

Collateral Program in Environmental Studies (18 credits)

This program offers students a multi-disciplinary approach to applying science and math to environmental issues including urban ecosystems and watersheds, human impacts regionally and globally, and sustainability. Critical thinking skills will be developed through lab and field experiences, problem solving and case studies, and participation in research activities.

Prerequisites: Precalculus (MATH 1054) or an equivalent or higher math course. One of the following lab sciences: Cell Biology (BIO 2400), Chemistry I (CHEM 1083), Intro to Geology (GEOL 1200) Intro to Meteorology (METR 1300) or a Physics course (PHYS 2091 or PHYS 2095).

Students must complete a minimum of 18 credit hours from courses listed in at least 3 of the areas below. These courses may not be used to also satisfy other requirements in general education or in the major program. Some courses may have additional prerequisites.

BIOLOGY

Botany (BIO 2500) 4 cr.
Genes, Organisms, Populations (BIO 2400) 4 cr.
Invertebrate Paleontology (GEOL 3264) 4 cr.
Marine Biology (BIO 3000) 4 cr.
Microbiology (BIO 3305) 4 cr.
Zoology (BIO 3400) 4 cr.

ECOLOGY

Applied Ecology (BIO 4615) 4 cr.
Environment, Ecology & Humanity (BIO 2601) 4 cr.
Principles of Ecology (BIO 3614) 4 cr.
Urban Ecology (ID XXXX) 3 cr.

GEOSCIENCE

Field Geology I (GEOL 3281) 2 cr.
Field Geology II (GEOL 4252) 2 cr.
Geographic Information Systems in Geoscience (ES 3200) 4 cr.
Hydrology (GEOL 3266) 4 cr.
Oceanography (OCEN 2400) 4 cr.
Marine Science (ES3600/OCEAN 3600) 3 cr.

METHODS

Air Pollution (METR 3360) 3 cr.
Applied Statistics (MATH 2526) 3 cr.
Biostatistics (BIO 4835) 3 cr.
Chemical Separation Methods (CHEM 4285) 4 cr.
Information Technology Foundations (TECH 1010) 3 cr.
Instrumental Methods of Analysis (CHEM 3284) 4 cr.
Remote Sensing (ES 4200) 4 cr.

PERSPECTIVES

Environment & Society (SOC 3420) 3 cr.
Environmental Philosophy (PHIL 3800) 3 cr.
Introduction to Public Health (HED 3635) 3 cr.
Observing the Earth (ES 1000) 3 cr.
The Community (SOC 3151) 3 cr.
World Geography (GEOG 2010) 3 cr.