ENVIRONMENTAL SCIENCE, MINOR

Liberal Arts (Code 155-400)

Advisors: P. Ihinger (Geology), P. Kleintjes Neff (Biology), K. Mumford, G. Running (Geography and Anthropology), E. Weiher (Biology).

This multidisciplinary liberal arts minor is created primarily for Arts and Sciences students with interests in the environmental sciences and conservation of biological diversity. The minor emphasizes the study of environmental issues and techniques, ecology and conservation, and water and earth resources, and is designed to complement a 36-credit standard major, e.g., Biology, Liberal Arts or Political Science, Liberal Arts. Comprehensive major environmental science programs include the Geography and Anthropology Department Environmental Geography Comprehensive Major, the Geology Department Environmental Science Comprehensive Major, the Biology Department Ecology and Environmental Biology Comprehensive Major, and the Environmental Public Health Comprehensive Major.

The minor consists of a minimum of 24 credits from the list of courses in categories below with at least 11 credits at the 300 level and higher. Credits from other courses may also be applied as electives, pending advisor and college approval, when they focus specifically on environmental topics. This includes special topics, directed studies, independent studies, and/or internships. Applicable environmental courses offered through International Study Abroad or National Student Exchange may also be taken with consent of an advisor.

Twenty-four semester credits, including:

Required:
BIOL 180  Environmental Biology and Conservation 3
or GEOG 178  Conservation of the Environment

One or more of the following life sciences courses (min. 3 crs):
BIOL 321  Ecology 3
BIOL 328  Conservation Biology 4
BIOL 330  Population and Community Ecology 4
BIOL 338  Vegetation Ecology 4
BIOL 336  Terrestrial Ecology 4
BIOL 376  Aquatic Ecology 3-4

Two or more of the following physical science courses (min 6 crs):
CHEM 304  Environmental Chemistry 3
GEOG 304  Introduction to Geomorphology 4
GEOG 361  Environmental Hazards 3
GEOL 115  Environmental Geology 4
or GEOG 104  The Physical Environment
GEOL 304  Global Environmental Change 3
GEOL 308  Water Resources 3
GEOL 315  Hydrogeology I 4
GEOL 336  Introduction to Geochemistry 3

One or more of the following health, humanities, or social science courses (min 3 crs):
ECON 268  Environmental Economics 3

Two or more of the following techniques courses (min 6 crs):
BIOL 383  Statistical Analysis of Biological Data 3
ENPH 441  Water and Wastewater 3
GEOG 280  Cartographic Design 3
GEOG 335  Geographic Information Systems I 3
GEOG 336  Geospatial Field Methods 3
GEOG 338  Remote Sensing of the Environment 3
GEOG 350  Soils and the Environment 4
GEOG 363  Watershed Analysis 4
GEOG 364  Fluvial Processes and Landforms 4
GEOG 370  Quantitative Methods in Geography 3

A field capstone (min 1 cr):
BIOL 320  Studies in Tropical Environments 3
BIOL 329  Biological Field Experiences and Service-Learning Capstone 1-2
BIOL 490  Biological Field Studies 1-4
GEOL 303  Rocky Mountain Field Studies 3
GEOL 343  Geological Field Excursion 1-2
GEOL 470  Field Geology I 3

Note: For students pursuing standard majors in Biology or Geography, a maximum of 12 credits from the major may be applied to this minor.