ENVIRONMENTAL SOIL SCIENCE (B.S.S.W.S.)

Required course work includes the university requirements (see regulation J-3 (https://catalog.uidaho.edu/general-requirements-academic-procedures/j-general-requirements-baccalaureate-degrees/#j3)) and:

Code	Title	Hours
Soil and Water Systems Core		
AGED 4060	Exploring International Agriculture	3
or AGED 4070	Global Agricultural & Life Sciences Systems	
or SOC 3500	Food, Culture, and Society	
ASM 3150	Irrigation Systems and Water Management	3
ENGL 3130	Business Writing	3
or ENGL 3160	Environmental Writing	
or ENGL 3170	Technical Writing II	
GEOG 3850	Foundations of GIS	3
MATH 1143	Precalculus I: Algebra	3
PLSC 1020	The Science of Plants in Agriculture	3
or FOR 2100	Principles of Ecology	
SOIL 1010	Soil, Health, and Climate	1
SOIL 2050	The Soil Ecosystem	3
SOIL 2060	The Soil Ecosystem Lab	1
SOIL 4380	Pesticides in the Environment	3
STAT 2510	Statistical Methods	3
Environmental Soil Science Courses		
BIOL 1140	Organisms and Environments	4
or BIOL 1150 & 1150L	Cells and the Evolution of Life and Cells and the Evolution of Life Laboratory	
CHEM 1111	General Chemistry I	3
CHEM 1111L	General Chemistry I Laboratory	1
CHEM 1120	General Chemistry II	4
CHEM 1120L	General Chemistry II Laboratory	1
CHEM 2750	Carbon Compounds	3
or CHEM 2770	Organic Chemistry I	
or PHYS 1112 & 1112L	General Physics II and General Physics II Lab	
EPPN 1540 & EPPN 1550	Microbiology and the World Around Us and Microbiology and the World Around Us: Laboratory	4
or BIOL 2500 & BIOL 2550	General Microbiology and General Microbiology Lab	
GEOL 1110 & GEOL 1101L	Physical Geology for Science Majors and Physical Geology Lab	3
or GEOL 1110L	Physical Geology for Science Majors Lab	
GEOL 1101L	Physical Geology Lab	1
or GEOL 1110L	Physical Geology for Science Majors Lab	
MATH 1160	Survey of Calculus	4
or MATH 1170	Calculus I	
PHYS 1111	General Physics I	3
PHYS 1111L	General Physics I Lab	1
SOIL 4000	Seminar	1
SOIL 4150	Soil and Environmental Physics	3
SOIL 4220	Environmental Soil Chemistry	3
SOIL 4250	Microbial Ecology	3
SOIL 4340	Landscape Nutrient Management	3
SOIL 4460	Soil Fertility	3
SOIL 4540	Pedology	3
SOIL 4560	North Idaho Field Trip	1
Experiential Experience Electives:		*2*
SOIL 2990	Directed Study	
SOIL 3980	Internship	
SOIL 4170	Market Garden Practicum	
SOIL 4580	Soil and Site Evaluation	
Broadening Perspectives and Applications of Soils Electives:		*9*
ASM 4760	Remote Sensing Application with Unmanned Aerial Systems (UAS)	
ENVS 4790	Introduction to Environmental Regulations	
FOR 1400	Introduction to Forest Management	
GEOG 3130	Global Climate Change	
NRS 1250	Introduction to Conservation and Natural Resources	
NRS 3860	Managing Complex Environmental Systems	
NRS 4760	Environmental Project Management and Decision Making	
PLSC 3070	Agronomy	
REM 4510	Rangeland Issues and Management Principles	
SOIL 1200	Introduction to Water Science and Management	
SOIL 4360	Principles of Sustainability	
SOIL 4520	Environmental Water Quality	
Total Hours		**92**

