MAJOR IN ENVIRONMENTAL SCIENCE AND STUDIES -ENVIRONMENTAL SCIENCE CONCENTRATION

The Environmental Science Concentration prepares students to become environmental problem-solvers in a world confronting climate change, population expansion, pollution and depletion of natural resources. Students in this concentration select from several tracks depending on student interest in Biology, Chemistry, Geology or the more general, Environmental Science.

Requirements Environmental Science Concentration

The Environmental Science Concentration requires 43–45 units. Students then choose a track that provides advanced study in one of three different fields: biology, chemistry or geology, or for students who choose not to specialize, a more general Environmental Science Track is also available. Each track has its own required courses and electives. The Environmental Science Concentration requires a total of 71–86 units (depending upon the track selected).

Common Required Courses

Code	Title	Units
Natural Sciences		
BIOL 206 & 206L	BIOLOGY II: INTRODUCTION TO ECOLOGY AND EVOLUTION [LECTURE] and BIOLOGY II: INTRODUCTION TO ECOLOGY AND EVOLUTION [LAB]	4
CHEM 131 & 131L	GENERAL CHEMISTRY I LECTURE and GENERAL CHEMISTRY I LABORATORY	4
CHEM 132 & 132L	GENERAL CHEMISTRY II LECTURE and GENERAL CHEMISTRY II LABORATORY	4
GEOL 121	PHYSICAL GEOLOGY	4
Mathematics and Sta	tistics	
MATH 119	PRE-CALCULUS ¹	3-4
or MATH 211	CALCULUS FOR APPLICATIONS	
Select one of the follo	owing:	3-4
MATH 231	BASIC STATISTICS	
MATH 237	ELEMENTARY BIOSTATISTICS	
GEOG 375	QUANTITATIVE METHODS IN GEOGRAPHY	
ECON 205	STATISTICS FOR BUSINESS AND ECONOMICS I	
Social Sciences/Hum	anities	
ENGL 318	TECHNICAL AND SCIENTIFIC WRITING	3
or GEOG 383	NATURAL RESOURCES AND SOCIETY: A GEOGRAPHIC PERSPECTIVE	
PHIL 255	ENVIRONMENTAL ETHICS	3
or HLTH 451	INTRODUCTION TO ENVIRONMENTAL HEALTH	H
Select two of the following sequences, which include both an upper-level and a lower-level course:		

Sequence 1		
GEOG 101 & GEOG 410	PHYSICAL GEOGRAPHY and ENVIRONMENTAL GEOGRAPHY	
Sequence 2		
ECON 201	MICROECONOMIC PRINCIPLES	
ECON 375	ENVIRONMENTAL ECONOMICS	
or ECON 376	NATURAL RESOURCE ECONOMICS	
Sequence 3		
POSC 103	AMERICAN NATIONAL GOVERNMENT	
or POSC 207	STATE GOVERNMENT	
Select one of the f	ollowing:	
FNVS 411	WATER POLICIES OF THE UNITED STATES	
ENVS 420	ENVIRONMENTAL POLICY AND SUSTAINABLE MANAGEMENT	
ENVS 425	SCIENCE AND POLICY OF THE CHESAPEAKE BAY RESTORATION	
Applications		
Select one of the follo	owing:	3
ENVS 482	ENVIRONMENTAL RESEARCH	
ENVS 485	ENVIRONMENTAL INTERNSHIP	
ENVS 491	SENIOR SEMINAR	
Total Units		43-45
Environmental B	iology Track	
Code	Title	Units
Required Courses		
BIOL 200 & 200L	BIOLOGY I: INTRODUCTION TO CELLULAR BIOLOGY AND GENETICS [LECTURE] and BIOLOGY I: INTRODUCTION TO CELLULAR BIOLOGY AND GENETICS [LAB]	4
BIOL 205	GENERAL BOTANY	4
or BIOL 207	GENERAL ZOOLOGY	
Select one of the follo	owing:	4
BIOL 310	CONSERVATION BIOLOGY	
BIOL 402	GENERAL ECOLOGY	
BIOL 435	PLANT ECOLOGY	
Select one of the follo	owing:	
CHEM 333 & 333L	ESSENTIALS OF ORGANIC CHEM [LECTURE] and ESSENTIALS OF ORGANIC	5-10
	CHEMISTRY LABORATORY	
or CHEM 334 & CHEM 336 & CHEM 337 & CHEM 339	ORGANIC CHEMISTRY I [LECTURE] and INTRODUCTORY ORGANIC CHEMISTRY LABORATORY and ORGANIC CHEMISTRY II [LECTURE] and INTERMEDIATE ORGANIC CHEMISTRY	
Floatives		
Soloot three of the fol	llowing	0.10
BIOL 304		9-12
BIOL 206		
BIOL 309		
BIUL 310	required)	

