

Bachelor of Arts in Environmental Studies

Environmental Studies is an interdisciplinary B.A. degree program that examines interactions of human society and nature through approaches of the natural sciences, social sciences, and humanities. Courses introduce foundation principles of ecology and environmental science in relation to issues of policy, politics, law, economics, social aspects, planning, pollution control, and natural resources management. Two degree concentrations are designed to prepare students for a broad field of environmental career pathways: **Environmental Sustainability** and **Environmental Systems**. Upon successful completion of the Environmental Studies B.A. degree program, students who want further training may go to graduate school in the natural sciences, public administration, planning, environmental law, environmental health, or education.

The **Environmental Studies B.A., Environmental Sustainability Concentration**, focuses on the concept of sustainability from an interdisciplinary perspective. This concentration includes instruction in sustainable development, environmental policies, ethics, ecology, landscape architecture, city and regional planning, economics, natural resource issues, sociology, and anthropology. Career pathways explored by this concentration include the work of government agencies and non-governmental organizations, natural resource planners and managers, environmental regulators, K-12 educators, and advocates. This concentration is recommended for students that want a broad and flexible liberal arts program that allows them follow diverse interests.

The **Environmental Studies B.A., Environmental Systems Concentration**, focuses on the application of biological, chemical, and physical principles to the study of environmental problems and solutions, including subjects such as abating or controlling environmental pollution and degradation; physical interactions between human society and the natural environment; and approaches to natural resources management. This concentration provides a science intensive background with instruction in biology, chemistry, physics, geosciences, environmental health, climatology, statistics, and mathematical modeling.

Career pathways explored by this concentration include the work of environmental specialists in consulting firms, governmental agencies that monitor and protect environmental quality, as well as in multiple fields of scientific research on human impacts to the environment.

This concentration is recommended for students preparing to pursue a graduate degree in the natural sciences, or preparing for an environmentally related technical career.

Requirements (45-52 units)

Total units required for graduation: 120

B.A. in Environmental Studies

Lower-division requirements (13)

GEOG 1070	Environmental Studies Orientation Seminar (must take in first fall semester for the major)	2
Three units chosen from:		3
GEOG 1030	Physical Geography	
GEOL 1000	Introductory Geology	

HSCI 1200	Health and Society: An Ecological and Societal Approach	
One unit chosen from:		1
GEOG 1030L	Physical Geography Laboratory	
GEOL 1000L	Introductory Geology Laboratory	
HSCI 1200L	Health and Society: An Ecological and Societal Approach Lab	
GEOG 2000	Environment and Society	3
GEOG 2250	Introduction to Geographic Information Systems and Cartography	4
Upper-division requirements (0)		
Environmental Systems (7)		7
Seven units chosen from:		
GEOG 3300	Weather and Climate	
GEOG 4250	Watershed Hydrology and Management	
GEOG 4300	Biogeography	
GEOG 4360	Climate Change	
or GEOG 4400	Geomorphology	
Nature-Society Relations (6)		
GEOG 3500	Conservation and Natural Resources	3
or GEOG 3501	Environmental Sustainability	
Three units chosen from:		3
ANTH 3607	Environmental Anthropology	
ECON 3103	Environmental Economics	
ECON 3740	Economics of Climate Change	
ENG 3400	Analysis of Environmental Discourse (WI)	
ENG 3410	Environmental Literature	
GEOG 3630	Environmental Justice	
PHIL 3014	Environmental Ethics	
Experiential Learning (4)		
GEOG 5000	Senior Seminar (must take in spring semester prior to graduation)	2
Minimum of two units chosen from:		2
GEOG 5240	National Parks and Public Lands	
GEOG 5351	Professional Conferences	
GEOG 5352	Professional Conferences	
GEOG 5551	Laboratory Experience	
GEOG 5552	Laboratory Experience	
GEOG 5651	Field Experience	
GEOG 5652	Field Experience	
GEOG 5751	Internship in Geography	
GEOG 5752	Internship in Geography	
GEOG 5753	Internship in Geography	
GEOG 5756	Model United Nations Practicum (Spring Semester MUN Team)	
GEOG 5761	Study Abroad	
GEOG 5762	Study Abroad	
GEOG 5763	Study Abroad	
GEOG 5771	Study Away	
GEOG 5772	Study Away	
GEOG 5773	Study Away	

GEOG 5781	Service Learning in Geography, Global Studies and Environmental Studies
GEOG 5782	Service Learning in Geography, Global Studies and Environmental Studies
GEOG 5783	Service Learning in Geography, Global Studies and Environmental Studies
GEOG 5951	Independent Study
GEOG 5952	Independent Study
GEOG 5953	Independent Study
GEOG 5971	Senior Honors Project - Environmental Studies

Concentration (15-22)

All students must satisfy the requirements of one of the concentrations listed below: 15-22

Total Units **45-52**

Concentrations (15-22 units)

Courses taken in a concentration cannot be used elsewhere to meet requirements of this major.

