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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 115</td>
<td>Cells &amp; the Evolution of Life</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 115L</td>
<td>Cells and the Evolution of Life Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>Principles of Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111L</td>
<td>Principles of Chemistry I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>COMM 101</td>
<td>Fundamentals of Public Speaking (OR one semester of a foreign language course)</td>
<td>2-4</td>
</tr>
<tr>
<td>ENVS 101</td>
<td>Introduction to Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 102</td>
<td>Field Activities in Environmental Sciences</td>
<td>1</td>
</tr>
<tr>
<td>ENVS 225</td>
<td>International Environmental Issues Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 400</td>
<td>Seminar</td>
<td>1-16</td>
</tr>
<tr>
<td>PHIL 452</td>
<td>Environmental Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>STAT 251</td>
<td>Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 301</td>
<td>Probability and Statistics</td>
<td></td>
</tr>
</tbody>
</table>

**Options**

Select one of the following options: 63-68

- Biological Science (p. 1)
- Physical Science (p. 2)
- Physical Science 2 (p. 3)
- Social Science (p. 4)
- Biophysical Science (p. 5)

**Total Hours: 87-109**

1. Students in Social Science option may substitute CHEM 101 & CHEM 101L.

A. Biological Science Option

This option is suitable for students wishing to pursue technically oriented careers in environmental professions such as natural resource management, bioremediation, and environmental impact analysis.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 497</td>
<td>Senior Research</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 250</td>
<td>General Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112L</td>
<td>Principles of Chemistry II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 317</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH 160</td>
<td>Survey of Calculus</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td></td>
</tr>
<tr>
<td>Select one of the following: 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 100</td>
<td>Physical Geography</td>
<td>4</td>
</tr>
<tr>
<td>&amp; 100L</td>
<td>and Physical Geography Lab</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>&amp; 101L</td>
<td>and Physical Geology Lab</td>
<td></td>
</tr>
</tbody>
</table>

Select 24 credits of Advisor-directed breadth electives, including at least one course from the first four areas and 9 credits from the technical area:

**Ecology:**
- BIOL 314 Ecology and Population Biology
- FOR 221 Principles of Ecology
- GEOG 410 Biogeography
- REM 221 Principles of Ecology

**Natural Resource Economics and Sociology:**
- AGE 451 Applied Environmental and Natural Resource Economics
- NRS 383 Natural Resource and Ecosystem Service Economics
- ECON 385 Environmental Economics
- FOR 235 Society and Natural Resources

**Management:**
- OM 378 Project Management
- NRS 311 Public Involvement in Natural Resource Management
- ENVS 428 Pollution Prevention
- FOR 484 Forest Policy and Administration
- GEOG 411 Natural Hazards and Society

**History, Philosophy, and Political Science:**
- AGE 477 Law, Ethics and the Environment
- ENVS 484 History of Energy
- HIST 424 American Environmental History
- PHIL 351 Philosophy of Science
- POLS 364 Politics of the Environment

**Technical:**
- CHEM 253 Quantitative Analysis
- & CHEM 254 and Quantitative Analysis: Lab
- CHEM 275 Carbon Compounds 1
- CHEM 277 Organic Chemistry II 1
- ENVS 498 Internship
- FOR 472 Remote Sensing of the Environment
- GEOG 301 Meteorology
- GEOG 313 Global Climate Change
- GEOG 401 Climatology
- GEOG 385 GIS Primer
- GEOL 309 Ground Water Hydrology
- GEOL 361 Geology and the Environment
- MATH 175 Analytic Geometry and Calculus II
- PHYS 111 General Physics I
- & 111L and General Physics I Lab 2
- PHYS 211 Engineering Physics I
- & 211L and Laboratory Physics I 2
- PHYS 112 General Physics II
- & 112L and General Physics II Lab 3
- PHYS 212 Engineering Physics II
- & 212L and Laboratory Physics II 3
- SOIL 205 The Soil Ecosystem

Select 4 Advisor-approved depth electives in any area unless otherwise noted from at least two of the following areas:

