

ENVIRONMENTAL SCIENCE, BACHELOR OF SCIENCE WITH A CONCENTRATION IN EARTH SCIENCES

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

Code	Title	Credits
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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 Earth Sciences - 75-81 Hours Required

Required coursework 15-17

(Note that in the case of cross-listed courses, Environmental Science majors must enroll in the ENVN section)

ENVN 2010	ENVIRONMENTAL PROBLEMS AND SOLUTIONS (^)
BIOL 1330	ENVIRONMENTAL BIOLOGY (**)
CHEM 1010	CHEMISTRY IN THE ENVIRONMENT AND SOCIETY (**^)
or CHEM 3030	ENVIRONMENTAL CHEMISTRY
ENVN/GEOG/GEOL/BIOL 4610	ENVIRONMENTAL MONITORING AND ASSESSMENT (^)
ENVN/BIOL 4800	INTERNSHIP IN ENVIRONMENTAL MANAGEMENT AND PLANNING (^)
ENVN/GEOG/PA 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 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 (^)
Earth Sciences Concentration 4	
GEOL 1170	INTRODUCTION TO PHYSICAL GEOLOGY (**)
Select one of the following covering surface processes 4	
GEOL/GEOG 4260	PROCESS GEOMORPHOLOGY (^)
GEOL/GEOG 4330	SOIL GENESIS, MORPHOLOGY AND CLASSIFICATION
GEOL/GEOG 4640	CRITICAL ZONE SCIENCE
Select an additional 27 hours of geography/geology/environmental science courses from the following 27	
ENVN/BIOL 4410	WETLAND ECOLOGY AND MANAGEMENT (^)
GEOL 1180	INTRODUCTION TO HISTORICAL GEOLOGY (^)
GEOL 2300	GEOSCIENCE DATA ANALYSIS AND MODELING (^)

GEOL 2500	SPECIAL TOPICS IN GEOGRAPHY- GEOLOGY	
GEOL 2750 & GEOL 2754	MINERALOGY and MINERALOGY LABORATORY (^)	
GEOL 2760 & GEOL 2764	IGNEOUS AND METAMORPHIC PETROLOGY and IGNEOUS AND METAMORPHIC PETROLOGY LABORATORY (^)	
GEOL 3300 & GEOL 3310	STRUCTURAL GEOLOGY and STRUCTURAL GEOLOGY FIELD METHODS (^)	
GEOL 3400	INTRODUCTION TO SEDIMENTARY GEOLOGY (^)	
GEOL/GEOG 4200	WATER QUALITY (^)	
GEOL/GEOG 4260	PROCESS GEOMORPHOLOGY (^)	
GEOL/PHYS 4400	GEOPHYSICS (^)	
GEOL/GEOG 4640	CRITICAL ZONE SCIENCE (^)	
GEOG 3510	METEOROLOGY (**)	
GEOG 4010	CONSERVATION OF NATURAL RESOURCES (^)	
GEOG/BIOL/GEOL 4100	BIOGEOGRAPHY (^)	
GEOG 4320	CLIMATOLOGY (^)	
GEOG/GEOL 4330	SOIL GENESIS, MORPHOLOGY AND CLASSIFICATION (^)	
GEOG/ENVN 4350	GLOBAL CLIMATE CHANGE (^)	
GEOG 4630	ENVIRONMENTAL REMOTE SENSING (^)	
Select one of the following chemistry sequences		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 (^)	
GEOL/CHEM 4540	GEOCHEMISTRY (^)	
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 (^)	
Select one of the following physics lecture and laboratory combinations		5
PHYS 1050 & PHYS 1054	INTRODUCTION TO PHYSICS and INTRODUCTION TO PHYSICS LABORATORY (** ^)	
PHYS 1110 & PHYS 1154	PHYSICS FOR LIFE SCIENCE I and GENERAL PHYSICS LABORATORY I (** ^)	
PHYS 2110 & PHYS 1154	GENERAL PHYSICS I - CALCULUS LEVEL and GENERAL PHYSICS LABORATORY I (** ^)	
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 Earth Sciences Four Year Plan

Freshman

Fall		Credits
BIOL 1330	ENVIRONMENTAL BIOLOGY	3
CHEM 1010	CHEMISTRY IN THE ENVIRONMENT AND SOCIETY	3
ENGL 1150	ENGLISH COMPOSITION I	3
MATH 1300 or MATH 1320	COLLEGE ALGEBRA WITH SUPPORT or COLLEGE ALGEBRA	3-4
General Education Course or Elective		3
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 Stellic.		

Credits 15-16

Spring

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
GEOL 1170	INTRODUCTION TO PHYSICAL GEOLOGY	4
General Education Course or Elective		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 15

Sophomore

Fall		Credits
CHEM 1140 & CHEM 1144	FUNDAMENTALS OF COLLEGE CHEMISTRY and FUNDAMENTALS OF COLLEGE CHEMISTRY LABORATORY	5
Approved GEOG/GEOL/ENVN Elective		3
Approved GEOG/GEOL/ENVN Elective		4
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

CHEM 2210 & CHEM 2214	FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY	5
Approved GEOG/GEOL/ENVN Elective		4
Approved GEOG/GEOL/ENVN Elective		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**

GEOL 4540	GEOCHEMISTRY	3
Approved GIS Course		4
Approved GEOG/GEOL/ENVN Elective		4
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		14

Spring

PHYS 1050 & PHYS 1054	INTRODUCTION TO PHYSICS and INTRODUCTION TO PHYSICS LABORATORY	5
Approved GEOG/GEOL/ENVN Elective		4
General Education Course or 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		15

Summer

ENVN 4800	INTERNSHIP IN ENVIRONMENTAL MANAGEMENT AND PLANNING	1
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Credits **1**

Senior**Fall**

ENVN/GEOL/GEOL/ BIOL 4610	ENVIRONMENTAL MONITORING AND ASSESSMENT	3
ENVN 4820	INTRODUCTION TO ENVIRONMENTAL LAW & REGULATIONS	3
Approved GEOG/GEOL/ENVN Elective		3
Approved GEOG/GEOL/ENVN Elective		3
Elective 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		15

Spring

Approved GEOG/GEOL/ENVN Elective	3
Statistics course	3
An approved course focusing on the human dimensions of environmental studies	3
Elective course	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 **15**

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!