

Environmental Sciences (ENVI)

The Environmental Science program, like the rather broad field of environmental science, is by its very nature highly interdisciplinary. Although the College of Agriculture administers the program through the Department of Crop, Soil, and Environmental Sciences, the Samuel Ginn College of Engineering and the College of Sciences and Mathematics are partners in developing the curriculum, guiding student development and providing instruction.

Environmental quality issues are often complex and significant expertise in physics, chemistry, biology, soil science and geology is needed to understand specific problems. Moreover, formulating solutions often requires mathematical expertise as well as specific knowledge of the air, water, and soil environments. Thus, the program is structured to educate environmental scientists broadly, but with considerable depth.

The program is specifically tailored to produce graduates who can enter and have a reasonable expectation of success in a field that is continually changing. The principal educational goals are to provide each student with a broad-based general education, a solid background in mathematics, physical science, and biological science, breadth of exposure to the environmental science field, and depth of knowledge in a specific area of environmental science of choice.

The curriculum is organized around a core set of courses that are required of all students. Students desiring to specialize may select from courses, called professional track electives, that emphasize environmental applications of biological science, physical science, soil science, or engineering science.

Freshman

Fall	Hours	Spring	Hours
ENVI 1010 Introduction to Environmental Science¹		1 ENGL 1120 English Composition II	3
CHEM 1030 Fundamentals Chemistry I & CHEM 1031 Fundamental Chemistry I Laboratory		4 ENVI 1020 Fundamentals of Environmental Science	3
ENGL 1100 English Composition I		3 BIOL 1020 Principles of Biology & BIOL 1021 Principles of Biology Laboratory	4
Core History 1		3 CHEM 1040 Fundamental Chemistry II & CHEM 1041 Fundamental Chemistry II Laboratory	4
MATH 1610 Calculus I		4 Core History 2	3
	15		17

Sophomore

Fall	Hours	Spring	Hours
BIOL 1030 Organismal Biology & BIOL 1031 Organismal Biology Laboratory		4 CHEM 2030 Survey of Organic Chemistry	3
PHYS 1500 General Physics I		4 STAT 2510 Statistics for Biological and Health Sciences	3
GEOL 1100 Dynamic Earth		4 PHYS 1510 General Physics II	4
COMM 1000 Public Speaking		3 GEOL 2100 Environmental Geology	4
	15		14

Junior

Fall	Hours	Spring	Hours
BIOL 3200 General Microbiology		3 CHEM 3050 Analytical Chemistry & CHEM 3051 Analytical Chemistry Laboratory	4
BIOL 3201 General Microbiology Laboratory		1 Professional Track²	4

FORV 5470 GIS Applications in Natural Resources	2	CIVL 5210 Chemical Principles of Environmental Engineering or 4210 Water and Wastewater Treatment and Design	3
CSES 2040 Basic Soil Science Professional Track²	4	BIOL 3060 Ecology	4
	6		
	16		15
Senior			
Fall	Hours	Spring	Hours
ENVI 4950 Environmental Science Senior Seminar Professional Track²		2 Professional Track²	7
		4 Core Social Science³	3
ECON 2020 Principles of Microeconomics		3 Core Literature	3
Core Fine Arts		3 UNIV 4AA0 Achieve the Creed	0
CSES 5000 Environmental Quality		3 PHIL 1020 Introduction to Ethics	3
	15		16
Total Hours: 123			

¹ Courses in boldface type are major courses and require a 2.0 minimum GPA for graduation.

² Professional Track - see adviser for approved course listing.

³ Student will choose from the following: ANTH 1000, GEOG 1010/GEOG 1017, PSYC 2010, SOCY 1000/SOCY 1007, or UNIV 2720.