

551, 552. Independent Study: Internship**Staff**

Variable credit course, 2-4 credits each semester.

Supervised field work in an area related to the study of literature or language of special interest to the student. A formal written proposal is required at the time of pre-registration. At the conclusion of the internship, participants are expected to produce a narrative in which they reflect upon their experience. No more than twelve credit hours of independent study or internship may be taken, and no more than eight credit hours may be in one department. A registration form is required. *Prerequisites: junior or senior standing, consent of the department chair and a department project director, and 12 credits toward the major.*

Environmental Studies

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The environmental studies major is an interdisciplinary program of study that transcends traditional disciplinary boundaries. The core includes an introductory course and courses in chemistry, ecology, philosophy, and environmental economics. The program also requires the student to take a range of courses in natural science and mathematics, social science, art, and humanities. Environmental studies majors do a senior project, and either off-campus field work or an internship. The core provides the necessary scientific and economic background for environmental decision-making. The additional courses provide exposure to methodologies and provide a knowledge base important to environmental studies.

Requirements for a major in environmental studies: All students must take ENV 120, 243, 247, 332, 500; CHM 100 or 111/112 or 175; MTH 120 (or PSC 211), plus 11 elective credits. Besides environmental studies courses, the following courses may be counted:

I: Natural Science and Mathematics — BIO 337, 338, 339, 450; CHM 211; MTH 146, 246;

II: Social Sciences — ECO 361 or 461; ANT 222, 318; PSC 251/252;

III: Arts and Humanities — PHL 353, 355; ART 153 (with permission of the Coordinator).

A minimum of 3 credits from at least two of these categories must be included in the electives. The above lists are not exhaustive: departmental studies or special topics courses that have a significant environmental component may also be counted in any of these areas.

Students must complete a capstone project. The student must write a substantial paper on the project, under the supervision of their advisor, and give a public presentation about the project as part of their enrollment in ENV 500. The project can be done as independent study or be based on a project undertaken during the student's off-campus experience or for some course outside the major. The project must be approved by the coordinator and should normally be completed prior to enrollment in ENV 500.

Students must develop a portfolio consisting of samples of their work from all courses counted for the major. The portfolio will be refined and presented for approval in ENV 500.

Students must complete an internship (ENV 550) or an off-campus field experience. Some programs that may fulfill the field experience include Woods Hole, the SEA Semester, and Oak Ridge. Many ACM study-abroad programs may also be used including those in Costa Rica, Tanzania, Brazil, Botswana, India, and Italy. Other programs are available, consult with the Coordinator of Environmental Studies. Students may count an appropriate *In Focus* (formerly Maymester) course as their off-campus experience. However, *no* course can be counted both as the internship or off-campus experience and as one of the elective courses.

Students wishing to pursue graduate work in environmental studies are encouraged to take additional courses in an area of specialty (e.g., biology, chemistry, economics, politics and government, sociology, anthropology).

120. Environmental Studies

Staff

Four credits.

Study of the interrelationships of ecological, ethical, political, legal, economic, social, and historical aspects of the environment. Lecture, discussion, projects, required field trips.

150. Geographic Information Systems (GIS)

K. Beres

Four credits.

Theory and methods of computer-based Geographic Information Systems (GIS), primarily using ArcMap © software. Applications will emphasize environmental topics, but students will work on individual projects that may apply GIS to any discipline. Readings, projects, papers, field trips.

220. Case Studies in Conservation

D. Beres

Four credits.

The conservation of biodiversity involves a complex interplay of social, political, and economic considerations, as well as an understanding of ecosystem dynamics. This course will analyze examples of contemporary conservation strategies from various continents. Drawing on examples across the globe, attention will be given to the complexity of interrelationships among population, water, energy, and land use. Readings, discussions, papers, presentations, field trips. *Prerequisite: ENV 120 or ENV 175, or consent of the instructor.*

243. Philosophy and the Environment

Jeffries

Four credits. Offered in 2014-15 and alternate years.

Exploration of the relationship of human beings to the natural world. Consideration of the conflicting claims about how we are interconnected with the rest of nature and also separate from it. An examination of such contested issues as what responsibilities, if any, do we have to the rest of nature and how can we wisely weigh competing claims about natural resources. Same as PHL 243.

247. General Ecology

Wallace

Four credits.

Interaction of aquatic and terrestrial plants and animals with their environment. Emphasis is placed on community structure, energy flow, nutrient cycling, competition, niche development, and population dynamics. Lecture, laboratory, required field trips. Same as BIO 247.

Prerequisite: BIO 121 or equivalent.

300. Departmental Studies **Staff**

Variable credit course, 2-4 credits.

Special subjects in environmental studies not covered by regular courses. This course may be repeated for credit when topics change. Please see the pertinent Schedule of Courses for the listing of topics courses. Some topics may count toward the global and cultural studies requirement; refer to the Academic Policies: Global and Cultural Studies Requirement section for more information.

332. Resource and Environmental Economics **Hauge**

Four credits. Offered in 2014-15 and alternate years.

Theoretical framework for the analysis of environmental pollution and renewable and nonrenewable resource management. Topics include public goods and common-property resources; private cost, social cost, externalities, and market failure; designing and implementing environmental policies; benefit-cost analysis; the global environment. Same as ECO 332. *Prerequisite: ECO 212 or consent of the instructor.*

500. Senior Studies **Staff**

Two credits.

A senior capstone experience. Students in this senior seminar will: 1) meet weekly for focused discussion on topics of current environmental concern; 2) prepare their environmental studies portfolio for approval; 3) prepare and present a public talk about their senior project. The seminar will discuss current environmental issues, track the students' progress in refining their portfolios, and prepare the students for the public presentation of their capstone project. Readings, short papers, oral reports and possible field trips. Normally, students will have completed their capstone project for environmental studies prior to enrolling in ENV 500. *Prerequisites: senior standing and declared environmental studies major, or consent of the instructor or Coordinator of Environmental Studies.*

540. Independent Study **Staff**

Variable credit course, 1-4 credits.

Individual investigation of some aspect of environmental studies of special interest to the student. No more than twelve credit hours of independent study or internship may be taken, and no more than eight credit hours may be in one department. A registration form is required. *Prerequisites: junior or senior standing, consent of the department chair and a department project director, and 12 credits toward the major.*

550. Internship **Staff**

Variable credit course, 2-4 credits.

Supervised field study combined with scholarly achievement and practical experience with an industry, government agency, or other institution. A paper is required. No more than twelve credit hours of independent study or internship may be taken, and no more than eight credit hours may be in one department. A registration form is required. *Prerequisites: junior or senior standing, consent of the department chair and a department project director, and 12 credits toward the major.*