

# ENVIRONMENTAL SCIENCE (B.S.ENV.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/>)), the general requirements for the B.S. degree, and:

Code	Title	Hours
ENVS 101	Introduction to Environmental Science	3
ENVS 102	Field Activities in Environmental Sciences	1
ENVS 201	Careers in the Environmental Sciences	3
ENVS 300	Environmental Sci Seminar	1
ENVS 498	Internship	1
STAT 251	Statistical Methods	3
or STAT 301	Probability and Statistics	
Choose one course from the following:		3
ENVS 225	International Environmental Issues Seminar	
AIST 453	Tribal Sovereignty and Federal Policy	
Choose one course from the following:		3-4
ECON 202	Principles of Microeconomics	
ECON 272	Foundations of Economic Analysis	
Choose one course from the following:		3
FOR 375	Fundamentals of Geomatics	
GEOG 385	Foundations of GIS	
Choose one course from the following:		3
GEOL 309	Ground Water Hydrology	
ENVS 448	Drinking Water and Human Health	
ENVS 450	Environmental Hydrology	
FISH 415	Limnology	
FOR 462	Watershed Science and Management	
Choose one course from the following:		4
ENVS 497	Senior Research	
NRS 476	Environmental Project Management and Decision Making	
<b>Emphasis</b>		
Select one of the following emphases:		53-68
Ecological Restoration (p. 1)		
Policy Planning and Management (p. 2)		
Culture and Communication (p. 2)		
Integrated Sciences (p. 3)		
Sustainability Sciences (p. 4)		
<b>Total Hours</b>		<b>81-97</b>

## A. Ecological Restoration

Code	Title	Hours
BIOL 115	Cells and the Evolution of Life	3
BIOL 115L	Cells and the Evolution of Life Laboratory	1
CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry I Laboratory	1
CHEM 112	General Chemistry II	4
CHEM 112L	General Chemistry II Laboratory	1

NRS 310	Social Science Methods	4
PHIL 452	Environmental Philosophy	3
Choose one course from the following:		3
ENGL 316	Environmental Writing	
ENGL 317	Technical Writing II	
ENGL 318/ JAMM 328	Science Writing	
NRS 387	Environmental Communication Skills	
WLF 370	Management and Communication of Scientific Data	
Choose one course from the following:		3
ENGL 322	Climate Change Fiction	
HIST 424	American Environmental History	
Choose one course from the following:		3
GEOG 313	Global Climate Change	
GEOG 435	Climate Change Mitigation	
GEOG 455	Societal Resilience and Adaptation to Climate Change	
Choose one course from the following:		3
ENVS/NRS 386	Managing Complex Environmental Systems	
GEOG 420	Land, Resources, and Environment	
NRS 235	Society and Natural Resources	
NRS 311	Public Involvement in Natural Resource Management	
SOC 466	Climate Change and Society	
SOC 340	Environmental Sociology and Globalization	
Choose one course from the following:		3
ENVS 479	Introduction to Environmental Regulations	
GEOG 488	Geography of Energy Systems	
NRS/POLS 364	Politics of the Environment	
NRS/POLS 462	Natural Resource Policy	
NRS 488	NEPA in Policy and Practice	
Choose one course from the following:		4
MATH 160	Survey of Calculus	
MATH 170	Calculus I	
Choose one sequence from the following:		4-5
GEOG 100 & 100L	Introduction to Planet Earth and Introduction to Planet Earth Lab	
GEOL 111 & GEOL 101L	Physical Geology for Science Majors and Physical Geology Lab	
SOIL 205 & SOIL 206	The Soil Ecosystem and The Soil Ecosystem Lab	
Choose one course from the following:		3
FOR 221	Principles of Ecology	
WLF 220	Principles of Ecology	
Choose one course from the following:		3
ENVS 428	Pollution Prevention	
ENVS 429	Environmental Audit	
SOIL 409	Principles of Environmental Toxicology	
GEOL 361	Geology and the Environment	
INDT 364	Hazardous Materials	

Choose one course from the following:	3
BE 433 Bioremediation	
SOIL 422 Environmental Soil Chemistry	
SOIL 452 Environmental Water Quality	
CHE 455 Surfaces and Colloids	
Choose 3 credits from the following:	3
PLSC 419 Plant Community Restoration Methods	
REM 280 Introduction to Wildland Restoration	
REM/NRS 440 Restoration Ecology	
Choose one course from the following:	3
AGEC 477 Law, Ethics, and the Environment	
NRS 311 Public Involvement in Natural Resource Management	
NRS 383 Natural Resource and Ecosystem Service Economics	
<b>Total Hours</b>	<b>58-59</b>

