

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 minors in Geography and Sustainability Studies. 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 three 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

MAJOR (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:

- Consider course offerings with environmental content when selecting the twelve free electives.
- BIO 3105 or MAT 4310 may fulfill the requirement for GEV 3300.
- GEV 6006 must be taken a total of three times prior to graduation.
- Students must select one track in either the Environmental Sustainability Concentration or Environmental Management Concentration, as listed below.
- 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.

Required Major Courses:

Item #	Title	Credits
GEV 1050	Environmental Science I	4
GEV 1051	Environmental Science II	4
GEV 2001	Prof Dev in Geo and Env	1
GEV 4310	Environmental Issues Seminar	3
GEV 3300	Stats. in Environmental Sci.	3
GEV 4700	Geographic Information Systems	4
GEV 3004	Geographies Envrnl Justice	3
GEV 6005	Senior Research Seminar	1
GEV 6006	Research Colloquium	
GEV 6006	Research Colloquium	
GEV 6006	Research Colloquium	
	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.

Item #	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.

Item #	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

Category Descriptions

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.

Item #	Title	Credits
GEV 3004	Geographies Envrnl Justice	3
GEV 4340	Spec Topics in Environm Issues	3
HIS 2276	American Environmental Hist	3
PHI 2160	The Ethics of War	3
THL 4330	Christian Environmental Ethics	3

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)

Item #	Title	Credits
GEV 6200	Independent Study	3
Item #	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)

Item #	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 from the list, or any course of three or more credits with the GEPM attribute.

Item #	Title	Credits
GEV 3001	Intro to Sustainability Study	3
GEV 3570	Land Use Planning & Mgmt	3
GEV 3580	Natural Res and Conservation	3
GEV 4001	Advanced Sustainability Study	4
GEV 4330	Spec Topics in Environm Policy	3
GEV 4331	Env. Policy & Management	3
GEV 4332	Water Resources Planning	3
GEV 4333	Politics and the Env.	3
GEV 4334	Environmental Law	3
GEV 4335	Energy Policy	3
GEV 4336	Environmental Economics	3
GEV 4517	Sustainable Development	3
MGT 2208	International Topics	3
PA 2000	Public Policy	3

Science and Technology Electives for ES Concentration

Credits: 9

Select 3 classes from the list below, or any course of three or more credits with the GESC attribute.

Item #	Title	Credits
GEV 2500	Global Change in Local Places	3
GEV 3002	Ecosystem Services	3
GEV 3003	Environmental Geology	3
GEV 3301	Fisheries	3
GEV 3302	Agricultural Science	3
GEV 3303	Soil Science	3
GEV 3304	Air Pollution	3
GEV 3305	Energy Systems	3
GEV 3306	Alternative Engery	3
GEV 3308	Environmental Health	3
GEV 3309	Coral Reefs	3
GEV 3310	Special Topics in Geology	3
GEV 3501	Geomorphic Environments	3
GEV 3503	Earth's Weather Systems	3
GEV 3521	GIS for Urban Sustainability	3
GEV 3550	Natural Hazards	3
GEV 3750	Remote Sensing	3
GEV 3790	Global Positioning Systems	4
GEV 4320	Spec. Topics in Env Lab Sci	4
GEV 4321	Microbial Processes	4
GEV 4322	Ocean Environments	4
GEV 4323	Watershed Biogeochemistry	4
GEV 4324	Wetland Science and Management	4
GEV 4325	Environmental Ecology	4
GEV 4326	Environmental Geology	4
GEV 4327	Process Geomorphology	4
GEV 4328	Climatology	4
GEV 4329	Global Change Research	4
GEV 4350	Spec Topics in Environm Sci	3
GEV 4351	Oceanography	3
GEV 4352	Physical Geology	3
GEV 4353	Green Science	3
GEV 4354	Biomimicry	3
GEV 4355	Tropical Ecology	3
GEV 4356	Global Change Science	3
GEV 4360	Field Methods in Env Science	4
GEV 4361	Field Research	4
GEV 4511	Climate Variability	3
GEV 4512	Medical Geography	3
GEV 4513	Geography of National Security	3
GEV 4514	Geomorphology	3
GEV 4515	Terrestrial Ecosystems	3
GEV 4516	Environmental Security	3
GEV 4518	COVID-19 Pandemic	3
GEV 4710	Adv. Geographic Info Sys	4

CHM 1151 & 1103

Credits: 5

Item #	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 from the list, or any course of three or more credits with the GEPM attribute.

Item #	Title	Credits
GEV 3001	Intro to Sustainability Study	3
GEV 3570	Land Use Planning & Mgmt	3
GEV 3580	Natural Res and Conservation	3
GEV 4001	Advanced Sustainability Study	4
GEV 4330	Spec Topics in Environm Policy	3
GEV 4331	Env. Policy & Management	3
GEV 4332	Water Resources Planning	3
GEV 4333	Politics and the Env.	3
GEV 4334	Environmental Law	3
GEV 4335	Energy Policy	3
GEV 4336	Environmental Economics	3
GEV 4517	Sustainable Development	3
MGT 2208	International Topics	3
PA 2000	Public Policy	3

Science and Technology Electives for EM Concentration

Credits: 12

Select 4 classes from the list below, or any course of three or more credits with the GESG attribute.

Item #	Title	Credits
GEV 2500	Global Change in Local Places	3
GEV 3002	Ecosystem Services	3
GEV 3003	Environmental Geology	3
GEV 3301	Fisheries	3
GEV 3302	Agricultural Science	3
GEV 3303	Soil Science	3
GEV 3304	Air Pollution	3
GEV 3305	Energy Systems	3
GEV 3306	Alternative Engery	3
GEV 3308	Environmental Health	3
GEV 3309	Coral Reefs	3
GEV 3310	Special Topics in Geology	3
GEV 3501	Geomorphic Environments	3
GEV 3503	Earth's Weather Systems	3
GEV 3521	GIS for Urban Sustainability	3
GEV 3550	Natural Hazards	3
GEV 3750	Remote Sensing	3
GEV 3790	Global Positioning Systems	4
GEV 4320	Spec. Topics in Env Lab Sci	4
GEV 4321	Microbial Processes	4
GEV 4322	Ocean Environments	4
GEV 4323	Watershed Biogeochemistry	4
GEV 4324	Wetland Science and Management	4
GEV 4325	Environmental Ecology	4
GEV 4326	Environmental Geology	4
GEV 4327	Process Geomorphology	4
GEV 4328	Climatology	4
GEV 4329	Global Change Research	4
GEV 4350	Spec Topics in Environm Sci	3
GEV 4351	Oceanography	3
GEV 4352	Physical Geology	3
GEV 4353	Green Science	3
GEV 4354	Biomimicry	3
GEV 4355	Tropical Ecology	3
GEV 4356	Global Change Science	3
GEV 4360	Field Methods in Env Science	4
GEV 4361	Field Research	4
GEV 4511	Climate Variability	3
GEV 4512	Medical Geography	3
GEV 4513	Geography of National Security	3
GEV 4514	Geomorphology	3
GEV 4515	Terrestrial Ecosystems	3
GEV 4516	Environmental Security	3
GEV 4518	COVID-19 Pandemic	3
GEV 4710	Adv. Geographic Info Sys	4