

Bachelor of Science in Earth and Environmental Systems, Environmental Systems Track

Required Core Courses

The Required General Courses provide a solid background in Geosciences and other subjects. Environmental Systems include physical, biological and human systems; thus, the program incorporates course work in Biological Sciences, Physical and Social Sciences, and Mathematics. Some of these courses may satisfy General Education requirements.

Code	Title	Credits
GEOL 1107	Real Monsters ¹	3
GEOL 2204	Fluid Earth	4
GEOL 2205	Solid Earth	4
GEOL 2292	Geosciences Careers Seminar	1
GEOL 3315	Evolution of the Earth's Surface	4
GEOL 4403	Principles of Geographic Information Systems	3
GEOL 4492	Earth and Environmental Systems Seminar	1
BIOL 1101 & 1101L	Biology I and Biology I Lab	4
BIOL 1102 & 1102L	Biology II and Biology II Lab	4
BIOL 2209 & 2209L	General Ecology and General Ecology Laboratory	4
CHEM 1111 & 1111L	General Chemistry I and General Chemistry I Lab	5
MATH 1147	College Algebra and Trigonometry (B.A.)	5
or		
MATH 1143 & MATH 1144	College Algebra and Trigonometry	
Recommended:		
ENGL 3307	Professional and Technical Writing	3

¹ Transfer students may substitute other courses for GEOL 1107 with the permission of the Geosciences Department Chair or Geosciences Undergraduate Advisor.

BS Environmental Systems Track Requirements

This track combines courses in Ecology, Environmental Geosciences, and supporting fields. This emphasis track will train students interested in field-related careers who need to understand the environmental relations between geologic and living systems.

Code	Title	Credits
Select two courses from the following:		
GEOL 4402 & 4402L	Geomorphology and Geomorphology Lab	4

GEOL 4417 & 4417L	Introduction to Soils and Critical Zone Processes and Introduction to Soils and Critical Zone Processes Lab	4
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GEOL 4429 & 4429L	Watershed Hydrology and Watershed Hydrology Laboratory	4
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GEOL 4430	Principles of Hydrogeology	3
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Or other approved courses in related fields.

Select one course from the following:

BIOL 4462 & 4462L	Freshwater Ecology and Freshwater Ecology Lab	4
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BIOL 4489	Field Ecology	4
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GEOL 4490	Ecosystem Ecology and Global Changes	4
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Or other approved course in related fields.

Required Courses:

CHEM 1112 & 1112L	General Chemistry II and General Chemistry II Lab	4
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GEOL 4451	Field Methods in Environmental Sciences	3
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MATH 1160 or MATH 1170	Survey of Calculus or Calculus I	3-4
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MATH 3350	Statistical Methods	3
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Select one elective from the following:

GEOL 4410	Science in American Society	2
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GEOL/HIST 4471	Historical Geography of Idaho	3
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GLBL 3379	Environment and Geography	3
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GLBL 4466	Cultural Geography	3
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GLBL 4480	International Parks and Protected Areas	3
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HIST 4430	Global Environmental History	3
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HIST 4432	U.S. Environmental History	3
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POLS 4455	Environmental Politics and Policy	3
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PHIL 4455	Environmental Ethics	3
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SOC 3335	Environmental Sociology	3
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Or other approved course in related fields.

Students who are considering graduate studies in a Geosciences field should consider also taking BIOL 3316 Biometry Laboratory, PHYS 1111 General Physics I with PHYS 1113 General Physics I Laboratory or PHYS 1111 General Physics I with PHYS 2213 Engineering Physics I Laboratory.