**Courses to total 120 credits for this degree**

## B. Policy Planning and Management

Code	Title	Hours
ENVS/NRS 475	Local and Regional Environmental Planning	3
NRS 235	Society and Natural Resources	3
NRS 310	Social Science Methods	4
NRS 311	Public Involvement in Natural Resource Management	3
NRS/POLS 364	Politics of the Environment	3
NRS 383	Natural Resource and Ecosystem Service Economics	3
NRS 387	Environmental Communication Skills	3
NRS/POLS 462	Natural Resource Policy	3
NRS 476	Environmental Project Management and Decision Making	4
Choose one course sequence from the following:	4	
CHEM 101 & 101L	Introduction to Chemistry and Introduction to Chemistry Laboratory	
CHEM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	
BIOL 114	Organisms and Environments	
Choose one course sequence from the following:	4-5	
GEOG 100 & 100L	Introduction to Planet Earth and Introduction to Planet Earth Lab	
GEOL 101 & 101L	Physical Geology and Physical Geology Lab	
GEOL 111 & GEOL 101L	Physical Geology for Science Majors and Physical Geology Lab	
SOIL 205 & SOIL 206	The Soil Ecosystem and The Soil Ecosystem Lab	
Choose one course from the following:	3-4	
MATH 143	Precalculus I: Algebra	
MATH 160	Survey of Calculus	
MATH 170	Calculus I	
Choose one course from the following:	3	
GEOG 313	Global Climate Change	

FOR 221	Principles of Ecology	
WLF 220	Principles of Ecology	
Choose one course from the following:	3	
ENGL 316	Environmental Writing	
ENGL 317	Technical Writing II	
ENGL 318/ JAMM 328	Science Writing	
WLF 370	Management and Communication of Scientific Data	
Choose one course from the following:	3-4	
BIOL 314	Ecology and Population Biology	
FIRE 326	Fire Ecology	
NRS/REM 440	Restoration Ecology	
REM 429	Landscape Ecology	
REM 459	Rangeland Ecology	
REM 460	Integrated Field Studies in Rangelands	
WLF 440	Conservation Biology	
Choose one course from the following:	3	
AGEC 477	Law, Ethics, and the Environment	
ENVS/NRS 386	Managing Complex Environmental Systems	
IS 322	International Environmental Governance	
Choose one course from the following:	3-4	
NRS 472	Remote Sensing of the Environment	
NRS 478	LIDAR and Optical Remote Sensing Analysis	
<b>Total Hours</b>	<b>55-59</b>	

**Courses to total 120 credits for this degree**

## C. Culture and Communication

Code	Title	Hours
ENGL 322	Climate Change Fiction	3
ENVS/NRS 386	Managing Complex Environmental Systems	3
NRS 235	Society and Natural Resources	3
PHIL 352	Philosophy, Politics, and Economics	3
HIST 424	American Environmental History	3
PHIL 452	Environmental Philosophy	3
Choose one course sequence from the following:	4	
CHEM 101 & 101L	Introduction to Chemistry and Introduction to Chemistry Laboratory	
CHEM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	
BIOL 114	Organisms and Environments	
Choose one course sequence from the following:	4-5	
GEOG 100 & 100L	Introduction to Planet Earth and Introduction to Planet Earth Lab	
GEOL 101 & 101L	Physical Geology and Physical Geology Lab	
GEOL 111 & GEOL 101L	Physical Geology for Science Majors and Physical Geology Lab	
SOIL 205 & SOIL 206	The Soil Ecosystem and The Soil Ecosystem Lab	
Choose one course from the following:	3-4	
MATH 143	Precalculus I: Algebra	

