

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

Environmental Science, Bachelor of Science with a Concentration in Life Sciences Requirements

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS - 34 Hours Required		
Minimum of "C-" required		
Fundamental Skills		15
Writing – 6 hrs.		
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	
Oral Communication – 3 hrs.		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
Quantitative Literacy – 3 hrs.		
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
Data Literacy – 3 hrs.		
Select one from the following:		
STAT 1100	DATA LITERACY AND VISUALIZATION	
STAT 1530	ELEMENTARY STATISTICS	
Until Fall 2028, students can satisfy this requirement with an approved data literacy course, or any approved natural or social science general education course.		
Breadth of Knowledge		13
Social Science – 3 hrs.		
Humanities – 3 hrs.		
Natural & Physical Science (must complete a lab) – 4 hrs.		
Arts – 3 hrs.		
Individual and Social Responsibility		6
Cultural Knowledge – 3 hrs.		
Civic Knowledge and Engagement – 3 hrs.		
MAJOR REQUIREMENTS		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
Environmental Science Major with a Concentration in Life Sciences - 74-87 Hours Required		
Required coursework		16-18
(Note that in the case of cross-listed courses, Environmental Science majors must enroll in the ENVN section)		

ENVN 2010	ENVIRONMENTAL PROBLEMS AND SOLUTIONS (^)	
GEOL 1010	ENVIRONMENTAL GEOLOGY (**)	
GEOG 1050	HUMAN-ENVIRONMENT GEOGRAPHY (**)	
ENVN/GEOL/BIOL 4610	ENVIRONMENTAL MONITORING AND ASSESSMENT (^)	
ENVN/BIOL 4800	INTERNSHIP IN ENVIRONMENTAL MANAGEMENT AND PLANNING (^)	
ENVN/GEOG 4820	INTRODUCTION TO ENVIRONMENTAL LAW & REGULATIONS (^)	
Select one of the following Statistics courses		3-4
BIOL 4110	STATISTICS FOR BIOLOGICAL SCIENCES (^)	
ENVN 2020	STATISTICS FOR LIFE AND ENVIRONMENTAL SCIENCE (^)	
STAT 1530	ELEMENTARY STATISTICS (** ^)	
STAT 3000	STATISTICAL METHODS I (^)	
PSYC 3130	STATISTICS FOR THE BEHAVIORAL SCIENCES (^)	
SOC 2130	SOCIAL STATISTICS (^)	
Select one of the following GIS courses		1-4
ENVN 4600	GIS APPLICATIONS FOR ENVIRONMENTAL SCIENCE (^)	
GEOG 1090	INTRODUCTION TO GEOSPATIAL SCIENCES (** ^)	
GEOG 3530	CARTOGRAPHY AND DATA VISUALIZATION (^)	
GEOG 4050	GEOGRAPHIC INFORMATION SYSTEMS I (^)	
Select one of the following courses on the Human Dimensions of Environmental Studies		3
ANTH 4250	ENVIRONMENTAL ANTHROPOLOGY AND NATIVE PEOPLES OF THE GREAT PLAINS (^)	
ECON 3320	ENVIRONMENTAL ECONOMICS AND BUSINESS STRATEGY (^)	
ENVN/PHIL 3180	ENVIRONMENTAL ETHICS (^)	
ENVN/SPAN 3310	SUSTAINABILITY AND THE ENVIRONMENT IN THE SPANISH-SPEAKING WORLD (^)	
ENVN/PSCI 4270	GLOBAL ENVIRONMENTAL POLITICS (^)	
ENVN 4390	THE NATURE OF THE PAST: AMERICAN ENVIRONMENTAL HISTORY, PRE-HISTORY TO THE PRESENT (^)	
SOC 4760	ENVIRONMENTAL SOCIOLOGY (^)	
Life Sciences Concentration		
All of the following:		25
BIOL 1450	BIOLOGY I (** ^)	
BIOL 1750	BIOLOGY II (^)	
BIOL 2140	GENETICS (^)	
BIOL 3340	ECOLOGY (^)	
BIOL 3530	FLORA OF THE GREAT PLAINS (^)	
BIOL 4120	CONSERVATION BIOLOGY (^)	
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
BIOL 3020	MOLECULAR BIOLOGY OF THE CELL (^)	
BIOL 3680	BIOLOGY OF AFRICA (^)	
BIOL 3730	FAUNA OF THE GREAT PLAINS (^)	

