

Community Service Program Courses

CMSP 29500, CMSP 39500, CMSP 49500 - Community Service NLA

The community service program deals with volunteer work throughout the Ithaca area. Agencies train and orient students to their individual needs. The program is offered on a credit or noncredit basis. A faculty sponsor is needed if credit is desired. Prerequisites: Permission of department chair and dean. Variable credit; minimum of 2 credits. (Y)

CMSP 29900, CMSP 39900, CMSP 49900 - Community Service Independent Study LA

Students may register for independent study in areas that have cross-disciplinary aspects or that are not available elsewhere in the College. Those interested should obtain the independent studies application form and guidelines from the office of the dean and develop a project in consultation with a faculty sponsor. Offered on demand only. Prerequisites: Approval of the student's adviser; permission of department chair and dean. 1-4 credits.

CMSP 39700, CMSP 49700 - Internship: Community Service NLA

Together with a faculty sponsor, students develop an interdisciplinary work-study project that combines an academic core with responsibilities in a professional setting. A design statement must be developed and approved in advance. Application forms and guidelines are available in the office of the dean. Students should have completed most of a major that prepares them for the work experience. No more than 12 internship credits may be counted toward a degree. Advance approval by the provost is required for the 7th to 12th credits. Prerequisites: Permission of department chair and dean. Variable credit.

ENVIRONMENTAL STUDIES PROGRAM

Bachelor of Arts

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The program in environmental studies offers two majors. Environmental studies focuses on the humanities, including implementation, values, and aesthetics, while providing a strong science background. Environmental science focuses on the sciences and prepares students to conduct original research designed to solve environmental problems in the context of social values and economic and political reality.

- Environmental Studies, B.A.
- Environmental Science, B.A.
- Environmental Studies Minor

Major in Environmental Studies

Environmental studies is an interdisciplinary major dealing with questions and issues that pertain to the interaction between humanity and nature. No one discipline can possibly cover such a broad area for reflection; consequently, students in this major are required to develop considerable intellectual breadth. The core curriculum requires not only a significant amount of biology and chemistry but also history, economics, politics, and philosophy. In consultation with their advisers, students will construct an area of concentration. Students must submit the self-designed concentration to the registrar no later than the first semester of the junior year. A senior capstone experience (such as an experiential course, internship, research paper, or special project) will integrate the major and prepare graduates for graduate school or environmental careers.

Requirements for the Major in Environmental Studies — B.A.

Required courses

BIOL 15100	Environmental Science	4
BIOL 27500	Field Biology	4
CHEM 11700	Environmental Chemistry I	3
CHEM 11900	Environmental Chemistry Laboratory	1
ECON 28100	Environmental Economics	3
POLT 36600	Environmental Politics	3
HIST 27000	History of American Environmental Thought	3
PHIL 25000	Environmental Ethics	3

Restricted electives

BIOL 12000	Fundamentals of Biology II <i>or</i>	
BIOL 12200	Principles of Biology II	4
MATH 15500	Basic Statistical Reasoning <i>or</i>	
MATH 24300	Statistics <i>or</i>	
MATH 24400	Statistics with Probability	3-4
ENVS 45000	Capstone Seminar for Environmental Studies/Science Majors <i>or</i>	

ENVS 49000	Independent Study: Environmental Studies <i>or</i>	
ENVS 49500	Internship: Environmental Studies	4

Required self-designed concentration

See the environmental studies website for examples: <http://www.ithaca.edu/hs/depts/envstudies/>.

Three courses at any level	9
Four courses at level 3 or 4	12
Total in the major	56-57
Electives	63-64
Total, B.A. in environmental studies	120

Major in Environmental Science

Environmental science is an interdisciplinary program that provides strong training in the sciences; a choice of focal areas in anthropology, biology, or chemistry; and a background in related courses in the humanities. Core science requirements include 43 credit hours of classes for science majors. In addition, the environmental science major develops a significant expertise in one of the three focal areas. Majors in both environmental studies and environmental science share in the senior capstone experience — a real, applied project — which integrates the experiences of students with different skills and training and prepares students for graduate school or environmental careers.

Requirements for the Major in Environmental Science — B.A. with a Concentration

Concentrations in the major may be in anthropology, biology, or chemistry.