MATH 160	Survey of Calculus	
MATH 170	Calculus I	
Choose one course from the following:		3
GEOG 313	Global Climate Change	
FOR 221	Principles of Ecology	
WLF 220	Principles of Ecology	
Choose one course from the following:		3
ENGL 316	Environmental Writing	
ENGL 317	Technical Writing II	
ENGL 318/ JAMM 328	Science Writing	
Choose one course from the following:		3
GEOG 420	Land, Resources, and Environment	
SOC 340	Environmental Sociology and Globalization	
SOC 341	Science, Technology, and Society	
SOC/ANTH 350	Food, Culture, and Society	
Choose one course from the following:		3
PHIL 351	Philosophy of Science	
PHIL 417	Philosophy of Biology	
PHIL 450	Ethics in Science	
Choose one course from the following:		3
NRS/POLS 462	Natural Resource Policy	
POLS/NRS 364	Politics of the Environment	
Choose one course from the following:		3
COMM 410	Conflict Management	
NRS 387	Environmental Communication Skills	
Choose one course from the following:		3
GEOG 435	Climate Change Mitigation	
GEOG 455	Societal Resilience and Adaptation to Climate Change	
Choose one course from the following:		3
SOC 346	Responding to Risk	
SOC 465	Environmental Justice	
SOC 466	Climate Change and Society	
<b>Total Hours</b>		<b>53-55</b>

Courses to total 120 credits for this degree

## D. Integrated Sciences

Code	Title	Hours
NRS 310	Social Science Methods	4
PHIL 452	Environmental Philosophy	3
Choose one course sequence from the following:		3-4
CHEM 101 & 101L	Introduction to Chemistry and Introduction to Chemistry Laboratory	
CHEM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	
BIOL 114	Organisms and Environments	
Choose one course sequence from the following:		4-5
GEOG 100 & 100L	Introduction to Planet Earth and Introduction to Planet Earth Lab	

GEOL 101 & 101L	Physical Geology and Physical Geology Lab	
GEOL 111 & 111L	Physical Geology for Science Majors and Physical Geology for Science Majors Lab	
SOIL 205 & SOIL 206	The Soil Ecosystem and The Soil Ecosystem Lab	
Choose one course from the following:		3-4
MATH 143	Precalculus I: Algebra	
MATH 160	Survey of Calculus	
MATH 170	Calculus I	
Choose one course from the following:		3
FOR 221	Principles of Ecology	
WLF 220	Principles of Ecology	
Choose one course from the following:		3
ENGL 316	Environmental Writing	
ENGL 317	Technical Writing II	
ENGL 318/ JAMM 328	Science Writing	
NRS 387	Environmental Communication Skills	
WLF 370	Management and Communication of Scientific Data	
Choose one course from the following:		3
GEOG 313	Global Climate Change	
GEOG 435	Climate Change Mitigation	
GEOG 455	Societal Resilience and Adaptation to Climate Change	
Choose one course from the following:		3
ENVS/NRS 386	Managing Complex Environmental Systems	
ENVS 420	Introduction to Bioregional Planning	
ENVS 423	Planning Sustainable Places	
GEOG 420	Land, Resources, and Environment	
NRS 235	Society and Natural Resources	
NRS 311	Public Involvement in Natural Resource Management	
SOC 466	Climate Change and Society	
SOC 465	Environmental Justice	
Choose one course from the following:		3
AGEC 477	Law, Ethics, and the Environment	
NRS/POLS 364	Politics of the Environment	
NRS/POLS 462	Natural Resource Policy	
ENVS 479	Introduction to Environmental Regulations	
GEOG 488	Geography of Energy Systems	
NRS 488	NEPA in Policy and Practice	

Students must also take one additional upper division course across 15 five different topic area bins <sup>1</sup>

Advanced Technical
Climate Change
Communication
Contaminants
Earth Science
Ecology

Economics	
Energy	
Geospatial	
Human Dimensions	
Planning	
Policy	
Sustainability	
Water	
<b>Students must also complete one minor, certificate, or accredited semester long academic program.</b> <sup>2</sup>	
<b>Total Hours</b>	<b>59-68</b>

1

Please contact the department to see a "Class list by Topic" spreadsheet of available courses.

2

Please contact the department for approved minors, certificates and academic programs.

**Courses to total 120 credits for this degree**

## E. Sustainability Sciences (Online only)

This option is intended for students at a distance wishing to pursue technically oriented careers in environmental professions such as natural resource management, bioremediation, and environmental impact analysis. Students need to work closely with an academic advisor to plan the courses needed to fulfill degree requirements that are not available through distance delivery.