	BIOL 318	MICROBIOLOGY		PHYS 211
	BIOL 325	ANIMAL PHYSIOLOGY		& PHYS 212
	BIOL 334	HUMANS, SCIENCE AND THE CHESAPEAKE BAY		
	BIOL 347	MARINE BIOLOGY		Select one of the fo
	BIOL 353	INVERTEBRATE ZOOLOGY		BIOL 402
	BIOL 382	ENVIRONMENTAL EDUCATION AND		or BIOL 406
		SERVICE LEARNING IN THE TROPICS		Select one of the fo
	BIOL 389	CURRENT DEVELOPMENTS IN BIOLOGY ²		GEOL 415
	BIOL 402	GENERAL ECOLOGY (if not taken as		or GEOL 305
		required)		Electives
	BIOL 405	MOLECULAR ECOLOGY, EVOLUTION AND		Select six units fron
		CONSERVATION		CHEM 310
	BIOL 406	LIMNOLOGY		CHEM 323
	BIOL 413	EVOLUTION		CHEM 345
	BIOL 419	ENVIRONMENTAL MICROBIOLOGY		CHEM 351
	BIOL 432	VASCULAR PLANT TAXONOMY		CHEM 356
	BIOL 435	PLANT ECOLOGY (if not taken as required)		CHEM 372
	BIOL 436	PLANT PHYSIOLOGY		CHEM 461
	or BIOL 447	TROPICAL FIELD ECOLOGY		CHEM 462
	BIOL 444	WILDLIFE MANAGEMENT		CHEM 480
	BIOL 446	TROPICAL ECOLOGY AND CONSERVATION		Select one additiona
	BIOL 447	TROPICAL FIELD ECOLOGY		Environmental Scien
	BIOL 452	WETLAND ECOLOGY		Total Units
	BIOL 455	FISH BIOLOGY		- · · · ·
	BIOL 456	ORNITHOLOGY		Environmental
	BIOL 458	MAMMALOGY		Code
	BIOL 461	ENTOMOLOGY		Required Courses
	BIOL 467	HERPETOLOGY		CHEM 220
	BIOL 473	ECOLOGICAL FIELD METHODS		& 220L
		LABORATORY		or GEOL 410
	BIOL 474	MOLECULAR TECHNIQUES IN ECOLOGY,		DUN(0.011
		EVOLUTION, AND CONSERVATION		PHYS 211
	CHEM 480	CHEMICAL TOXICOLOGY		CEOL 205
5	Select one additional	course from among any of the	2-4	GEOL 331
	invironmental Scien	ce and Studies tracks.		
Т	otal Units		28-38	Select one of the fe
				Select one of the fo

Environmental Chemistry Track

Code	Title	Units
Required Courses		
CHEM 220 & 220L	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB]	5
CHEM 333 & 333L	ESSENTIALS OF ORGANIC CHEM [LECTURE] and ESSENTIALS OF ORGANIC CHEMISTRY LABORATORY	5-10
or CHEM 334 & CHEM 336 & CHEM 337 & CHEM 339	ORGANIC CHEMISTRY I [LECTURE] and INTRODUCTORY ORGANIC CHEMISTRY LABORATORY and ORGANIC CHEMISTRY II [LECTURE] and INTERMEDIATE ORGANIC CHEMISTRY LABORATORY	