Science background courses

BIOL 15100	Environmental Science	4
BIOL 12100	Principles of Biology I	4
BIOL 12200	Principles of Biology II	4
BIOL 27500	Field Biology <i>or</i>	
PHYS 17200	Earth Science	4
CHEM 12100	Principles of Chemistry	3
CHEM 12400	Experimental Chemistry I	2
CHEM 22500	Experimental Chemistry II	2
CHEM 22100	Organic Chemistry I	3
CHEM 22200	Organic Chemistry II	3
CHEM 23200	Quantitative Chemistry	3
MATH 11100	Calculus I <i>or</i>	
MATH 10800	Calculus for Decision Making	4
MATH 24400	Statistics with Probability	4
	Total, science background	43

Cultural background courses

A minimum of two courses from each of the two lists below, with at least one in humanities and one in social sciences. Courses chosen to fulfill this requirement cannot be used to fulfill requirements for the focal area.

Select two of the following:

PHIL 25000	Environmental Ethics (3)	
POLT 36600	Environmental Politics (3)	
HIST 27000	History of American Environmental Thought (3)	6

Select two of the following:

ANTH 10300	Biological Anthropology (3)	
ANTH 12900	Introduction to Global Studies (3)	
ECON 28100	Environmental Economics (3)	
ECON 28200	Natural Resource Economics (3)	
HIST 20300	Introductory Geography (3)	
HIST 27000	History of American Environmental Thought (3)	
POLT 12900	Introduction to Global Studies (3)	
POLT 36600	Environmental Politics (3)	
SOCI 30100	Technology and Society (3)	
SOCI 40200	Society and Nature (3)	
CMSP 31900	Writing as a Naturalist (3)	6
	Total, cultural background	12

Integrative experience

ENVS 45000	Environmental Capstone	4
ENVS 40100	Environmental Seminar	1
	Total, integrative experience	5

Focused Studies

Each student will fulfill requirements in one of the three focal areas listed below.

Biology

Select five of the following:

BIOC 35300	Biochemistry I (4)
BIOC 35400	Biochemistry II (4)

BIOL 20300	Invertebrate Zoology [4]	
BIOL 20800	Animal Behavior [4]	
BIOL 21400	Animal Physiology [4]	
BIOL 22700	Genetics [4]	
BIOL 27400	General Ecology [4]	
BIOL 27800	Environmental Health and Medicine [3]	
BIOL 28400	Field Ornithology [4]	
BIOL 30500	Parasitology [4]	
BIOL 35400	Cell Biology [4]	
BIOL 37800	Environmental Toxicology [4]	
BIOL 45200	Microbiology [4]	
BIOL 47300	Plant Physiology [4]	
BIOL 47900	Ecology of Aquatic Communities [4]	
	Total, biology focal area	19-20

Chemistry		
CHEM 32400	Experimental Chemistry III	3
CHEM 32600	Experimental Chemistry V	3
CHEM 33100	Physical Chemistry I or	
CHEM 33200	Physical Chemistry II	3
PHYS 10100-PHYS 10200	Introduction to Physics I-II or	
PHYS 11700-PHYS 11800	Principles of Physics I-II	8
MATH 11200	Calculus II	4
	Total, chemistry focal area	21

Anthropology		
ANTH 10400	Cultural Anthropology	3

Select six of the following:

ANTH 26500	South American Prehistory [3]	
ANTH 26900	Mesoamerican Prehistory [3]	
ANTH 27500	North American Prehistory [3]	
ANTH 31400	The Beastly Mirror [3]	
ANTH 37500	Environmental Anthropology [3]	
ANTH 38000	Medical Anthropology [3]	
ANTH 38800	Origins of Agriculture [3]	
	Total, anthropology focal area	18 21

Minor in Environmental Studies

The interdisciplinary minor in environmental studies at Ithaca College is administered by the School of Humanities and Sciences. The object of the minor is to (1) introduce students to the substance and complexity of environmental issues, and (2) explain what they must know before they can begin to participate in responsible discussion and policy making on any level.

Students pursue eight courses for an integrated inquiry into two related areas: area I: foundations in science — toward an understanding of and an appreciation for the principles of ecology, and thus a recognition of the necessity for integrity and stability in the natural environment; and area II: cultural solutions — an analysis of economic, political, cultural, and intellectual forces that motivate adverse human impact on the natural environment, and an encouragement of an “active hope” for solutions to environmental issues.