Code	Title	Hours
BIOL 115	Cells and the Evolution of Life	3
BIOL 115L	Cells and the Evolution of Life Laboratory	1
BIOL 250	General Microbiology	3
or PHYS 111	General Physics I	
CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry I Laboratory	1
CHEM 112	General Chemistry II	4
CHEM 112L	General Chemistry II Laboratory	1
Select one course sequence from the following:		4
PHYS 111	General Physics I	
& 111L	and General Physics I Lab	
PHYS 211	Engineering Physics I	
& 211L	and Laboratory Physics I	
Choose one course from the following:		4
MATH 160	Survey of Calculus	
MATH 170	Calculus I	
Earth Science - Choose one course sequence from the following:		4-5
GEOG 100	Introduction to Planet Earth	
& 100L	and Introduction to Planet Earth Lab	
GEOL 101	Physical Geology	
& 101L	and Physical Geology Lab	
GEOL 111	Physical Geology for Science Majors	
& 111L	and Physical Geology for Science Majors Lab	
SOIL 205	The Soil Ecosystem	
& SOIL 206	and The Soil Ecosystem Lab	
Ecology - Choose one course from the following:		3

FOR 221	Principles of Ecology
WLF 220	Principles of Ecology
BIOL 314	Ecology and Population Biology
Writing and Communication - Choose one course from the following:	3
ENGL 316	Environmental Writing
ENGL 317	Technical Writing II
ENGL 318/ JAMM 328	Science Writing
NRS 387	Environmental Communication Skills
WLF 370	Management and Communication of Scientific Data

Environmental Ethics and Philosophy:	3
PHIL 452	Environmental Philosophy

**Select five of the following depth areas, and take at least 6 advisor-approved credits within each of the selected depth areas.**<sup>1</sup> **30**

a. Mathematics, Physics, and Statistics	
MATH 175	Calculus II
MATH 275	Calculus III
MATH 310	Ordinary Differential Equations
PHYS 112	General Physics II
or PHYS 212	Engineering Physics II
PHYS 112L	General Physics II Lab
or PHYS 212L	Laboratory Physics II
STAT 301	Probability and Statistics
STAT 431	Statistical Analysis
b. Social Dimensions:	
ARCH 483	Urban Theory and Issues
ENVS 423	Planning Sustainable Places
ENVS 428	Pollution Prevention
ENVS 484	History of Energy
INDT 415	Impact of Technology on Society
FN 450	Global Nutrition
IS 322	International Environmental Governance
NRS 235	Society and Natural Resources
c. Management Tools	
ENVS 415	Environmental Lifecycle Assessment
ENVS 420	Introduction to Bioregional Planning
ENVS 428	Pollution Prevention
ENVS 430	Planning Theory and Process
INDT 364	Hazardous Materials
INDT 448	Project and Program Management
d. Geospatial Tools:	
GEOG 385	Foundations of GIS
GEOG 424	Hydrologic Applications of GIS and Remote Sensing
GEOG 475	Intermediate GIS
GEOG 483	Remote Sensing/GIS Image Analysis
NRS/FOR 472	Remote Sensing of the Environment
NRS 478	LIDAR and Optical Remote Sensing Analysis
FIRE 407	GIS Application in Fire Ecology and Management
e. Environmental Policy and Regulations:	
AGEC 477	Law, Ethics, and the Environment
ENVS 429	Environmental Audit

ENVS 436	Principles of Sustainability
ENVS 479	Introduction to Environmental Regulations
NRS 488	NEPA in Policy and Practice
POLS/NRS 462	Natural Resource Policy

## f. Energy Systems:

ARCH 463	Principles of Environmental Building Design
ARCH 464	Environmental Building Performance
ENGR 320	Engineering Thermodynamics and Heat Transfer
ENVS 484	History of Energy
ENVS 485	Energy Efficiency and Conservation
GEOG 435	Climate Change Mitigation
INDT 415	Impact of Technology on Society
INDT 434	Power Generation and Distribution

## g. Sustainability Science:

ENVS 420	Introduction to Bioregional Planning
ENVS 415	Environmental Lifecycle Assessment
ENVS 423	Planning Sustainable Places
ENVS 428	Pollution Prevention
FOR 443	Forest Production Ecology
ENVS 436	Principles of Sustainability
SOIL 409	Principles of Environmental Toxicology
GEOG 313	Global Climate Change
INDT 419	Industrial Sustainability Analysis
INDT 457	Lean to Green Sustainable Technology