& PHYS 212	BASED and GENERAL PHYSICS II; NON CALCULUS-BASED ³	
Select one of the follo	owing:	
BIOL 402	GENERAL ECOLOGY	4
or BIOL 406	LIMNOLOGY	
Select one of the follo	owing:	
GEOL 415	HYDROGEOLOGY	4
or GEOL 305	ENVIRONMENTAL GEOLOGY	
Electives		
Select six units from	the following:	6
CHEM 310	INSTRUMENTAL ANALYSIS	
CHEM 323	INORGANIC CHEMISTRY	
CHEM 345	PRINCIPLES OF PHYSICAL CHEMISTRY	
CHEM 351	BIOCHEMISTRY	
CHEM 356	BIOCHEMISTRY LAB	
CHEM 372	PHYSICAL CHEMISTRY LABORATORY	
CHEM 461	ADVANCED LECTURE TOPICS	
CHEM 462	ADVANCED LABORATORY TECHNIQUES	
CHEM 480	CHEMICAL TOXICOLOGY	
Select one additional	course from among any of the	3-4
Environmental Science	ce and Studies tracks	
Total Units		35-41
Environmental G	eology Irack	
Code	Title	Units
Required Courses		
Required Courses CHEM 220	ANALYTICAL CHEMISTRY [LECTURE]	4-5
Required Courses CHEM 220 & 220L	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB]	4-5
Required Courses CHEM 220 & 220L or GEOL 410	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY	4-5
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵	4-5 4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY	4-5 4 4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY	4-5 4 4 4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY	4-5 4 4 4 4 4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follow	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY	4-5 4 4 4 4 4 4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follow GEOL 321	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY owing: STRUCTURAL GEOLOGY	4-5 4 4 4 4 4 4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follo GEOL 321 GEOL 443	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY STRUCTURAL GEOLOGY SEDIMENTOLOGY AND STRATIGRAPHY	4-5 4 4 4 4 4 4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follo GEOL 321 GEOL 443 Electives	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY STRUCTURAL GEOLOGY SEDIMENTOLOGY AND STRATIGRAPHY	4-5 4 4 4 4 4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follow GEOL 321 GEOL 443 Electives Select one of the follow	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY Wing: STRUCTURAL GEOLOGY SEDIMENTOLOGY AND STRATIGRAPHY Wing:	4-5 4 4 4 4 4 4 3-4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follow GEOL 321 GEOL 443 Electives Select one of the follow	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY STRUCTURAL GEOLOGY SEDIMENTOLOGY AND STRATIGRAPHY SEDIMENTOLOGY AND STRATIGRAPHY SUSTAINABILITY AND THE USE OF NATURAL RESOURCES	4-5 4 4 4 4 4 3-4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follow GEOL 321 GEOL 301 GEOL 321	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY STRUCTURAL GEOLOGY SEDIMENTOLOGY AND STRATIGRAPHY SEDIMENTOLOGY AND STRATIGRAPHY SUSTAINABILITY AND THE USE OF NATURAL RESOURCES STRUCTURAL GEOLOGY (if not taken as required)	4-5 4 4 4 4 4 3-4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follor GEOL 321 GEOL 301 GEOL 301 GEOL 321 GEOL 321	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY STRUCTURAL GEOLOGY SEDIMENTOLOGY AND STRATIGRAPHY SUSTAINABILITY AND THE USE OF NATURAL RESOURCES STRUCTURAL GEOLOGY (if not taken as required) PETROLOGY OF IGNEOUS AND METAMORPHIC ROCKS	4-5 4 4 4 4 4 3-4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follow GEOL 443 Electives Select one of the follow GEOL 321 GEOL 301 GEOL 321 GEOL 321 GEOL 333	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY Wing: STRUCTURAL GEOLOGY SEDIMENTOLOGY AND STRATIGRAPHY SEDIMENTOLOGY AND STRATIGRAPHY Wing: SUSTAINABILITY AND THE USE OF NATURAL RESOURCES STRUCTURAL GEOLOGY (if not taken as required) PETROLOGY OF IGNEOUS AND METAMORPHIC ROCKS	4-5 4 4 4 4 4 4 3-4
Required Courses CHEM 220 & 220L or GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follow GEOL 321 GEOL 321 GEOL 321 GEOL 321 GEOL 321 GEOL 321 GEOL 321 GEOL 321	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY HYDROGEOLOGY STRUCTURAL GEOLOGY SEDIMENTOLOGY AND STRATIGRAPHY Wing: SUSTAINABILITY AND THE USE OF NATURAL RESOURCES STRUCTURAL GEOLOGY (if not taken as required) PETROLOGY OF IGNEOUS AND METAMORPHIC ROCKS OCEANOGRAPHY SEDIMENTOLOGY AND STRATIGRAPHY (if	4-5 4 4 4 4 4 3-4
Required Courses CHEM 220 ar GEOL 410 PHYS 211 GEOL 305 GEOL 331 GEOL 415 Select one of the follow GEOL 443 Electives Select one of the follow GEOL 301 GEOL 321 GEOL 301 GEOL 321 GEOL 301 GEOL 321 GEOL 321 GEOL 301	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] METHODS FOR ENVIRONMENTAL GEOCHEMISTRY GENERAL PHYSICS I; NON CALCULUS- BASED ⁵ ENVIRONMENTAL GEOLOGY MINERALOGY HYDROGEOLOGY HYDROGEOLOGY STRUCTURAL GEOLOGY SEDIMENTOLOGY AND STRATIGRAPHY NATURAL RESOURCES STRUCTURAL GEOLOGY (if not taken as required) PETROLOGY OF IGNEOUS AND METAMORPHIC ROCKS OCEANOGRAPHY SEDIMENTOLOGY AND STRATIGRAPHY (if not taken as required)	4-5 4 4 4 4 4 3-4

