ENVIRONMENTAL SCIENCE, BACHELOR OF SCIENCE WITH A CONCENTRATION IN LIFE SCIENCE

Requirements

Code	Title	Credits
Required core courses:		
(Note that in the case of cross-listed courses, Environmental Science majors must enroll in the ENVN section)		
ENVN 2010	ENVIRONMENTAL PROBLEMS AND SOLUTIONS	2
ENVN/GEOG/GEOL/BIOL 4610	ENVIRONMENTAL MONITORING AND ASSESSMENT	3
GEOL 1010	ENVIRONMENTAL GEOLOGY	3
GEOG 1050	HUMAN-ENVIRONMENT GEOGRAPHY	4
Minimum of 1 credit hour of ENVN 4800 must be completed (up to 3 credits can be applied to the major)		
ENVN/BIOL 4800	INTERNSHIP IN ENVIRONMENTAL MANAGEMENT AND PLANNING	1-3
ENVN/BIOL/GEOG/PA 4820	INTRODUCTION TO ENVIRONMENTAL LAW & REGULATIONS	3
Also required:		
An approved course in statistics (BIOL 4110, STAT 1530, STAT 3000, PSYC 3130, SOC 2130)		3-4
An approved GIS course (ENVN 4600, GEOG 1090, GEOG 3530, GEOG 4050)		1-4
An approved course focusing on the human dimensions of environmental studies (ANTH 4250, ENVN 3180, ENVN 4270, SOC 4760, PHIL 3180, PSCI 4270)		3
Life Science Concentration requirements:		
BIOL 1450	BIOLOGY I	5
BIOL 1750	BIOLOGY II	5
BIOL 2140	GENETICS	4
BIOL 3340	ECOLOGY	4
BIOL 3530	FLORA OF THE GREAT PLAINS	4
BIOL 4120	CONSERVATION BIOLOGY	3
Select three additional upper division courses in Biology or Environmental Science from the approved list below). At least two courses must include a lab.		10-12
Required cognate courses:		
CHEM 1010	CHEMISTRY IN THE ENVIRONMENT AND SOCIETY	3
or CHEM 3030	ENVIRONMENTAL CHEMISTRY	
In addition, select one of the following chemistry sequences:		10-13
Sequence One:		
CHEM 1140 & CHEM 1144	FUNDAMENTALS OF COLLEGE CHEMISTRY and FUNDAMENTALS OF COLLEGE CHEMISTRY LABORATORY	
CHEM 2210 & CHEM 2214	FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY	
Sequence Two:		
CHEM 1180 & CHEM 1184	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY	
CHEM 1190 & CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY	
CHEM 2210 & CHEM 2214	FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY	
Complete one additional approved physical science course in Chemistry, Geology, Physical Geography, or Physics.		3-5
CHEM 3650 & CHEM 3654	FUNDAMENTALS OF BIOCHEMISTRY and FUNDAMENTALS OF BIOCHEMISTRY LABORATORY	
PHYS 1050 & PHYS 1054	INTRODUCTION TO PHYSICS and INTRODUCTION TO PHYSICS LABORATORY	
PHYS 1110	GENERAL PHYSICS I	
GEOL 1170	INTRODUCTION TO PHYSICAL GEOLOGY	
GEOL 2300	GEOSCIENCE DATA ANALYSIS AND MODELING	
GEOL 4260	PROCESS GEOMORPHOLOGY	
GEOL 4330	SOIL GENESIS, MORPHOLOGY AND CLASSIFICATION	
GEOL 4540	GEOCHEMISTRY	
GEOL 4640	CRITICAL ZONE SCIENCE	
GEOG 4010	CONSERVATION OF NATURAL RESOURCES	
GEOG 4320	CLIMATOLOGY	
GEOG 4340	WATER RESOURCES	
GEOG 4350	GLOBAL CLIMATE CHANGE	
GEOG 4630	ENVIRONMENTAL REMOTE SENSING	
Total Credits		**74-87**