## h. Water and Soils:

CHE 455	Surfaces and Colloids
SOIL 452	Environmental Water Quality
ENVS 450	Environmental Hydrology
FISH 415	Limnology
SOIL 205	The Soil Ecosystem
SOIL 438	Pesticides in the Environment
SOIL 446	Soil Fertility

## i. Restoration and Remediation:

BE 433	Bioremediation
PLSC 419	Plant Community Restoration Methods
REM 280	Introduction to Wildland Restoration
REM 410	Principles of Vegetation Monitoring and Measurement
REM/NRS 440	Restoration Ecology
SOIL 422	Environmental Soil Chemistry
SOIL 452	Environmental Water Quality
WLF 440	Conservation Biology

**Total Hours** **67-68**

1

Courses listed more than once cannot double count across depth areas.

**Courses to total 120 credits for this degree.**

## Ecological Restoration Emphasis

Fall Term 1	Hours
ENGL 101 Writing and Rhetoric I	3
ENVS 101 Introduction to Environmental Science	3

ENVS 102	Field Activities in Environmental Sciences	1
MATH 143	Precalculus I: Algebra	3
Oral Communication Course		3
Social and Behavioral Ways of Knowing		3

**Hours** **16**

## Spring Term 1

CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry I Laboratory	1
ENGL 102	Writing and Rhetoric II	3
ENVS 201	Careers in the Environmental Sciences	3
MATH 160 OR MATH 170		4
Elective Course		1

**Hours** **15**

## Fall Term 2

BIOL 115	Cells and the Evolution of Life	3
BIOL 115L	Cells and the Evolution of Life Laboratory	1
STAT 251 OR STAT 301		3
(GEOG 100 AND GEOG 100L) OR (GEOL 111 AND GEOL 101L) OR (SOIL 205 AND SOIL 206)		4
ECON 202 OR ECON 272		3

**Hours** **14**

## Spring Term 2

CHEM 112	General Chemistry II	4
CHEM 112L	General Chemistry II Laboratory	1
ENVS 300	Environmental Sci Seminar	1
ENVS 225 OR AIST 453		3
FOR 221 OR WLF 220		3
Humanistic and Artistic Ways of Knowing		3

**Hours** **15**

## Fall Term 3

NRS 310	Social Science Methods	4
PHIL 452	Environmental Philosophy	3
ENVS 225 OR AIST 453		3
ENGL 322 OR HIST 424		3
REM 280 OR REM 440		3

**Hours** **16**

## Spring Term 3

ENGL 316 OR ENGL 317 OR ENGL 318 OR NRS 387 OR WLF 370		3
ENVS 386 OR GEOG 420 OR NRS 235 OR NRS 311 OR SOC 466 OR SOC 340		3
ENVS 428 OR ENVS 429 OR SOIL 409 OR GEOL 361 OR INDT 364		3
American Diversity Course		3
Humanistic and Artistic Ways of Knowing Course		3

**Hours** **15**

## Fall Term 4

ENVS 497 OR NRS 476		2
GEOG 313 OR GEOG 435 OR GEOG 455		3
GEOL 309 OR ENVS 450 OR FISH 415 OR FOR 462		3
AGEC 477 OR NRS 311 OR NRS 383		3
American Diversity Course		3

**Hours** **14**

## Spring Term 4

ENVS 498	Internship	1
ENVS 497 OR NRS 476		2
ENVS 479 OR GEOG 488 OR NRS 364 OR NRS 462 OR NRS 488		3
BE 433 OR CHE 455 OR SOIL 422 OR SOIL 452		3
International Course		3
Elective Course		3