BIOL 4030	SPECIAL TOPICS IN BIOLOGY (^)
BIOL 4040	DIRECTED READINGS IN BIOLOGY (^) ¹
BIOL 4050	SUPERVISED RESEARCH IN BIOLOGY (^) ¹
BIOL/GEOG/GEOL 4100	BIOGEOGRAPHY (^)
BIOL 4110	STATISTICS FOR BIOLOGICAL SCIENCES (^) ²
BIOL/ENVN 4180	FRESHWATER ECOLOGY (^)
BIOL 4210	FIRE ECOLOGY (^)
BIOL 4220	POPULATION BIOLOGY (^)
BIOL 4230	EVOLUTION (^)
BIOL 4240	MARINE BIOLOGY (^)
BIOL 4260	BEHAVIORAL ECOLOGY (^)
BIOL/ENVN 4410	WETLAND ECOLOGY AND MANAGEMENT (^)
BIOL 4420	RESTORATION ECOLOGY (^)
BIOL 4490	MEDICINAL USES OF PLANTS (^)
BIOL 4540	PRINCIPLES OF SYSTEMATICS (^)
BIOL 4710	TOXICOLOGY (^)
BIOL 4780	VERTEBRATE ZOOLOGY (^)
BIOL 4790	MAMMALOGY (^)
BIOL 4840	HERPETOLOGY (^)
BIOL 4940	ENTOMOLOGY (^)
BIOL/ENVN 4970	ADVANCED BOTANY (^)
BIOL 4980	ORNITHOLOGY (^)
ENVN/BIOL 3030	MICROBIAL ECOLOGY
ENVN 4320	ECOLOGICAL SUSTAINABILITY AND HUMAN HEALTH (^)

¹ With approval from the Environmental Studies Program

² May be used to satisfy the statistics requirement or can count towards the required biology and environmental Science courses, but not both.

Required chemistry courses: 3

CHEM 1010	CHEMISTRY IN THE ENVIRONMENT AND SOCIETY (** ^)
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	PHYSICS FOR LIFE SCIENCE I (** ^)
GEOL 1170	INTRODUCTION TO PHYSICAL GEOLOGY (**)
GEOL 2300	GEOSCIENCE DATA ANALYSIS AND MODELING (^)
GEOL/GEOG 4200	WATER QUALITY (^)
GEOL/GEOG 4260	PROCESS GEOMORPHOLOGY (^)
GEOL/GEOG 4330	SOIL GENESIS, MORPHOLOGY AND CLASSIFICATION (^)
GEOL/CHEM 4540	GEOCHEMISTRY (^)
GEOL/GEOG 4640	CRITICAL ZONE SCIENCE (^)
GEOG 4010	CONSERVATION OF NATURAL RESOURCES (^)
GEOG 4320	CLIMATOLOGY (^)
GEOG 4340	WATER RESOURCES (^)
GEOG/ENVN 4350	GLOBAL CLIMATE CHANGE (^)
GEOG 4630	ENVIRONMENTAL REMOTE SENSING (^)

College Breadth 0

College of Arts and Sciences' breadth requirement satisfied by this major

Bachelor of Science Cognate Requirement 0

See major.

