

Environmental Studies Major

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About

The Department of Geography and the Environment offers B.A. degrees in Geography and Environmental Studies, and a B.S. in Environmental Science. The department also offers a minor in Geography and supports the Sustainability Studies minor. The department's overarching objective is to integrate the disciplines of geography and environmental science to seek an understanding of human and environmental patterns, the processes that produce those spatial patterns, and salient human and environmental problems that face modern society. The department has two teaching and five research labs; and the department has a full suite of state-of-the-art geospatial software and scientific research equipment.

Program: [Geography and the Environment](#)

Type: Bachelor of Arts

PRIMARY MAJOR (122 credits)

Required Major Courses (57 credits)

The B.A. in Environmental Studies program focuses on the interface between environmental science and relevant social sciences, including public policy, political science, law, economics, sociology, and planning. Towards this end, the program's graduates will have a fundamental understanding of the biological, chemical, and physical principles that underlie the structure and function of the natural and physical environments of the Earth coupled with a foundation in the social sciences that underlie the relationships between humans, as individuals and/or societies, and the natural and physical environments of Earth. The program is founded on the principle that the social sciences – both as a bodies of knowledge and as the bases for structuring human societal norms and behaviors – must be applied to assess and to address the direct and indirect influences of human activities on the integrity of the Earth's systems.

Program Notes:

- **Students must select one track in either the Environmental Sustainability Concentration or Environmental Management Concentration, as listed below.**
- Consider course offerings with environmental content when selecting free electives.
- GEV 6006 must be taken a total of three times prior to graduation.
- Two environmental social science and humanities electives are required for the major, and not included in the 57 credits as they count towards core or free elective credits.
- Environmental Studies Social Science and Humanities Elective course credits are counted under core curriculum or free electives.

Course	Title	Credits
GEV 1050	Environmental Science I	4
GEV 1051	Environmental Science II	4
GEV 2001	Prof Dev in Geo and Env	1
GEV 3004	Geographies Envrnl Justice	3
GEV 4310	Environmental Issues Seminar	3
	Statistics for Environmental Studies	3
GEV 4700	Geographic Information Systems	4
GEV 6005	Senior Research Seminar	1
GEV 6006	Research Colloquium	
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	Environmental Social Sciences and Humanities Electives	0
	GEV Independent Study Requirement	3-6

Environmental Sustainability Concentration

Associated Career Paths: Corporate Sustainability, Environmental Planning, Environmental Journalism.

Course	Title	Credits
GEV 3001	Intro to Sustainability Study	3
GEV 4001	Advanced Sustainability Study	4
	Geospatial Technology	3-4
	Policy and Management Electives for ES Concentration	12
	Science and Technology Electives for ES Concentration	9

Environmental Management Concentration

Associated Career Paths: Environmental Consulting, Environmental Health, Environmental Law.

Course	Title	Credits
	CHM 1151 & 1103	5
GEV 2310	Environmental Chemistry	4
GEV 1750	Geo-Techniques	4
	Policy and Management Electives for EM Concentration	6
	Science and Technology Electives for EM Concentration	12

Core Curriculum Requirement (36 credits)

Environmental Studies Majors meet the following core requirements in the major and therefore are omitted from the summary below:

- Natural Science (8 cr)
- Depending upon the courses chosen by the student, the Social Sciences (6 cr) core requirement may also be fulfilled through the major.

Course	Title	Credits
ACS 1000	Ancients	3
ACS 1001	Moderns	3
THL 1000	Faith, Reason, and Culture	3
PHI 1000	Knowledge, Reality, Self	3
ETH 2050	The Good Life:Eth & Cont Prob	3
	Mathematics or Statistics (1 course)	3
	Literature and Writing Seminar (1 course)	3
	History (1 course)	3
	Social Sciences (2 courses)	6
	Fine Arts (1 course)	3
	Upper-Level Theology (1 course)	3
	Language Requirement (Proficiency)	
	Diversity Requirement (2 courses)	

Free Elective Requirement (29 credits)

Students with an Environmental Studies primary major have twenty-nine (29) required free elective credits.

Degree Credit Summary

- **Major Credits:** 57 credits
- **Core Credits:** 36 credits
- **Free Electives Credits:** 29 credits
- **Total Required Credits:** 122 Credits

Note: The above credit totals are based on the minimum number of required credits in each degree area. The minimum number of required credits in each area listed above must be met. Credits taken beyond the required minimum for one area may not be applied to another area.

SECONDARY MAJOR

Students who declare Environmental Studies as a **secondary major** must complete the Required Major Courses to achieve this major. Students are able to count any eligible course taken in their primary major, the core curriculum, minors, concentrations, or free electives toward these requirements.

Category Descriptions

Statistics for Environmental Studies

Credits: 3

Select 1 course from those listed.

Course	Title	Credits
BIO 3105	Biostatistics & Exp Design	4
GEV 3300	Stats. in Environmental Sci.	3
STAT 1313	Statistics for Life Sciences	3
STAT 4310	Stat Methods	3

Environmental Social Sciences and Humanities Electives

Credits: 0

- Select two classes from this list, or any course of three or more credits with the GESH attribute.
- Course credits are counted under core curriculum or free electives.

GEV Independent Study Requirement

Credits: 3-6

- Choose GEV 6200: Independent Study (3 cr) OR
 - GEV 6210 and 6220: Senior Thesis I & II (6 cr – 3 cr of which count as a free elective)

Course	Title	Credits
GEV 6200	Independent Study	3
Course	Title	Credits
GEV 6210	Senior Thesis Research I	3
GEV 6220	Senior Thesis Research II	3

Geospatial Technology

Credits: 3-4

Select 1 courses from the list (3-4cr)

Course	Title	Credits
GEV 3521	GIS for Urban Sustainability	3
GEV 3750	Remote Sensing	3
GEV 3790	Global Positioning Systems	4
GEV 4710	Adv. Geographic Info Sys	4

Policy and Management Electives for ES Concentration

Credits: 12

Select 4 courses of three or more credits with the GEPM attribute (12 cr).

Science and Technology Electives for ES Concentration

Credits: 9

Select 3 classes of three credits or more with the GESC attribute (9 cr).

CHM 1151 & 1103

Credits: 5

Course	Title	Credits
CHM 1151	General Chemistry I	4
CHM 1103	General Chemistry Lab I	1

Policy and Management Electives for EM Concentration

Credits: 6

Select 2 courses of three or more credits with the GEPM attribute (6 cr).

Science and Technology Electives for EM Concentration

Credits: 12

Select 4 classes of three or more credits with the GESC attribute (12 cr).

Mathematics or Statistics (1 course)

Credits: 3

Students must take one course in either Mathematics or Statistics. Any course offered by the Department of Mathematics and Statistics fulfills the Core Curriculum requirement. Certain courses offered by other departments (e.g., Computer Science and Philosophy) also fulfill the requirement. These courses are designated by the Mathematics A & S Core attribute.