

The environmental science minor:

- provides a scientific background to those students interested in environmental law, environmental economics and environmental sustainability.
- broadens the student's understanding of how sciences are linked to environmental questions.
- complements any major by focusing on courses related to environmental issues.

The minimum requirement for a minor in environmental science is 24 credit hours taken from the four categories outlined below. Students wishing to complete more than one of the environmental minors (environmental management, environmental science and environmental studies) may receive dual credit for the capstone course (ENVT 400), but may not receive dual credit for any other courses that might be shared by the minors.

A score of four or greater in AP Environmental Science substitutes for GGEO 115 or ISAT 112.

Courses	Credit Hours
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One of the following:

Minimum of 3-4 credit hours; can be double-counted with GenEd credits.

BIO 124. Ecology and Evolution	4
GGEO 102. Environment: Earth	3
GGEO 115. Earth Systems and Climate Change	3
GISAT 112. Environmental Issues in Science and Technology	4
GEOG 210. Physical Geography	4

Fifteen credit hours from the following.

BIO 451. Ecological Systems	4
BIO 452. Population Ecology	4
BIO 453. Microbial Ecology	4
BIO 454. Introduction to Biometrics	4
BIO 456. Landscape Ecology	4
BIO 457. Biological Applications of GIS	4
BIO 459. Freshwater Ecology	4
BIO 465 Environmental Toxicology	4
BIO 466. Ecotoxicology Seminar	3
CHEM 354. Environmental Chemistry Field Camp	3
CHEM 450. Nuclear and Radiation Chemistry	3
ENVT 200. Environmental Systems Theory	3
GEOG 215. Geospatial Tools I – Cartography & GIS	3
GEOG 216. Geospatial Tools II – Rem. Sensing & GPS	3
GEOG 290. Human Interaction with the Physical Environment	3
GEOG 340. Biogeography	3
GEOG 365. Cartography & Geospatial Visualization	3
GEOG 366. Introduction to GIS	3
GEOG 385. Principles of Remote Sensing	3
GEO 211. Introduction to Oceanography	3
GEO 310. Management of Marine Resources	3
GEO 320. Meteorology	3
GEO 340. Soils and Land Use	3
GEO 355. Geochemistry of Natural Waters	3
GEO 377. Earth Surface Processes	3
GEO 395. Geomorphology	3
GEO 410. Engineering Geology	3
GEO 460. Hydrogeology	3
ISAT 302. Instrument & Measurement of the Environment	1
ISAT 320. Fundamentals of Environmental Science & Technology I	3
ISAT 321. Fundamentals of Environmental Science & Technology II	3
ISAT 420. Environmental Analysis and Modeling	3

ISAT 423. Environmental Remediation	3
ISAT 425. Environmental Hydrology	3
ISAT 427. Industrial Hygiene	3
ISAT 428. Industrial Ecology	3
MATH 321. Analysis of Variance and Experimental Design	3
MATH 322. Applied Linear Regression	3
MATH 324. Applied Nonparametric Statistics	3
MATH 328. Time Series Analysis	3
MATH/BIO 345E. Biometry	4
MATH 421. Applied Multivariate Statistics	3
PHYS 215. Energy and the Environment	3

One of the following courses:

ANTH 373. Anthropological Perspectives on Environment	3
ECON 305. Environmental Economics	3
ECON 340. Economics of Natural Resources	3
ENG 371. Literature and the Environment	3
ENG 471. Eco-Criticism and Environmental Ethics	3
GEOG 325. Environmental Ethics	3
HIST 427. US Environmental History	3
ISAT 421. Environmental Policy and Regulation	3
SCOM 354. Communication, Environment and Environmentalism	3
SOCI 311. Sociology of the Environment	3
ENVT 400. Capstone Seminar	3

All students must complete the capstone course ENVT 400.

Students must have completed 15 hours of their environment minor in order to enroll in the capstone.

Environmental Studies

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The environmental studies minor provides an interdisciplinary education engaging socio-cultural, scientific and technical issues raised by the oft-conflicting needs and desires of globally interacting societies. Designed to complement any major, the goals of the environmental studies minor include:

- to help undergraduates develop an awareness of the cultural, political and scientific aspects of the world's environmental problems.
- to better prepare students for further study at the graduate or professional school level and careers in the expanding field of environmental professions.

The minimum requirement for a minor in environmental studies is 24 credit hours taken from the four categories outlined. No more than three courses from a single subject (e.g., GEOG, GEOL, ANTH, ENG, etc.) may count toward completion of the environmental studies minor. Students wishing to complete more than one of the environment minors (environmental management, environmental science and environmental studies) may receive dual credit for the capstone course (ENVT 400), but may not receive dual credit for any other courses that might be shared by the minors.

Introduction to Environmental Literacy

Minimum of three credit hours; can be double-counted with GenEd credits.

Courses	Credit Hours
GANTH 196. Biological Anthropology	3
GBIO 103. Contemporary Biology	3
ENVT 200. Environmental Systems Theory	3
GGEO 102. Environment: Earth	3
GGEO 115. Earth Systems and Climate Change	3

GHUM 200. Literature, Nature, Environment (this GHUM section only)	3
GISAT 112 Environmental Issues in Science and Tech	4
GEOG 210 Physical Geography	4

Socio-Cultural Approaches to Environmental Studies

Minimum of 15 credit hours; only two courses with the same course subject may be taken from the courses listed below.