ELECTIVES

Elective hours as required to reach a total of 120 hours

Environmental Science, Bachelor of Science with a Concentration in Life Sciences Four Year Plan

Freshman

Fall	Credits
BIOL 1450	BIOLOGY I 5
ENGL 1150	ENGLISH COMPOSITION I 3
GEOG 1050	HUMAN-ENVIRONMENT GEOGRAPHY 4
MATH 1300 or MATH 1320	COLLEGE ALGEBRA WITH SUPPORT or COLLEGE ALGEBRA 3-4

Attend Durango Days; other campus events. Set up a Handshake account and take the Pathway U career assessment. Attend the Student Involvement & Volunteer Fair to explore student organizations. Make advising appointment for spring: Sept-Oct. Work with your advisor to develop your Pathway in Stelling.

Spring	Credits	15-16
BIOL 1750	BIOLOGY II	5
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	3
ENVN 2010	ENVIRONMENTAL PROBLEMS AND SOLUTIONS	2

CHEM 1010 CHEMISTRY IN THE ENVIRONMENT AND SOCIETY 3

Attend campus events such as major exploration week to get an idea of interests and career paths. Schedule a resume review with UNO Career Services. Visit faculty office hours and ask about undergraduate research opportunities. Make advising appointment for summer and fall: February – March.

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

General Education Course or Elective 3

General Education Course or Elective 3

Attend the Career & Internship Fair to start networking with employers. Look for volunteer, research, or part-time work to gain experience. Join a student organization or club related to your field or interests. Make advising appointment for spring: Sept. - Oct.

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

General Education Course or Elective 3

Attend a career fair for informational and networking purposes. Update your resume and LinkedIn profile with new experiences. Investigate and apply for summer internships, research, or study abroad programs. Make advising appointment for summer and fall: February – March.

Credits 15

Junior

Fall

Approved BIOL/ENVN 3000/4000 Level elective with lab 4

Approved Statistics Course 3

General Education Course or Elective 3

General Education Course or Elective 3

Apply for a paid internship or research assistantship. Attend a mock interview workshop or use online interview tools with Career Services. Start researching and visiting graduate programs or professional schools. Visit Career Center, continue updating resume. Make advising appointment for spring: Sept-Oct.

Credits 13

Spring

BIOL 3340 ECOLOGY 4

BIOL 4120 CONSERVATION BIOLOGY 3

General Education Course or Elective 3

Elective 3

Elective 3

Request letters of recommendation from faculty for jobs or grad school. Attend the All-Majors Career Fair with a plan to network. Meet with your advisor or submit for a graduation check-in to review remaining degree requirements. Make advising appointment for summer and fall: February – March.

Credits 16

Summer

ENVN 4800 INTERNSHIP IN ENVIRONMENTAL MANAGEMENT AND PLANNING 1

Credits 1

Senior

Fall

BIOL 3530 FLORA OF THE GREAT PLAINS 4

ENVN 4610 ENVIRONMENTAL MONITORING AND ASSESSMENT 3

ENVN 4820 INTRODUCTION TO ENVIRONMENTAL LAW & REGULATIONS 3

Approved BIOL/ENVN 3000/4000 Level elective 3

Approved physical science course 3

Check in with Career Center for networking tips. Finalize graduate school applications or job search strategy. Attend a career fair and start applying for full-time jobs. Prepare for interviews and salary negotiations with Career Services. Make advising appointment for spring: Sept. - Oct.

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 3

Complete your final advising check before graduation. Polish your resume, cover letters, and LinkedIn profile. Stay connected by joining alumni networks and professional organizations. Apply for graduation via MavLink.

Credits 13

Total Credits 120-121

Upper Level Credits: Students need 27 upper level credits throughout the degree with at least 18 upper level credits within the major. Electives may need to be selected at the 3000-4000 level to reach these minimums.

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, World 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

GPA Requirements: 2.0

Note: This plan provides a general guide, but your specific courses, experiences, and career goals may differ. Work with your academic advisor

to ensure you're meeting degree requirements and consult with career advisors to explore internships, research opportunities, and post-graduation plans. Regular check-ins will help you stay on track and make the most of your time at UNO!