frameworks, sources of evidence, and analytical strategies employed by researchers to address the conjunction of environmental and human history in colonial contexts. During the second half of the course, we explore the uses of these varied approaches and lines of evidence in relation to specific cases and trajectories of transformation since the sixteenth century.
Instructor(s): M. Lycett, K. Morrison Terms Offered: Spring
Equivalent Course(s): ANTH 28210, ANTH 48210

ENST 29000. Energy and Energy Policy. 100 Units.
This course shows how scientific constraints affect economic and other policy decisions regarding energy, what energy-based issues confront our society, how we may address them through both policy and scientific study, and how the policy and scientific aspects can and should interact. We address specific technologies and the policy questions associated with each, as well as with more overarching aspects of energy policy that may affect several, perhaps many, technologies.
Instructor(s): S. Berry, G. Tolley Terms Offered: Autumn
Prerequisite(s): PQ: Third- or fourth-year standing. For ECON majors who want ECON credit for this course (ECON 26800): PQ is ECON 20100.
Equivalent Course(s): CHSS 37502, ECON 26800, PBPL 29000, PPHA 39201, PSMS 39000, BPRO 29000

ENST 29700. Reading and Research. 100 Units.
This course is a reading and research course for independent study not related to BA research or BA paper preparation.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of faculty supervisor and program director
Note(s): Students are required to submit the College Reading and Research Course Form. This course may be counted as one of the electives required for the major.

ENST 29701. Readings and Research: Working Group in Environment, Agriculture, and Food (EAF) 100 Units.
This course consists of participation in the Environment, Agriculture, and Food Group in a role assigned by the instructor.
Instructor(s): S. Shaikh Terms Offered: Autumn
Prerequisite(s): Registration by instructor consent only
Note(s): Please email Sabina Shaikh at sabina@uchicago.edu.
Equivalent Course(s): PBPL 29701
ENST 29720. Reading and Research: Calumet. 100 Units.
The Program on the Global Environment will be hosting many interesting guest speakers during the Calumet Quarter, and this readings course will be dedicated primarily to the discussion of relevant articles written by the speakers. This will acquaint students with literature on a variety of topics ranging from food security to wetlands ecology to conservation theory. Students will be expected to discuss the articles, drawing on knowledge gained in the three core Calumet courses. Students will also attend the guest presentations and write short responses to the lectures.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 29801. BA Colloquium I. 100 Units.
This colloquium is designed to aid students in their thesis research. Students are exposed to different conceptual frameworks and research strategies. The class meets weekly.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Students must have an approved topic proposal and a faculty reader
Note(s): Required of students with fourth-year standing who are majoring in Environmental Studies.

ENST 29802. BA Colloquium II. 100 Units.
This colloquium assists students in conceptualizing, researching, and writing their BA theses.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): Open only to students with fourth-year standing who are majoring in Environmental Studies

ENST 29900. BA Thesis (Reading and Research) 100 Units.
This is a reading and research course for independent study related to BA research and BA thesis preparation.
Instructor(s): Staff Terms Offered: Winter, Spring
Prerequisite(s): Consent of instructor and program director
Note(s): Students are required to submit the College Reading and Research Course Form.