**Plant Protection:**
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT 322</td>
<td>General and Applied Entomology</td>
<td></td>
</tr>
<tr>
<td>PLSC 338</td>
<td>Weed Control</td>
<td></td>
</tr>
<tr>
<td>PLSC 410</td>
<td>Invasive Plant Biology</td>
<td></td>
</tr>
<tr>
<td>PLP 415</td>
<td>Plant Pathology</td>
<td></td>
</tr>
<tr>
<td>SOIL 446</td>
<td>Soil Fertility</td>
<td></td>
</tr>
<tr>
<td>WLF 314</td>
<td>Ecology of Terrestrial Vertebrates</td>
<td></td>
</tr>
<tr>
<td>WLF 315</td>
<td>Techniques Laboratory</td>
<td></td>
</tr>
<tr>
<td>WLF 440</td>
<td>Conservation Biology</td>
<td></td>
</tr>
<tr>
<td>WLF 448</td>
<td>Fish and Wildlife Population Ecology</td>
<td></td>
</tr>
<tr>
<td>FISH 314</td>
<td>Fish Ecology</td>
<td></td>
</tr>
<tr>
<td>FISH 415</td>
<td>Limnology</td>
<td></td>
</tr>
<tr>
<td>FISH 430</td>
<td>Riparian Ecology and Management</td>
<td></td>
</tr>
<tr>
<td>FOR 330</td>
<td>Forest Soil and Canopy Processes</td>
<td></td>
</tr>
<tr>
<td>FOR 426</td>
<td>Global Fire Ecology and Management</td>
<td></td>
</tr>
<tr>
<td>REM 411</td>
<td>Ecological Monitoring and Analysis</td>
<td></td>
</tr>
<tr>
<td>REM 429</td>
<td>Landscape Ecology</td>
<td></td>
</tr>
<tr>
<td>REM 440</td>
<td>Wildland Restoration Ecology</td>
<td></td>
</tr>
<tr>
<td>REM 459</td>
<td>Rangeland Ecology</td>
<td></td>
</tr>
<tr>
<td>FS 409</td>
<td>Principles of Environmental Toxicology</td>
<td></td>
</tr>
<tr>
<td>SOIL 425</td>
<td>Microbial Ecology</td>
<td></td>
</tr>
<tr>
<td>SOIL 438</td>
<td>Pesticides in the Environment</td>
<td></td>
</tr>
<tr>
<td>SOIL 454</td>
<td>Pedology</td>
<td></td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Principles of Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 112L</td>
<td>Principles of Chemistry II Laboratory</td>
<td></td>
</tr>
<tr>
<td>ENGL 317</td>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td></td>
</tr>
<tr>
<td>PHYS 111</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 111L</td>
<td>General Physics I Lab</td>
<td></td>
</tr>
<tr>
<td>GEOG 100</td>
<td>Physical Geography &amp; 100L</td>
<td></td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Physical Geology &amp; 101L</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 4

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 497</td>
<td>Senior Research</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 275</td>
<td>Carbon Compounds</td>
<td>1</td>
</tr>
</tbody>
</table>

**B. Physical Science Option**

This option is suitable for students wishing to pursue technical careers in environmental professions such as air, soil, and water pollution abatement, hazardous waste management, waste minimization, and ecological restoration.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 450</td>
<td>Environmental Hydrology</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 446</td>
<td>Drinking Water and Human Health</td>
<td></td>
</tr>
<tr>
<td>FOR 462</td>
<td>Watershed Science and Management</td>
<td></td>
</tr>
<tr>
<td>GEOL 309</td>
<td>Ground Water Hydrology</td>
<td></td>
</tr>
<tr>
<td>GEOL 410</td>
<td>Techniques of Groundwater Study</td>
<td></td>
</tr>
<tr>
<td>HYDR 412</td>
<td>Environmental Hydrogeology</td>
<td></td>
</tr>
<tr>
<td>FOR 372</td>
<td>Remote Sensing of the Environment</td>
<td></td>
</tr>
<tr>
<td>GEOG 385</td>
<td>GIS Primer</td>
<td></td>
</tr>
<tr>
<td>GEOG 424</td>
<td>Hydrologic Applications of GIS and Remote Sensing</td>
<td></td>
</tr>
<tr>
<td>GEOG 475</td>
<td>Intermediate GIS</td>
<td></td>
</tr>
<tr>
<td>GEOG 483</td>
<td>Remote Sensing/GIS Integration</td>
<td></td>
</tr>
<tr>
<td>LARC 495</td>
<td>GIS Applications in Land Planning 2</td>
<td></td>
</tr>
<tr>
<td>NRS 383</td>
<td>Natural Resource and Ecosystem Service Economics</td>
<td></td>
</tr>
<tr>
<td>GEOG 313</td>
<td>Global Climate Change</td>
<td></td>
</tr>
<tr>
<td>GEOG 410</td>
<td>Biogeography</td>
<td></td>
</tr>
<tr>
<td>CHEM 253</td>
<td>Quantitative Analysis</td>
<td></td>
</tr>
<tr>
<td>CHEM 254</td>
<td>and Quantitative Analysis: Lab</td>
<td></td>
</tr>
<tr>
<td>ENVS 375</td>
<td>Project Management</td>
<td></td>
</tr>
<tr>
<td>NRS 311</td>
<td>Public Involvement in Natural Resource Management</td>
<td></td>
</tr>
<tr>
<td>ENVS 428</td>
<td>Pollution Prevention</td>
<td></td>
</tr>
<tr>
<td>FOR 484</td>
<td>Forest Policy and Administration</td>
<td></td>
</tr>
<tr>
<td>GEOG 411</td>
<td>Natural Hazards and Society</td>
<td></td>
</tr>
<tr>
<td>REM 456</td>
<td>Integrated Rangeland Management</td>
<td></td>
</tr>
</tbody>
</table>