Courses	Credit Hours
ANTH 373. Anthropological Perspectives on Environment and Development	3
ECON 305. Environmental Economics	3
ECON 340. Economics of Natural Resources	3
ENG 371. Literature & the Environment	3
ENG 471. Eco-Criticism & Environmental Ethics	3
GEOG 290. Human Interactions with the Physical Environment	3
GEOG 300. Population Geography	3
GEOG 310. Environmental Issues	1-4
GEOG 311. Endangered Environments	3
GEOG 320. Human Dimensions of Global Change	3
GEOG 322. Agricultural Systems	3
GEOG 325. Environmental Ethics	3
GEOG 341. Wilderness Techniques	3
GEOG 342. Management and Protection of Natural Resources	3
GEOG 343. Wildlife Management	3
GEOG 345. Geography of Poverty	3
GEOG/ISAT 429. Sustainability: An Ecological Process	3
GEOG 430. Geography of Crop Plants	3
HIST 427. U.S. Environmental History	3
ISAT 421. Environmental Policy and Regulation	3
SCOM 354. Communication, Environment and Environmentalism	3
SOCI 311. Sociology of the Environment	3
Approved special topics courses	3
Approved internship programs	1-6
Approved study abroad courses	1-6

Environmental Science Literacy

Minimum of 3 credit hours from this list.

Courses	Credit Hours
BIO 451. Ecological Systems	4
BIO 452. Population Ecology	4
BIO 456. Landscape Ecology	4
BIO 457. Environmental Toxicology	4
BIO 459. Freshwater Ecology	4
GEOG 327. Climatology	3
GEOG 340. Biogeography	3
GEOL 211. Introduction to Oceanography	3
GEOL 310. Management of Marine Resources	3
GEOL 340. Soils and Land Use	3
ISAT 320. Fundamentals in Environmental Science	3

Senior Seminar Capstone Course

Course	Credit Hours
ENVT 400 Capstone Seminar	3

Family Studies

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The interdisciplinary minor in family studies is designed for undergraduates seeking enhancement of their major, desiring to increase understanding of self and relationships, and seeking to make a positive contribution to society. A substantial knowledge of family-related issues, family processes, policies, laws, services and the interrelationship of families and societies will enhance majors in many fields including anthropology, early and middle education, health sciences, management, nursing, psychology, social work and sociology.

The minor encourages students to make connections between their major field and family studies, thereby adding value to the major.

The family studies minor requires a minimum of 18 credit hours with no more than six credit hours in the student's major.

One introductory course is required from the following: FAM 133, The Contemporary Family, or SOCI 276, Sociology of the Family. One course must be selected from each of these areas: families in society, family and intimate relationships, and human development in the family. An additional course must be selected from any of the three areas or from family studies electives. A capstone course, FAM 400, Family Issues and Applications, is also required. At least four courses in the minor, including the introductory course, must have been completed prior to enrolling in FAM 400.

Required Courses	Credit Hours
Introductory course (choose one of the following):	3
FAM 133. Contemporary Family	
SOCI 276. Sociology of the Family	
Families in Society (choose one of the following):	3
ECON 306. Economics of Women and the Family ¹	
GERN/SOCI 280. Social Gerontology	
HIST 466. The Family 1400-1800	
SOCI 303. Sociology of Death and Dying ²	
SOCI 337. Sociology of Gender	
SOWK 338. Issues and Policies in Family Services	
SOWK 342. Child Welfare Services	
Family and Intimate Relationships (choose one of the following):	3
FAM 330. Family Relations	
HTH 372. Human Sexuality	
PSYC 275. Psychology of Human Intimacy	
PSYC 450. Psychology of Child Abuse and Neglect ^{1,3}	
SOWK 340. Violence in Families ⁴	
Human Development in the Family (choose one of the following):	3
FAM 300. Child Development ^{1,5}	
FAM 335. Parent-Child Relationships Across the Lifespan	
PSYC 304. Death and Dying: Thanatology ^{1,5}	
PSYC 365. Developmental Psychology ^{1,7}	
PSYC 470. Psychology of the Young Adult ¹	
PSYC 475. Psychology of Adulthood ¹	
SOWK 387. Working with Teenagers	
Capstone	3
FAM 400. Family Issues and Applications ¹	
Additional family studies course	3
(choose additional course from B, C, D or one of the following):	
FAM 487. Special Topics in Family Issues	
FAM 490. Special Studies in Family Issues	
FAM Elective	

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1 Course has one or more prerequisites. 2 May not also take PSYC 304 in the minor. 3 May not also take SOWK 340 in the minor. 4 May not also take PSYC 450 in the minor. 5 May not also take SOCI 303 in the minor. 6 May not also take PSYC 365 in the minor. 7 May not also take FAM 300 in the minor.

Film Studies

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The minor in film studies is designed for students who wish to extend their critical understanding of visual communication and narrative form by studying how movies tell stories, convey information and influence audiences. Because the program is interdisciplinary, it examines films as both art and entertainment, bringing together the literary traditions of English and the communication perspectives of media arts and design. Together, the aim is to explore cinema's pictorial "language," investigate its