

CHEMISTRY

CHEMISTRY PROGRAM - ENVIRONMENTAL OPTION

The objective of the Environmental curriculum is to bring together the disciplines of chemistry, biology, and geology as applied to the environment. Emphasis will be on interdisciplinary approaches to environmental studies.

Curriculum

The matrix below is a sample plan for all coursework required for this program.

Freshman

Fall	Credits
ENGL 1013 Composition I ¹	3
MATH 2243 Calculus for Business and Economics	3
PHSC 1001 Orientation to Physical Science	1
BIOL 1004 Principles of Environmental Science/ENVS 1004 Principles of Environmental Science/PHSC 1004 Principles of Environmental Science	4
CHEM 2124 General Chemistry I and CHEM 2120 General Chemistry I Lab	4
Total Hours	15

Spring	Credits
ENGL 1023 Composition II ¹	3
SS 1XXX Social Science Courses ¹	3
ECON 2003 Principles of Economics I	3
PHSC 1011 Orientation to Physical Science II	1
CHEM 2134 General Chemistry II and CHEM 2130 General Chemistry II Lab	4
CHEM 3313 Environmental Chemistry	3
Total Hours	17

Sophomore

Fall	Credits
USHG 1XXX U S HISTORY & GOVERNMENT ¹	3
STAT 2163 Introduction to Statistical Methods or PSY 2053 Statistics for the Behavioral Sciences/SOC 2053 Statistics for the Behavioral Sciences	3
COMS 2003 Microcomputer Applications or COMS 2803 Programming in C	3
PHYS 2014 Algebra-Based Physics I and PHYS 2000 Physics Laboratory I	4
CHEM 3254 Fundamentals of Organic Chemistry	4
Total Hours	17

Spring	Credits
PHYS 2024 Algebra-Based Physics II and PHYS 2010 Physics Laboratory II	4
CHEM 2111 Environmental Seminar	1
CHEM 3245 Quantitative Analysis	5
CHEM 3264 Mechanistic Organic Chemistry	4
Total Hours	14

Junior

Fall	Credits
FAH 1XXX Fine Arts and Humanities Courses ¹	3
ENGL 2053 Technical Writing	3
BIOL 2124 Principles of Zoology	4
GEOL 1014 Physical Geology	4
BIOL 3353 Fundamentals of Toxicology/CHEM 3353 Fundamentals of Toxicology	3
Total Hours	17

Spring	Credits
FAH 1XXX Fine Arts and Humanities Courses ¹	3
SFHS 1XXX Social Sciences/Fine Arts/Humanities/Communication Courses ¹	3
BIOL 2134 Principles of Botany	4
BIOL 3043 Conservation/ENVS 3043 Conservation	3
BIOL 3111 Environmental Seminar/CHEM 3111 Environmental Seminar/ENVS 3111 Environmental Seminar/GEOL 3111 Environmental Seminar	1
Total Hours	14

Senior

Fall	Credits
BIOL 3054 Microbiology	4
BIOL 3114 Principles of Ecology	4
GEOL 3083 Hydrogeology	3
CHEM 4414 Instrumental Analysis	4
Total Hours	15

Spring	Credits
BIOL 4111 Environmental Seminar/CHEM 4111 Environmental Seminar/GEOL 4111 Environmental Seminar	1

Spring	Credits
CHEM 4951 Undergraduate Research in Chemistry-4 or CHEM 4991 Special Problems in Chemistry-4	1-4
Elective	6-9
Total Hours	11

¹See appropriate choices, alternatives or substitutions in "[General Education Requirements](#)". A specific general education core course does not have to be taken in the semester listed, any other part of the general education core at any time is acceptable as well.