GENERAL PHYSICS I; NON CALCULUS-

8

Select one additional course from among any of the	2-4
Environmental Science and Studies tracks.	

29-33

Environmental Science Track

Total Units

Required Courses BIOLOGY I: INTRODUCTION TO CELLULAR 4 BIOL 200 BIOLOGY AND GENETICS [LECTURE] and BIOLOGY I: INTRODUCTION TO CELLULAR BIOLOGY AND GENETICS [LAB] 4 CHEM 220 ANALYTICAL CHEMISTRY [LECTURE] 5 & 220L and ANALYTICAL CHEMISTRY [LAB] 5	Code	Title	Units
BIOL 200 BIOLOGY I: INTRODUCTION TO CELLULAR 4 & 200L BIOLOGY AND GENETICS [LECTURE] and BIOLOGY I: INTRODUCTION TO cELLULAR BIOLOGY AND GENETICS [LAB] CHEM 220 ANALYTICAL CHEMISTRY [LECTURE] 5 & 220L and ANALYTICAL CHEMISTRY [LAB] 5	Required Courses		
CHEM 220 ANALYTICAL CHEMISTRY [LECTURE] 5 & 220L and ANALYTICAL CHEMISTRY [LAB]	BIOL 200 & 200L	BIOLOGY I: INTRODUCTION TO CELLULAR BIOLOGY AND GENETICS [LECTURE] and BIOLOGY I: INTRODUCTION TO CELLULAR BIOLOGY AND GENETICS [LAB]	4
or CHEM 330 ESSENTIALS OF ORGANIC CHEMISTRY	CHEM 220 & 220L or CHEM 330	ANALYTICAL CHEMISTRY [LECTURE] and ANALYTICAL CHEMISTRY [LAB] ESSENTIALS OF ORGANIC CHEMISTRY	5
PHYS 211 GENERAL PHYSICS I; NON CALCULUS- & PHYS 212 BASED and GENERAL PHYSICS II; NON CALCULUS-BASED ³	PHYS 211 & PHYS 212	GENERAL PHYSICS I; NON CALCULUS- BASED and GENERAL PHYSICS II; NON CALCULUS-BASED ³	8
Electives	Electives		
Select one of the following: (additional prerequisites may be required)	Select one of the follo required)	wing: (additional prerequisites may be	4
BIOL 402 GENERAL ECOLOGY	BIOL 402	GENERAL ECOLOGY	
BIOL 310 CONSERVATION BIOLOGY	BIOL 310	CONSERVATION BIOLOGY	
BIOL 406 LIMNOLOGY	BIOL 406	LIMNOLOGY	
GEOL 415 HYDROGEOLOGY	GEOL 415	HYDROGEOLOGY	
GEOL 305 ENVIRONMENTAL GEOLOGY	GEOL 305	ENVIRONMENTAL GEOLOGY	
Two additional environmental electives in the same discipline9-12from biology, chemistry, geology or geography AND one additionalcourse selected from among any of the Environmental Scienceand Studies tracks	Two additional enviro from biology, chemist course selected from and Studies tracks	nmental electives in the same discipline ry, geology or geography AND one additional among any of the Environmental Science	9-12
Total Units 30-33	Total Units		30-33