**Hours** **15**

**Total Hours** **120**

## Policy, Planning, and Management Emphasis

Fall Term 1		Hours
ENGL 101	Writing and Rhetoric I	3
ENVS 101	Introduction to Environmental Science	3
ENVS 102	Field Activities in Environmental Sciences	1
MATH 143 OR MATH 160 OR MATH 170		3
Oral Communication Course		3
Humanistic and Artistic Ways of Knowing		3
<b>Hours</b>		<b>16</b>
Spring Term 1		Hours
ENGL 102	Writing and Rhetoric II	3
ENVS 201	Careers in the Environmental Sciences	3
NRS 235	Society and Natural Resources	3
BIOL 114 OR (CHEM 101 AND CHEM 101L) OR (CHEM 111 AND CHEM 111L)		4
Social and Behavioral Ways of Knowing		3
<b>Hours</b>		<b>16</b>
Fall Term 2		Hours
ECON 202 OR ECON 272		3
STAT 251 OR STAT 301		3
American Diversity Course		3
Elective Course		3
Elective Course		3
<b>Hours</b>		<b>15</b>
Spring Term 2		Hours
ENVS 300	Environmental Sci Seminar	1
ENVS 225 OR AIST 453		3
(GEOG 100 AND GEOG 100L) OR (GEOL 101 AND GEOL 101L) OR (GEOL 111 AND GEOL 101L) OR (SOIL 205 AND SOIL 206)		4
Humanistic and Artistic Ways of Knowing Course		3
Elective Course		3
<b>Hours</b>		<b>14</b>
Fall Term 3		Hours
NRS 310	Social Science Methods	4
NRS 462 OR POLS 462		3
GEOG 313 OR FOR 221 OR WLF 220		3
International Course		3
Elective Course		2
<b>Hours</b>		<b>15</b>
Spring Term 3		Hours
NRS 311	Public Involvement in Natural Resource Management	3
ENGL 316 OR ENGL 317 OR ENGL 318 OR WLF 370		3
Upper Division Ecology, Major Elective Course		3
Elective Course		3
Elective Course		3
<b>Hours</b>		<b>15</b>
Fall Term 4		Hours
ENVS 497 OR NRS 476		2
GEOL 309 OR ENVS 450 OR FISH 415 OR FOR 462		3
ENVS 475 OR NRS 475		3
AGEC 477 OR ENVS 386 OR NRS 386 OR IS 322		3
Elective Course		3
<b>Hours</b>		<b>14</b>
Spring Term 4		Hours
ENVS 498	Internship	1
NRS 476	Environmental Project Management and Decision Making	4
ENVS 497 OR NRS 476		2
NRS 472 OR NRS 478		3
Elective Course		3

Elective Course	2
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>120</b>

## Culture and Communication Emphasis

Fall Term 1		Hours
ENGL 101	Writing and Rhetoric I	3
ENVS 101	Introduction to Environmental Science	3
ENVS 102	Field Activities in Environmental Sciences	1
MATH 143 OR MATH 160 OR MATH 170		3
Oral Communication Course		3
Humanistic and Artistic Ways of Knowing Course		3
<b>Hours</b>		<b>16</b>
Spring Term 1		Hours
ENGL 102	Writing and Rhetoric II	3
ENVS 201	Careers in the Environmental Sciences	3
NRS 235	Society and Natural Resources	3
BIOL 114 OR (CHEM 101 AND CHEM 101L) OR (CHEM 111 AND CHEM 111L)		4
Elective Course		2
<b>Hours</b>		<b>15</b>
Fall Term 2		Hours
STAT 251 OR STAT 301		3
ECON 202 OR ECON 272		3
American Diversity Course		3
Humanistic and Artistic Ways of Knowing Course		3
Technical Elective, Major Elective Course		3
<b>Hours</b>		<b>15</b>
Spring Term 2		Hours
ENVS 300	Environmental Sci Seminar	1
PHIL 352	Philosophy, Politics, and Economics	3
ENVS 225 OR AIST 453		3
(GEOG 100 AND GEOG 100L) OR (GEOL 101 AND GEOL 101L) OR (GEOL 111 AND GEOL 111L) OR (SOIL 205 AND SOIL 206)		4
International Course		3
<b>Hours</b>		<b>14</b>
Fall Term 3		Hours
PHIL 452	Environmental Philosophy	3
GEOG 313 OR FOR 221 OR WLF 220		3
ENGL 316 OR ENGL 317 OR ENGL 318		3
SOC 342 OR SOC 346 OR SOC 465 OR SOC 466		3
Elective Course		3
<b>Hours</b>		<b>15</b>
Spring Term 3		Hours
HIST 424	American Environmental History	3
ENGL 322	Climate Change Fiction	3
ENVS 386 OR NRS 386		3
GEOG 420 OR SOC 340 OR SOC 341 OR SOC 350		3
Physical Science Area Elective, Major Elective Course		3
<b>Hours</b>		<b>15</b>
Fall Term 4		Hours
ENVS 497 OR NRS 476		2
GEOL 309 OR ENVS 450 OR FISH 415 OR FOR 462		3
PHIL 351 OR PHIL 417 OR PHIL 450		3
COMM 410 OR NRS 387		3
Physical Science Area Elective, Major Elective Course		3
Elective Course		1
<b>Hours</b>		<b>15</b>
Spring Term 4		Hours
ENVS 498	Internship	1
ENVS 497 OR NRS 476		2
NRS 462 OR NRS 364		3

