

**2003-05 Catalog Paradigm
Environmental Science**

First Year	
1.	BL120 (GS4) (1 st semester)
2.	BL121 (2 nd semester)
3.	GL105 or 107
4.	MT124 or 131 (GS8)
5.	CS110 or BA142
6.	General Education
7.	General Education
8.	General Education

Second Year	
1.	BL228 (1 st semester)
2.	ES300 (2 nd semester)
3.	GL225 (1 st semester)
4.	CH105 (1 st semester)
5.	CH107 (2 nd semester)
6.	General Education
7.	General Education
8.	General Education

Third Year	
1.	BL Elective (225, 350, 355, 380, 390, 450)
2.	BL338
3.	ES310 (2 nd semester)
4.	BA284 or DS224
5.	CH216 or 220
6.	General Education
7.	General Education
8.	Elective/Minor

Fourth Year	
1.	BL428, GL428, or ES428 (2 nd semester)
2.	BL Elective (225, 350, 355, 380, 390, 450)
3.	General Education
4.	General Education
5.	Elective/Minor
6.	Elective/Minor
7.	Elective/Minor
8.	Elective/Minor

Elective/Minor courses can be used to take additional major courses, free electives, or to fulfill a minor.

Progress Sheet Environmental Science

Student Name: Student ID:	
General Education – Lower Biennium	Major
<input type="checkbox"/> GS1 – Religious Studies _____ <input type="checkbox"/> GS2 – Philosophy of Human Nature _____ <input type="checkbox"/> GS3 – Human Relationships _____ <input type="checkbox"/> GS4 – Natural Science _____ <input type="checkbox"/> GS5 – Creative Expression _____ <input type="checkbox"/> GS6 – United States Heritage _____ <input type="checkbox"/> GS7 – Foreign Heritages _____ <input type="checkbox"/> GS8 – Quantitative Skills _____ <input type="checkbox"/> GS9 – Writing _____ _____	Required Courses: <input type="checkbox"/> BL120 – General Biology I <input type="checkbox"/> BL121 – General Biology II <input type="checkbox"/> BL228 – Ecology <input type="checkbox"/> BL338 – Limnology <input type="checkbox"/> BL428 OR GL428 OR ES428 – Environmental Research <input type="checkbox"/> ES300 – Environmental Science <input type="checkbox"/> 1 of BL225, 350, 355, 380, 390, 450 <input type="checkbox"/> 1 of BL225, 350, 355, 380, 390, 450 <input type="checkbox"/> GL105 – Geology or GL107 – Environmental Geology <input type="checkbox"/> GL225 - Hydrogeology <input type="checkbox"/> CH105 – General Chemistry I <input type="checkbox"/> CH107 – General Chemistry II <input type="checkbox"/> CH216 – Organic Chemistry or CH220 – Organic Chemistry I <input type="checkbox"/> ES310 – Environmental Chemistry <input type="checkbox"/> MT124 – Survey of Calculus or MT131 – Calculus and Analytic Geometry I <input type="checkbox"/> CS110 – Introduction to Computer Programming or BA142 – Computer Applications In Business <input type="checkbox"/> BA284 – Statistics for Business and Economics or DS224 – Basic Statistics
General Education – Upper Biennium	
<input type="checkbox"/> GS1 – Religious Studies _____ <input type="checkbox"/> GS10 – Western Tradition _____ <input type="checkbox"/> GS11 – Global Society _____ <input type="checkbox"/> GS12 – Senior Colloquium (GS400) _____ _____	<p>Note – It is recommended that the student select courses as electives in the physical and earth sciences such as PY121 and 122, and GL307. For students interested in graduate study, we also recommend course work in biology at the suborganismal level (BL224).</p>

2003-2005 SNC Program Description

Environmental Science (ENVS)

Environmental Science is an interdisciplinary major which requires advanced course work in the areas of biology, geology, and chemistry. The Environmental Science program has several objectives: a) to provide the student with a solid science foundation balanced with a liberal arts education; b) to provide a foundation in the specifics, theory, and concepts of environmental science as a prerequisite for post-graduate study, or for positions in government service and industry; c) to develop research skills in the student; and d) to develop in the student a contemporary environmental ethic based on a scientific understanding of natural processes. A key component of the Environmental Science major is the requirement to complete independent research by taking BIOL 428, GEOL 428, or ENVS 428 under the supervision of an appropriate faculty member. The products of this research (at the minimum a written report, but in some cases including an oral presentation) not only arm the student with evidence that the major's objectives have been accomplished, but also will serve as a primary vehicle for assessment of the major.

Graduate School Advisor: Dr. David Poister

Major (17 courses, 6 in Biology): The major is expected to satisfy all the requirements for each of the areas below.
(See Biology, Natural Science and Chemistry.)

Biology courses:

BIOL 120 General Biology I
BIOL 121 General Biology II
BIOL 228 Ecology
BIOL 338 Limnology
BIOL 428 Environmental Biology Research **or**
GEOL 428 Environmental Geology Research **or**
ENVS 428 Environmental Science Research
ENVS 300 Environmental Science

Biological Electives (minimum of one of the following):

BIOL 225 Vertebrate Natural History
BIOL 350 Microbiology
BIOL 355 Invertebrate Biology
BIOL 380 Plant Ecology
BIOL 390 Ichthyology
BIOL 450 Special Topics

Geology Courses:

Either GEOL 105 Geology **or** GEOL 107 Environmental Geology
GEOL 225 Hydrogeology

Chemistry Courses:

CHEM 105 General Chemistry I
CHEM 107 General Chemistry II
Either CHEM 216 Organic Chemistry **or** CHEM 220 Organic Chemistry I
ENVS 310 Environmental Chemistry

Required Cognates:

Either MATH 124 Survey of Calculus **or** MATH 131 Calculus and Analytical Geometry
Either CSCI 110 Introduction to Computer Programming **or** BUAD 140 Business Information Systems
Either BUAD 284 Statistics for Business and Economics **or** SSCI 224 Basic Statistics
It is recommended that the student select courses as electives in the physical and earth sciences, such as PHYS 121, PHYS 122, and GEOL 307. For students interested in graduate study, we also recommend course work in biology at the suborganismal level (e.g., BIOL 244).

Academic Minor (6 courses):

BIOL 120 or 180, BIOL 228, ENVS 300, and three electives above the BIOL 200 level chosen from the core or elective listing of the environmental science major program.