Code	Title	Credits
Approved Upper Level Course in Biology and Environmental Science. Three courses from this list are required and at least two must include labs.		
BIOL 3020	MOLECULAR BIOLOGY OF THE CELL	3
BIOL 3680	BIOLOGY OF AFRICA	3
BIOL 3730	FAUNA OF THE GREAT PLAINS	3
BIOL 4030	SPECIAL TOPICS IN BIOLOGY (*)	3
BIOL 4040	DIRECTED READINGS IN BIOLOGY (*)	1-3
BIOL 4050	SUPERVISED RESEARCH IN BIOLOGY (*)	1-3
BIOL 4100	BIOGEOGRAPHY	3
BIOL 4110	STATISTICS FOR BIOLOGICAL SCIENCES (**)	4
BIOL/ENVN 4180	FRESHWATER ECOLOGY	4
BIOL 4210	FIRE ECOLOGY	3
BIOL 4220	POPULATION BIOLOGY	4
BIOL 4230	EVOLUTION	3
BIOL 4240	MARINE BIOLOGY	3
BIOL 4260	BEHAVIORAL ECOLOGY	3
BIOL/ENVN 4410	WETLAND ECOLOGY AND MANAGEMENT	3
BIOL 4420	RESTORATION ECOLOGY	3
BIOL 4490	MEDICINAL USES OF PLANTS	3
BIOL 4540	PRINCIPLES OF SYSTEMATICS	3

BIOL 4710	TOXICOLOGY	3
BIOL 4780	VERTEBRATE ZOOLOGY	4
BIOL 4790	MAMMALOGY	4
BIOL 4840	HERPETOLOGY	4
BIOL 4940	ENTOMOLOGY	4
BIOL/ENVN 4970	ADVANCED BOTANY	4
BIOL 4980	ORNITHOLOGY	4

*With approval from the Environmental Studies Program

** May be used to satisfy the statistics requirement or can count towards the required biology and environmental Science courses, but not both

Writing in the Discipline

All students are required to take a writing in the discipline course within their major. For the environmental science major with a concentration in life sciences, the writing in the discipline requirement can be fulfilled through one of the two options for biology majors:

Option I

Complete two courses from each of the three tiers below. All courses used to meet the writing requirement must be taken at UNO. Only courses completed in 2010 or later qualify.

Tier I

Code	Title	Credits
BIOL 1450	BIOLOGY I	5
BIOL 1750	BIOLOGY II	5

Tier II

Code	Title	Credits
BIOL 2140	GENETICS	4
BIOL 3020	MOLECULAR BIOLOGY OF THE CELL	3
BIOL 3340	ECOLOGY	4

Tier III two writing in the discipline 3000 or 4000 level biology courses designated as Tier III courses.

Option II

Complete either:

Code	Title	Credits
BIOL 3150	WRITING AND COMMUNICATION IN THE BIOLOGICAL SCIENCES	3
OR		
ENGL 3980	TECHNICAL WRITING ACROSS THE DISCIPLINES	3

Freshman

Fall		Credits
BIOL 1450	BIOLOGY I	5
ENGL 1150	ENGLISH COMPOSITION I (*)	3
GEOG 1050	HUMAN-ENVIRONMENT GEOGRAPHY	4
MATH 1220 or MATH 1300	COLLEGE ALGEBRA (**) or COLLEGE ALGEBRA WITH SUPPORT	3-4

*ENGL 1150: requires placement via EPPE, ACT, or AP score

**MATH : Refer to the catalog for the most up-to-date prerequisites.

	Credits	**15-16**

Spring		
BIOL 1750	BIOLOGY II (*)	5
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
ENGL 1160	ENGLISH COMPOSITION II (**)	3
ENVN 2010	ENVIRONMENTAL PROBLEMS AND SOLUTIONS (***)	2
CHEM 1010	CHEMISTRY IN THE ENVIRONMENT AND SOCIETY (^)	3