GEOG 435 OR GEOG 455	3
Elective Course	3
Elective Course	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>120</b>

## Integrated Sciences Emphasis

Fall Term 1		Hours
ENGL 101	Writing and Rhetoric I	3
ENVS 101	Introduction to Environmental Science	3
ENVS 102	Field Activities in Environmental Sciences	1
MATH 143 OR MATH 160 OR MATH 170		3
Oral Communication Course		3
Social and Behavioral Ways of Knowing Course		3
<b>Hours</b>		<b>16</b>

Spring Term 1		Hours
ENGL 102	Writing and Rhetoric II	3
ENVS 201	Careers in the Environmental Sciences	3
BIOL 114 OR (CHEM 101 AND CHEM 101L) OR (CHEM 111 OR CHEM 111L)		4
International Course		3
Elective Course		2
<b>Hours</b>		<b>15</b>

Fall Term 2		Hours
STAT 251 OR STAT 301		3
(GEOG 100 OR GEOG 100L) OR (GEOL 101 AND GEOL 101L) OR (GEOL 111 OR GEOL 111L) OR (SOIL 205 AND SOIL 206)		4
FOR 221 OR WLF 220		3
ECON 202 OR ECON 272		3
Humanistic and Artistic Ways of Knowing Course		3
<b>Hours</b>		<b>16</b>

Spring Term 2		Hours
ENVS 300	Environmental Sci Seminar	1
ENVS 225 OR AIST 453		3
Minor/Certificate/Program Elective, Major Elective Course		3
Humanistic and Artistic Ways of Knowing Course		3
Elective Course		3
<b>Hours</b>		<b>13</b>

Fall Term 3		Hours
PHIL 452	Environmental Philosophy	3
NRS 310	Social Science Methods	4
ENVS 386 OR ENVS 420 OR ENVS 423 OR GEOG 420 OR NRS 235 OR NRS 311 OR SOC 466 OR SOC 465		3
Topic Area Elective, Major Elective Course		3
Minor/Certificate/Program Elective, Major Elective Course		3
<b>Hours</b>		<b>16</b>

Spring Term 3		Hours
ENGL 316 OR ENGL 317 OR ENGL 318 OR NRS 387 OR WLF 370		3
GEOG 313 OR GEOG 435 OR GEOG 455		3
GEOL 309 OR ENVS 450 OR FISH 415 OR FOR 462		3
Topic Area Elective, Major Elective Courses		3
Topic Area Elective, Major Elective Courses		3
<b>Hours</b>		<b>15</b>

Fall Term 4		Hours
ENVS 497	Senior Research	2
AGEC 477 OR NRS 364 OR NRS 462 OR POLS 364 OR POLS 462 OR ENVS 479 OR GEOG 488 OR NRS 488		3
Topic Area Elective, Major Elective Course		3
Minor/Certificate/Program Elective, Major Elective Course		3
Minor/Certificate/Program Elective, Major Elective Course		3
<b>Hours</b>		<b>14</b>

Spring Term 4		Hours
ENVS 497	Senior Research	2
ENVS 498	Internship	1
American Diversity Course		3
Topic Area Elective, Major Elective Course		3
Minor/Certificate/Program Elective, Major Elective Course		3
Minor/Certificate/Program Elective, Major Elective Course		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>120</b>

## Sustainability Sciences Emphasis

Fall Term 1		Hours
ENGL 101	Writing and Rhetoric I	3
ENVS 101	Introduction to Environmental Science	3
ENVS 102	Field Activities in Environmental Sciences	1
MATH 143	Precalculus I: Algebra	3
MATH 144	Precalculus II: Trigonometry	1
Social and Behavioral Ways of Knowing Course		3
<b>Hours</b>		<b>14</b>

Spring Term 1		Hours
CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry I Laboratory	1
ENGL 102	Writing and Rhetoric II	3
ENVS 201	Careers in the Environmental Sciences	3
MATH 160 OR MATH 170		4
Oral Communication Course		3
<b>Hours</b>		<b>17</b>