Environmental Sustainability Concentration (15 units)

(Program Code: ESSU)

MATH 1201	Introduction to Statistical Thinking	3
or GEOG 3018	Geographic Statistics and Research Methods	
Minimum of six units chosen from:		6
GEOG 3300	Weather and Climate	
GEOG 3520	Environmental Inquiry and Education	
GEOG 3701	Environmental Policy and Impact Assessment	
GEOG 4250	Watershed Hydrology and Management	
GEOG 4300	Biogeography	
GEOG 4710	Water Wars	
GEOG 4750	Ecosystem Assessment	
GEOG 4870	Environmental GIS	
May choose one of the following:		
GEOG 3020	Social Geography	
GEOG 3030	Cultural Geography	
GEOG 3045	Global Cities and Urban Environment	
GEOG 3050	Economic Geography	
GEOG 3060	Political Geography	
GEOG 4050	Geography of California	
Six units chosen from:		6
ANTH 3607	Environmental Anthropology	
COMM 3227	Topics in Relational and Organizational Communication (Topic: Environmental Communication)	
or COMM 4222	Communication and Conflict	
ECON 3103	Environmental Economics	
or ECON 3740	Economics of Climate Change	
GEOG 3630	Environmental Justice	
HIST 4950	Politics of Oil	
PA 5140	Nonprofit Management and Leadership	

or PA 5170	Nonprofit Fundraising and Grantwriting
or PA 5200	Water Law, Regulation and Policy
or PA 5210	Urban Growth and Planning
PSCI 3300	State and Local Politics
or PSCI 3420	The Politics of Environment
SOC 4340	Community Organization
May choose one of the following GE courses:	
ART 3000	Art and Activism
BIOL 2180	Sustainable Agriculture
BIOL 3010	Human Ecology
CHEM 3100	Chemistry and the Environment
GEOL 3020	Natural Disasters
GEOL 3040	Energy and the Environment
ENG 3400	Analysis of Environmental Discourse (WI)
ENG 3410	Environmental Literature
PHIL 3014	Environmental Ethics

Total Units **15**

Environmental Systems Concentration (22 units)

(Program Code: ESSY)

BIOL 1000	Introduction to Biology	3
or BIOL 2010	Principles of Biology I	
CHEM 1000	Introduction to Chemistry	3
or CHEM 2050	Survey of General Chemistry	
or CHEM 2100	General Chemistry I	
CHEM 1000L	Introduction to Chemistry Laboratory	1
or CHEM 2050L	Survey of General Chemistry Laboratory	
or CHEM 2100L	General Chemistry I Laboratory	
MATH 1201	Introduction to Statistical Thinking	3
or MATH 1301	Modeling with Functions	
or MATH 1601	Modeling with Calculus	
or GEOG 3018	Geographic Statistics and Research Methods	
PHYS 1000	Physics in the Modern World	3
or PHYS 2000	Introduction to Physics I	
or PHYS 2500	General Physics I	
Minimum of nine units chosen from:		9
GEOG 3300	Weather and Climate	
GEOG 3701	Environmental Policy and Impact Assessment	
GEOG 4250	Watershed Hydrology and Management	
GEOG 4300	Biogeography	
GEOG 4360	Climate Change	
GEOG 4400	Geomorphology	
GEOG 4651	Coastal Resources Management	
GEOG 4750	Ecosystem Assessment	
GEOG 4870	Environmental GIS	
GEOG 4880	Remote Sensing of the Environment	
May choose one of the following:		
GEOL 3100	Introduction to Geologic Mapping	
GEOL 3600	Structural Geology	

GEOL 4100	Engineering Geology
GEOL 3700	Groundwater Hydrology
GEOL 5400	Environmental Hydrology
HSCI 3052	Principles of Environmental Health
HSCI 3522	Air Pollution and Radiological Health
HSCI 3558	Water Quality and Pollution Control
HSCI 4577	Environmental Health Engineering
HSCI 5557	Solid and Hazardous Waste Management
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Total Units	22