¹ The requirement of MATH 119 or MATH 211 may also be satisfied by successful completion of MATH 273 or MATH 274.

² Acceptable topics related to environmental science and studies. Please contact the Environmental Science and Studies program director for approval.

- ³ The requirement of PHYS 211 and PHYS 212 may also be satisfied by successful completion of PHYS 241 and PHYS 242.
- ⁴ GEOL 410 preferred.

⁵ The requirement of PHYS 211 may also be satisfied by successful completion of PHYS 241.

Four-Year Plan of Study

Sample Four-Year Plan

The selected course sequence below is an example of the simplest path to degree completion. Based on course availability, student needs, and student choice, individual schedules will vary. Students should consult with their adviser to make the most appropriate elective choices and to ensure that they have completed the required number of units (120) to graduate.

Freshman

Term 1	Units Term 2	Units
CHEM 131	4 BIOL 206	4
& 131L (Core 8)	& 206L (Core 7)	

MATH 119 or 211 (Core 3)	4 CHEM 132 & 132L	4
Select one of the following: ¹	4 ECON/GEOG/POSC lower level (Core 6)	3
BIOL 200 & 200L	Core 2 (or Core 1)	3
GEOL 121		
Core 1 (or Core 2)	3	
	15	14
Sophomore		
Term 1	Units Term 2	Units
ECON 205, GEOG 375, MATH 231, or MATH 237	3 ECON/GEOG/POSC upper level	3
ECON/GEOG/POSC lower level	3 Track Requirement	4
GEOL 121 (or Track Requirement)	4 Track Requirement	4
Core 4	3 Core 10	3
Core 5	3	
	16	14
Junior		
Term 1	Units Term 2	Units
ECON/GEOG/POSC upper level	3 ENGL 318 (Core 9)	3
HLTH 451 or PHIL 255	3 Track Requirement	4
Track Requirement	4 Track Requirement	5
Core 11	3 Core 13	3
Core 12	3	
	16	15
Senior		
Term 1	Units Term 2	Units
ENVS 482, 485, or 491	3 Track Requirement or elective	3
Track Requirement	3 Track Requirement or elective	3
Track Requirement	4 Elective	3
Core 14	3 Elective	3
Elective	3 Elective	2
	16	14

Total Units 120

 ¹ BIOL 200 / BIOL 200L is required for Environmental Biology and Environmental science track and is a prerequisite for BIOL 206. However, students in other environmental science tracks that elect not to take BIOL 200/200L could consider GEOL 121 in this semester.

Learning Outcomes

- 1. Apply their knowledge of the sciences and the scientific method to collect, analyze and interpret data that they have collected or to critique the methods used by others to collect, analyze and interpret data.
- Identify the cultural, economic, geographic and/or political facets of environmental problems/situations and relate their understanding of these components to particular situations.

- 3. Relate the theoretical background materials presented in natural science, social science or humanities courses to specific current environmental problems/dilemmas.
- 4. Students will display competency in essential skills required of a college graduate by reading, interpreting, analyzing and evaluating written discourse.
- Students will display competency in essential skills required of a college graduate by researching a topic, develop an argument and organize supporting details (ILTC).