*BIOL 1750: requires BIOL 1450

**ENGL 1160: requires ENGL 1150 or EPPE score of 6, or AP Score of 4

***ENVN 2010: requires BIOL 1330 or GEOG 1050 GEOL 1010 or concurrent enrollment

^CHEM 1010: See the catalog for the most up-to-date prerequisites

	Credits	**16**

Sophomore

Fall		
CHEM 1140 & CHEM 1144	FUNDAMENTALS OF COLLEGE CHEMISTRY and FUNDAMENTALS OF COLLEGE CHEMISTRY LABORATORY (*)	5
GEOG 1090	INTRODUCTION TO GEOSPATIAL SCIENCES	4
Humanities and Fine Arts/US Diversity		3
Social Science/Global Diversity		3

*CHEM 1140: See the catalog for the most up-to-date prerequisites. CHEM 1144 concurrent or prior with C- or better.

Note: CHEM 1180/1184 and 1190/1194 together can substitute for CHEM 1140/1144.

	Credits	**15**

Spring		
BIOL 2140	GENETICS (*)	4
CHEM 2210 & CHEM 2214	FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY (**,***)	5
GEOL 1010	ENVIRONMENTAL GEOLOGY	3
Social Science		3

*BIOL 2140: Requires BIOL 1450, BIOL 1750, and CHEM 1140 or 1180.

**CHEM 2210: requires CHEM 1140/1144 or CHEM 1190/1194 with a C- or better. CHEM 2214 must be taken concurrently.

***CHEM 2250 and 2260/2274 together can substitute for CHEM 2210/2214.

	Credits	**15**

Junior

Fall		
BIOL 4110	STATISTICS FOR BIOLOGICAL SCIENCES	4
Approved BIOL/ENVN 3000/4000 Level elective with lab		4
Social Science*		3
Humanities and Fine Arts		3

*SS: must be in a 2nd discipline

	Credits	**14**

Spring		
BIOL 3340	ECOLOGY (*)	4
BIOL 4120	CONSERVATION BIOLOGY (**)	3
Humanities and Fine Arts***		3
Elective		3
Elective		3

*BIOL 3340: Requires BIOL 1450, 1750, and junior status

**BIOL 4120: requires BIOL 1750		
***HFA: must be in a 2nd discipline		
	Credits	**16**
Summer		
ENVN 4800	INTERNSHIP IN ENVIRONMENTAL MANAGEMENT AND PLANNING (*)	1
*ENVN 4800: requires permission of instructor.		
	Credits	**1**
Senior		
Fall		
BIOL 3530	FLORA OF THE GREAT PLAINS (*)	4
Approved BIOL/ENVN 3000/4000 Level elective		3
Approved physcial science course		3
ENVN 4610	ENVIRONMENTAL MONITORING AND ASSESSMENT (**)	3
ENVN 4820	INTRODUCTION TO ENVIRONMENTAL LAW & REGULATIONS	3
*BIOL 3530: requires BIOL 1450 and BIOL 1750		
**ENVN 4610: requires permission of instructor.		
	Credits	**16**
Spring		
Approved BIOL/ENVN 3000/4000 Level elective		4
An approved course focusing on the human dimensions of environmental studies		3
Elective		3
Elective if needed to reach 120 hours*		3
*120 total credits are required for a degree, with a minimum of 18 upper level (3000-4000) credits in the major and 27 upper level credits throughout the degree. Selecting 3000-4000 level electives or options (when given) can help you reach these minimums.		
	Credits	**13**
	Total Credits	**121-122**

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

This plan is not a contract and curriculum is subject to change

Additional Information About this Plan:
University Degree Requirements: The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific program to determine all requirements for the program. In order to graduate on-time (four years for an undergraduate degree), you need to take 30 hours each year.

Placement Exams: For Math, English, Foreign Language, a placement exam may be required. More information on these exams can be found at https://www.unomaha.edu/enrollment-management/testing-center/placement-exams/information.php

**Transfer credit or placement exam scores may change suggested plan of study