ENVIRONMENTAL SCIENCE MAJOR - CHEMISTRY CONCENTRATION

FACULTY COORDINATING COMMITTEE Campbell (Chemistry and Biochemistry); Morris (Biology).

The interdepartmental major in environmental science is sponsored jointly by the departments of Biology and Chemistry and Biochemistry. The objectives of the program are to provide the student with the necessary background for a professional career in the area of environmental science or entrance into a graduate program.

Requirements

Each student will be assigned an advisor from the Biology department and must take the following core courses:

Code	Title	Hours
ENS 150	Introduction to Environmental Science	2.0
BIO 151 & BIO 152	Molecules to Cells and Molecules to Cells Laboratory	4.0
BIO 251 & BIO 252	Ecology, Evolution and Biodiversity and Ecology, Evolution and Biodiversity Laboratory	4.0
BIO 300	Population, Resources and Environment	3.0
BIO 420	Ecosystem Ecology	4.0
ENS 470	Environmental Science Capstone	1.0-3.0
CHM 110 & CHM 111	General Chemistry I and General Chemistry I Lab	4.0
CHM 116 & CHM 117	General Chemistry II and General Chemistry II Laboratory	4.0
CHM 252 & CHM 253	Organic Chemistry I and Organic Chemistry Laboratory I	5.0
CHM 416	Environmental Chemistry	3.0
Select one of the following:		4.0
GES 101 & GES 102	Principles of Earth Science and Principles of Earth Science Laboratory	
GES 110 & GES 111	Principles of Historical Geology and Principles of Historical Geology Laboratory	
Calculus		8.0
PHY 107 & PHY 108	General Physics I and General Physics II	8.0
Select one of the following: [1]		3.0
ECO 100	Introduction to Economics	
ECO 221	Principles of Microeconomics	
ECO 222	Principles of Macroeconomics	
Total Hours		**57-59**

[1] Both Micro and Macro Economics (ECO 221 and ECO 222) are highly recommended.

The student must have on average a grade of C or better in all ENS core courses.

Concentration Requirements

Code	Title	Hours
CHM 256 & CHM 257	Organic Chemistry II and Organic Chemistry Laboratory II	4.0
CHM 320	Quantitative Analysis	3.0
CHM 321	Quantitative Analysis Laboratory	1.0
CHM 326		
CHM 360	Biochemistry	3.0
CHM 420	Instrumental Analysis	4.0
CHM 470	Physical Chemistry I	3.0
Select one of the following:		3.0
MTH 111	Elementary Statistics	
BIO 260 & BIO 261	Biological Statistics I and Biological Statistics II	
Total Hours		**21**