

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 (<http://catalog.missouri.edu/academicdegreerequirements/generaleducationrequirements/>), University graduation (<http://catalog.missouri.edu/academicdegreerequirements/universityrequirements/>), and degree requirements, including selected foundational courses, which may fulfill some University general education requirements.

Foundational

MATH 1100	College Algebra	3-5
or MATH 1160	Precalculus Mathematics	
MATH 1400	Calculus for Social and Life Sciences I	3-5
or MATH 1500	Analytic Geometry and Calculus I	
CHEM 1320	College Chemistry I	4
Business Elective (select from ABM, ECON, FINPLN)		3
ABM 2123	Quantitative Applications in Agricultural and Natural Resource Sciences	3
or STAT 1200	Introductory Statistical Reasoning	
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	Introduction to Geographic Information Systems	3
or GEOG 3040	Introduction to Geographic Information Systems GIS	
ENV_SC 4560	Observing the Earth from Space	3
or ABM 1200	Applied Computer Applications	

Core Emphasis Requirements

Biological Science

BIO_SC 1200	General Botany with Laboratory	3
or PLNT_SCI 2110	Plants and their Cultivation	
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	Introduction to the Earth with Laboratory	4
or GEOL 1200	Environmental Geology with Laboratory	

Physics		
ENV_SC 4305	Environmental Soil Physics	3
ENV_SC 4306	Environmental Soil Physics Laboratory	2

Learning/Education		
AG_ED_LD 2270	Leadership Development in Youth Organizations	3
or AG_ED_LD 4340H	Designing and Delivering Educational/Leadership Programs - Honors	

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	Inquiry into Learning I - Field Experience	
or AGSC_COM 2210	Communicating Science to the Public	
or NAT_R 2080	Outdoor Recreation Consortium	

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 3290	Soils and the Environment	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).		15

ATM_SC 3600	Climates of the World	
ENV_SC 4312	Environmental Soil Microbiology	
ENV_SC 4318	Environmental Soil Chemistry	
ENV_SC 4560	Observing the Earth from Space	
F_W 4600	Ecosystem Management	
FOREST 4320	Forest Ecology	
NAT_R 3400	Water Quality and Natural Resource Management	

PRST 3210W	Personnel Management and Leadership - Writing Intensive	
PRST 3220	Introduction to Recreation for Individuals with Disabilities	
PRST 4250	Parks, Health and Wellness	
PRST 4340	Recreation Land Management	

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 1320		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
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