Courses to total 120 credits for this degree

Fall Term 1		**Hours**
ENGL 1101	Writing and Rhetoric I	3
MATH 1143	Precalculus I: Algebra	3
SOIL 1200	Introduction to Water Science and Management (Recommended)	2
PLSC 1020 OR FOR 2100		3
Humanistic and Artistic Ways of Knowing Course		3
Oral Communication Course		3
	Hours	**17**
Spring Term 1		
CHEM 1111	General Chemistry I	3
CHEM 1111L	General Chemistry I Laboratory	1
ENGL 1102	Writing and Rhetoric II	3
MATH 1160 OR MATH 1170		4
Social and Behavioral Ways of Knowing Course		3
SOIL 1010	Soil, Health, and Climate	1
	Hours	**15**
Fall Term 2		
CHEM 1120	General Chemistry II	4
CHEM 1120L	General Chemistry II Laboratory	1
GEOG 3850	Foundations of GIS	3
PHYS 1111	General Physics I	3
PHYS 1111L	General Physics I Lab	1
GEOL 1110	Physical Geology for Science Majors	3

GEOL 1110L OR GEOL 1101L		1
	Hours	**16**
Spring Term 2		
BIOL 1140 OR (BIOL 1150 AND BIOL 1150L)		4
CHEM 2750 OR CHEM 2770 OR (PHYS 1112 AND PHYS 1112L)		3
SOIL 2050	The Soil Ecosystem	3
SOIL 2060	The Soil Ecosystem Lab	1
ASM 4760 OR ENVS 4790 OR FOR 1400 OR GEOG 3130 OR NRS 1250 OR NRS 3860 OR NRS 4760 OR PLSC 3070 OR REM 4510 OR SOIL 1200 OR SOIL 4360 OR SOIL 4520		3
	Hours	**14**
Fall Term 3		
ASM 3150	Irrigation Systems and Water Management	3
EPPN 1540 or BIOL 2500	Microbiology and the World Around Us or General Microbiology	3
EPPN 1550 or BIOL 2550	Microbiology and the World Around Us: Laboratory or General Microbiology Lab	1
SOIL 4150	Soil and Environmental Physics	3
ENGL 3130 OR ENGL 3160 OR ENGL 3170		3
Humanistic and Artistic Ways of Knowing Course		3
	Hours	**16**
Spring Term 3		
SOIL 4220	Environmental Soil Chemistry	3
SOIL 4340	Landscape Nutrient Management	3
SOIL 4560	North Idaho Field Trip	1
ASM 4760 OR ENVS 4790 OR FOR 1400 OR GEOG 3130 OR NRS 1250 OR NRS 3860 OR NRS 4760 OR PLSC 3070 OR REM 4510 OR SOIL 1200 OR SOIL 4360 OR SOIL 4520		2
American Experience Course		3
Social and Behavioral Ways of Knowing Course		3
	Hours	**15**
Fall Term 4		
SOIL 4540	Pedology	3
STAT 2510	Statistical Methods	3
AGED 4060 OR AGED 4070 OR SOC 3500		3
SOIL 2990 OR SOIL 3980 OR SOIL 4170 OR SOIL 4580		2
ASM 4760 OR ENVS 4790 OR FOR 1400 OR GEOG 3130 OR NRS 1250 OR NRS 3860 OR NRS 4760 OR PLSC 3070 OR REM 4510 OR SOIL 1200 OR SOIL 4360 OR SOIL 4520		3
	Hours	**14**
Spring Term 4		
SOIL 4000	Seminar	1
SOIL 4250	Microbial Ecology	3
SOIL 4460	Soil Fertility	3
SOIL 4380	Pesticides in the Environment	3
International Course		3
	Hours	**13**
	Total Hours	**120**

The degree map is a guide for the timely completion of your curricular requirements. Your academic advisor or department may be contacted for assistance in interpreting this map. This map is not reflective of your academic history or transcript and it is not official notification of completion of degree or certificate requirements. Please contact the Registrar's Office regarding your official degree/certificate completion status.

1. Students demonstrate knowledge of the physical, biological and chemical principles that determine function in soil and water systems.
2. Students can effectively communicate science-based data to a variety of audiences.
3. Students gain experiential experience in applying their knowledge through internships and participating in student organizations.