Requirements for the minor in environmental studies

Area I: Foundations in science

(9-16 credits; minimum of three courses)

Minimum of one survey of biology from the following:

BIOL 12000	Fundamentals of Biology II [3]
BIOL 12200	Principles of Biology II [3]

Minimum of one environment survey course from the following:

BIOL 10400	Environmental Biology [3]
BIOL 15100	Environmental Science [4]
BIOL 27100	General Ecology [4]
BIOL 27500	Field Biology [4]
PHYS 17100	Earth: Evolution of a Habitable World [3]
PHYS 17200	Earth: Evolution of a Habitable World with Lab [4]

Minimum of one chemistry course from the following:

CHEM 10200	Contemporary Chemical Issues [3]	
CHEM 10500	Energy and the Environment [3]	
CHEM 11700	Environmental Chemistry [3]	
	Total, area I	9-10

Area II: Cultural solutions

(12 credits; minimum of four courses, of which at least one is in the humanities and one is in the social sciences. A list of approved electives is available from the environmental studies program coordinator)

Total, area I	9-10
Total, area II	12
Total, required for minor	22-23

Students should be aware that many of the courses in area II have prerequisites not required for the minor. Therefore, to successfully complete the minor, it is important to plan carefully and seek advice early from a minor adviser. Courses listed as seminar or tutorial apply only if the topic is appropriate to the minor and prior approval is granted by the environmental studies program coordinator.

Environmental Studies Courses

ENVS 20100 - Environmental Research: Introductory LA

An introductory course for students who desire hands-on research in environmental studies projects but who have limited experience with research. Research will typically involve participation in continuing projects, though new, student-proposed projects may be possible if the instructor approves. Students will work closely with a faculty member to guide their study. May be repeated twice for a maximum of 6 credits. Prerequisites: Sophomore standing and permission of instructor. 1-3 credits (F-S)

ENVS 20200-ENVS 20299 - Topics in Sustainability LA NS SS

An umbrella course with a different focus each semester. The course is integrative and allows students to experience sustainability firsthand through field experiences and service projects at Ecovillage and the local community, linked to the study of core principles and strategies in different areas of community sustainability. The courses taught within this umbrella include sustainable land use, teaching sustainability, fostering sustainable communities, sustainable energy systems, urban sustainability, and the sustainability movement. May be repeated for a maximum of 12 credits. Prerequisites: Sophomore standing. 3-4 credits. (F-S)

ENVS 38000-ENVS 38099 - Selected Topics in Field Studies LA NS

Field study courses provide a multiday field trip to an off-campus ecosystem. Each field study course emphasizes a unique regional topic, and students become familiar with the major geological and ecological events as well as the human impact on sustainability of the natural ecosystem(s). Students also learn to identify the predominant flora and fauna of the area. Student projects are expected to show considerable independent effort, background information, analyses, and original synthesis. May be repeated for credit for field studies in different regions for a maximum three times or 12 credits. Prerequisites: A minimum of three courses in environmental studies or biology. 1-4 credits. (IRR)

ENVS 40100 - Environmental Seminar LA NS

Seminars, discussion, and readings in environmental studies and science. Required of environmental science majors. Prerequisites: Junior standing; environmental studies or environmental science major. Pass/fail only. 0.5 credits. (F, S)

ENVS 45000 - Capstone Seminar for Environmental Studies/Science Majors LA

An integrative course that encourages majors to apply previously learned ideas and concepts to a specific area of environmental inquiry or a particular environmental problem. The specific subject matter of the course is determined by the professor teaching it, but common to all capstone seminars is class involvement in a rigorous research agenda, drawing on methodologies from natural sciences, social sciences, and humanities. Course topics generally focus on local or regional environmental issues, showing their interconnections to global environmental concerns. Students are encouraged to move out of the classroom to conduct research projects. Public presentation of research findings is strongly encouraged. Prerequisites: Junior standing or above; environmental studies or environmental science majors. 4 credits. (F-S,Y)

ENVS 49000 - Independent Study: Environmental Studies LA

The program of study may be a reading program of materials of special interest to the student, or one involving developing and executing a research project on a specific topic. Reading or research is undertaken under faculty direction. Prerequisites: Permission of instructor. 1-4 credits. (F-S,Y)

ENVS 49500 - Internship: Environmental Studies NLA

Permits students to explore environmental studies through a variety of work experiences. Students are expected to submit, as part of their course obligations, a thorough written evaluative report based on their experiences. Internships may be taken at national, state, and local levels, and in London under the auspices of the Ithaca College London Center. Prerequisites: Permission of instructor; completion of three-quarters of an environmental studies major or minor. 1-12 credits. (F-S,Y)