

# ENVIRONMENTAL SCIENCE

## Courses

### Our Courses

#### ENVS 3000. Environmental Science. (3 Credits)

This course covers the biological, chemical, and geological components of world ecosystems. The causes of both air and water pollution will also be covered. The interactions between the atmosphere, lithosphere, hydrosphere, and biosphere will be described. The relationship between global change and the effects of human activities will be addressed as well.

**Attributes:** BIEL, ENST, ESNS, ESPS, INST, ISIN.

**Prerequisites:** BISC 1404 and BISC 1414 or (NSCI 1404 and NSCI 1414) and CHEM 1322 or NSCI 1322.

#### ENVS 4401. Environmental Science Internship. (4 Credits)

Individually tailored research internship in an environmental institution. Placement will be in an environmental organization, government agency or business, under the supervision of a consenting faculty member, and with permission of the Environmental Science Program Faculty Committee. Grade and credits are given only upon the completion and successful defense of a final report integrating the practical internship experience with previous course work in environmental science is required. A weekly seminar that synthesizes previous environmental science coursework with practical experiences is also required. All students choosing this option must complete two semesters (4 credits each). Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

#### ENVS 4501. Environmental Science Research. (4 Credits)

Individually tailored laboratory or field research conducted throughout the senior year. The project will be on a specific environmental topic under the supervision of a consenting faculty member and with permission of the Environmental Science Program Faculty Committee. Grade and credits are given only upon the completion and successful defense of a final research paper that integrates the project findings with previous published studies in environmental science. A weekly seminar that synthesizes previous environmental science coursework with research experiences is also required. All students choosing this option must complete two semesters (4 credits each). Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

#### ENVS 4999. Tutorial. (1 to 4 Credits)

## Courses in Other Areas

The following courses offered outside the program have the ENVS attribute and count toward the Environmental Science major.

Course	Title	Credits
ANTH 4373	Environment and Human Survival	4
ANTH 4722	Primate Ecology and Conservation	4
BISC 1403	Introductory Biology I	3
BISC 1404	Introductory Biology II	3
BISC 1413	Introductory Biology Lab I	2
BISC 1414	Introductory Biology Lab II	2
BISC 2539	General Genetics	3

BISC 2561	Ecology	3
BISC 2571	Ecology Lab	2
BISC 3244	Evolutionary Biology	3
BISC 3405	Plant Biology	3
BISC 3415	Plant Biology Lab	2
BISC 3466	Urban Ecology & Evolution	3
BISC 3643	Microbiology	3
BISC 4575	Conservation Biology	4
BISC 4642	Animal Behavior	4
CHEM 1321	General Chemistry I	4
CHEM 1322	General Chemistry II	4
CHEM 2521	Organic Chemistry I	4
CHEM 2522	Organic Chemistry II	4
CHEM 3622	Physical Chemistry II	4
CHEM 3632	Physical Chemistry Lab II	2
CHEM 3721	Quantitative Analysis	4
CHEM 3722	Instrumental Analysis	4
CHEM 3990	Directed Research	1
CHEM 4340	Environmental Chemistry	3
CHEM 4990	Independent Research	1-3
ECON 3850	Environmental Economics	4
ENST 3307	Environmental Politics	4
HIST 3990	North American Environmental History	4
HPLC 1603	Honors: Natural Science I	4
HPLC 1604	Honors: Natural Science II	4
MATH 1203	Applied Calculus I	3
MATH 1205	Applied Statistics	3
MATH 1206	Calculus I	4
MATH 1700	Mathematical Modelling	4
NSCI 1321	General Chemistry Lecture I	4
NSCI 1322	General Chemistry Lecture II	4
NSCI 1403	General Biology Lecture I	3
NSCI 1404	General Biology Lecture II	3
NSCI 1433	Concepts in Biology Lab I	2
NSCI 1434	Concepts in Biology Lab II	2
NSCI 2010	Global Ecology Lecture	3
NSCI 2020	An Introduction to Geology	3
NSCI 2060	Environment: Science, Law, and Policy	3
NSCI 2142	Paleoecology Lecture	3
NSCI 3101	Biological Modeling	4
NSCI 3102	Biological Modeling Recitation	0
NSCI 3121	Organic Chemistry Lecture I	4
NSCI 3122	Organic Chemistry Lecture II	4
NSCI 3133	Genetics Lecture	3
NSCI 3821	Organic Chemistry Lab I	2
NSCI 3822	Organic Chemistry Lab II	2
NSCI 4112	Animal Physiology Lecture	3
NSCI 4143	Advanced Microbiology Lecture	3
NSCI 4153	Biological Chemistry Lecture	3
NSCI 4222	Science, Technology, and Society Values	4
PHIL 3109	Environmental Ethics	4
PHIL 3990	Environmental Worldviews and Ethics	4

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PHYS 1501	General Physics I	3
PHYS 1511	Physics I Lab	1
POSC 3307	Environmental Politics	4
POSC 3312	Introduction to Environmental Politics	4
VART 2050	Designing the City	4
VART 2055	Environmental Design	4