

BS in Environmental Sciences with Emphasis in Outreach and Education

Degree Program Description

The degree in Environmental Sciences with Emphasis in Outreach and Education combines interests in educating others about the natural environment and environmental issues with the shaping of new policies and educating others about the natural environment and environmental issues. Example careers include Environmental Outreach Coordinator, Environmental Specialist, and Environmental Teacher. Employment may occur in a variety of sectors, including Extension, federal, state, county, and city government agencies, non-government agencies (NGOs), and private consulting firms.

Major Program Requirements

Students earning a Bachelor of Science in Environmental Sciences are required to complete all University general education (<https://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/>), University graduation (<https://catalog.missouri.edu/academicdegreerequirements/universityrequirements/>), and degree requirements, including selected foundational courses, which may fulfill some University general education requirements.

Foundational

MATH 1100 or MATH 1160	College Algebra Precalculus Mathematics	3-5
MATH 1400 or MATH 1500	Calculus for Social and Life Sciences I Analytic Geometry and Calculus I	3-5
CHEM 1400 & CHEM 1401	College Chemistry I and College Chemistry I Laboratory	4
Business Elective (select from ABM, ECON, FINPLN)		3
ABM 2123 or STAT 1200	Quantitative Applications in Agricultural and Natural Resource Sciences Introductory Statistical Reasoning	3
AGSC_COM 2220	Verbal Communication in Agriculture, Food and Natural Resources	3
ENV_SC 1100	Introduction to Environmental Science	3
ATM_SC 1050	Introductory Meteorology	3
NAT_R 2325 or GEOG 3040	Introduction to Geographic Information Systems Introduction to Geographic Information Systems GIS	3
ENV_SC 4560 or ABM 1200	Observing the Earth from Space Applied Computer Applications	3

Core Emphasis Requirements

Biological Science

BIO_SC 1200 or PLNT_SCI 2110	General Botany with Laboratory Who Runs the World? Plants.	3
BIO_SC 1500	Introduction to Biological Systems with Laboratory	5

Environmental Policy

NAT_R 4353	Natural Resource Policy/Administration	3
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or ENV_SC 4400W	Environmental Law, Policy, and Justice - Writing Intensive	
or ABM 2070W	Environmental Economics and Policy - Writing Intensive	
Geology		
GEOL 1100 or GEOL 1200	Introduction to the Earth with Laboratory Environmental Geology with Laboratory	4
Physics		
ENV_SC 4305	Environmental Soil Physics	3
ENV_SC 4306	Environmental Soil Physics Laboratory	2
Learning/Education		
AG_ED_LD 2270 or AG_ED_LD 4340	Leadership Development in Youth Organizations Designing and Delivering Educational/Leadership Programs	3
ENV_SC 4024	Foundations of Environmental Education	3
ESC_PS 2000	Experiencing Cultural Diversity in the United States	3
ESC_PS 2010	Inquiry Into Learning I	3
ESC_PS 2014 or AGSC_COM 2210 or NAT_R 2080	Inquiry into Learning I - Field Experience Communicating Science to the Public Outdoor Recreation Consortium	3
Soil Science		
SOIL 2100	Introduction to Soils	3
SOIL 2106	Soil Science Laboratory	2
Additional Emphasis Area Requirements		
ENV_SC 2600	Sustainability Foundations: An Introduction to Sustainability	3
ENV_SC 3250	Pollutant Fate and Transport	3
ENV_SC 4940	Environmental Science Internship	3
PRST 3230	Outdoor Recreation Policy	3
PRST 3231	Interpretation of Natural and Cultural Resources	3
Upper Level Disciplinary Electives		
Select 15 credit hours from the following courses at the 3000/4000 levels (must take at least one Atmospheric, Environmental, or Soil Science course). May only double count up to 6 credits between degree program requirements and upper-level disciplinary electives.		15
ATM_SC 3600	Climates of the World	3
ENV_SC 4312	Environmental Soil Microbiology	3
ENV_SC 4318	Environmental Soil Chemistry	3
ENV_SC 4560	Observing the Earth from Space	3
F_W 3660	Mammalogy	4
F_W 4600W	Ecosystem Management - Writing Intensive	3
FOREST 3212	Forest Health and Protection	3
FOREST 4320	Forest Ecology	5
NAT_R 3400	Water Quality and Natural Resource Management	3
PRST 3210W	Personnel Management and Leadership - Writing Intensive	3
PRST 3220	Introduction to Recreation for Individuals with Disabilities	3
PRST 4250	Parks, Health and Wellness	3
PRST 4340	Recreation Land Management	3
Capstone Experience		
ENV_SC 4600W	Sustainability Science Problem Solving - Writing Intensive	3

Electives approved by professional advisor to complete 120 total credits

Semester Plan

First Year					
Fall	CR	Spring	CR	Summer	CR
BIO_SC 1200		5 ESC_PS 2000		3 MATH 1100	3
HIST 1100		3 AGSC_COM 2220		3	
ENV_SC 1100		3 GEOL 1200		4	
ATM_SC 1050		3 SOIL 2100		3	
		SOIL 2106		2	
		14			3
Second Year					
Fall	CR	Spring	CR		
BIO_SC 1500		5 CHEM 1400 & CHEM 1401	4		
ENV_SC 4024		3 ENGLISH 1000	3		
ENV_SC 2600		3 NAT_R 2325	3		
AG_ED_LD 2270		3 Emphasis Area Elective PRST 3231	3		
		14	16		
Third Year					
Fall	CR	Spring	CR	Summer	CR
ENV_SC 3290		3 ENV_SC 3250		3 ENV_SC 4940	3
SOIL 4305		3 MATH 1400		3	
SOIL 4306		2 ESC_PS 2010		3	
ABM 1200		3 Business Elective		3	
Emphasis Area Elective		3 Emphasis Area Elective		3	
		14	15	3	
Fourth Year					
Fall	CR	Spring	CR		
ABM 2123		3 NAT_R 4353	3		
PRST 3230		3 NAT_R 2080	2		
Emphasis Area Elective		3 ENV_SC 4600W	3		
Humanities Elective WI		3 Emphasis Area Elective Elective	3		
		12	14		

Total Credits: 120