Fall Term 2		Hours
BIOL 115	Cells and the Evolution of Life	3
BIOL 115L	Cells and the Evolution of Life Laboratory	1
ECON 202 OR ECON 272		3
STAT 251 OR STAT 301		3
(GEOG 100 AND GEOG 100L) OR (GEOL 111 AND GEOL 101L) OR (SOIL 205 AND SOIL 206)		4
Humanistic and Artistic Ways of Knowing Course		3
<b>Hours</b>		<b>17</b>

Spring Term 2		Hours
CHEM 112	General Chemistry II	4
CHEM 112L	General Chemistry II Laboratory	1
ENVS 300	Environmental Sci Seminar	1
ENVS 225 OR AIST 453		3
American Diversity Course		3
Humanistic and Artistic Ways of Knowing Course		3
<b>Hours</b>		<b>15</b>

Fall Term 3		Hours
PHIL 452	Environmental Philosophy	3
BIOL 250 OR PHYS 111		3
FOR 221 OR WLF 220 OR BIOL 314		3
Depth Elective, Major Elective Course		3
Depth Elective, Major Elective Course		3
<b>Hours</b>		<b>15</b>

Spring Term 3		Hours
ENGL 316 OR ENGL 317 OR ENGL 318 OR NRS 387 OR WLF 370		3
(PHYS 111 AND PHYS 111L) OR (PHYS 112 OR PHYS 112L)		4
Depth Elective, Major Elective Course		3
Depth Elective, Major Elective Course		3
<b>Hours</b>		<b>13</b>

Fall Term 4		Hours
ENVS 497	Senior Research	2
GEOL 309 OR ENVS 450 OR FISH 415 OR FOR 462		3
Depth Elective, Major Elective Course		3

Depth Elective, Major Elective Course	3
Depth Elective, Major Elective Course	3
<b>Hours</b>	<b>14</b>
<b>Spring Term 4</b>	
ENVS 497 Senior Research	2
ENVS 498 Internship	1
International Course	3
Depth Elective, Major Elective Course	3
Depth Elective, Major Elective Course	3
Depth Elective, Major Elective Course	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>120</b>

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.

#### Ecological Restoration Emphasis

1. Students will be able to apply environmental science principles in biophysical and social science contexts to address societally relevant issues in environmental science, management, and mitigation.
2. Students will be able to communicate environmental science, management, and mitigation principles and applications effectively through writing, oral, and graphical presentations.
3. Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.
4. Students will be able to demonstrate how core ecological principles are used to implement effective scientific approaches to environmental restoration and remediation.

#### Policy, Planning, and Management Emphasis

1. Students will be able to apply environmental science principles in biophysical and social science contexts to address societally relevant issues in environmental science, management, and mitigation.
2. Students will be able to communicate environmental science, management, and mitigation principles and applications effectively through writing, oral, and graphical presentations.
3. Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.
4. Students will be able to demonstrate how core principles of policy and planning work within societal frameworks to complement and advance management decisions in the field of environmental science.

#### Culture and Communication Emphasis

1. Students will be able to apply environmental science principles in biophysical and social science contexts to address societally relevant issues in environmental science, management, and mitigation.
2. Students will be able to communicate environmental science, management, and mitigation principles and applications effectively through writing, oral, and graphical presentations.
3. Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.

4. Students will be able to demonstrate how and why cultural influences can affect societal decisions regarding key issues of environmental science.

#### Integrated Sciences Emphasis

1. Students will be able to apply environmental science principles in biophysical and social science contexts to address societally relevant issues in environmental science, management, and mitigation.
2. Students will be able to communicate environmental science, management, and mitigation principles and applications effectively through writing, oral, and graphical presentations.
3. Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.
4. Students will be able to integrate biophysical expertise with socio-cultural dimensions of environmental problem-solving.

#### Sustainability Sciences Emphasis

1. Students will be able to apply environmental science principles in biophysical and social science contexts to address societally relevant issues in environmental science, management, and mitigation.
2. Students will be able to communicate environmental science, management, and mitigation principles and applications effectively through writing, oral, and graphical presentations.
3. Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.
4. Students will be able to demonstrate how and why fundamentals of biophysical and social science contribute to environmental sustainability at the local, national, and international level.