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

1. Either CHEM 275 or CHEM 277 may be used as a technical breadth elective.

2. Either PHYS 111/PHYS 111L or PHYS 211/PHYS 211L may be used as a technical breadth elective.

3. Either PHYS 112/PHYS 112L or PHYS 212/PHYS 212L may be used as a technical breadth elective.

4. Either WLF 440 or WLF 448 may be used as a depth elective.
Environmental Science (B.S.Env.S.)

CHEM 277  Organic Chemistry I  
ENVS 498  Internship  
FOR 472  Remote Sensing of the Environment  
GEOG 301  Meteorology  
GEOG 313  Global Climate Change  
GEOG 401  Climatology  
GEOG 418  GIS Primer  
GEOL 309  Ground Water Hydrology  
GEOL 361  Geology and the Environment  
MATH 175  Analytic Geometry and Calculus II  
PHYS 211  Engineering Physics I  
& 211L  and Laboratory Physics I  
PHYS 112  General Physics II  
& 112L  and General Physics II Lab  
PHYS 212  Engineering Physics II  
& 212L  and Laboratory Physics II  
SOIL 205  The Soil Ecosystem

Select 4 Advisor-approved depth electives in any area unless otherwise noted from at least two of the following areas:

Water:
ENVS 446  Drinking Water and Human Health  
ENVS 450  Environmental Hydrology  
FOR 462  Watershed Science and Management  
GEOG 309  Ground Water Hydrology  
GEOG 401  Climatology  

Hazardous Waste:
BE 433  Bioremediation  
BE 452  Environmental Water Quality  
Biol 380  Biochemistry I  
CHEM 418  Environmental Chemistry  
ENVS 479  Introduction to Environmental Regulations  
FS 409  Principles of Environmental Toxicology  

Geology:
GEOG 410  Techniques of Groundwater Study  
HYDR 412  Environmental Hydrogeology  

Mathematics and Statistics:
MATH 175  Analytic Geometry and Calculus II  
MATH 275  Analytic Geometry and Calculus III  
MATH 310  Ordinary Differential Equations  
STAT 431  Statistical Analysis  

Soils:
CHEM 418  Environmental Chemistry  
SOIL 415  Soil and Environmental Physics  
SOIL 422  Environmental Soil Chemistry  
SOIL 454  Pedology  

Economics and Management (take all three courses):
OM 378  Project Management  
ECON 385  Environmental Economics  
ENVS 428  Pollution Prevention  

Geospatial Tools (take at least 3 of the 4 courses):
FOR 472  Remote Sensing of the Environment  
GEOG 385  GIS Primer  
GEOG 424  Hydrologic Applications of GIS and Remote Sensing  
GEOG 483  Remote Sensing/GIS Integration  

Climate Change and Emissions Reduction:
ENVS 485  Energy Efficiency and Conservation  
GEOG 313  Global Climate Change  
GEOG 401  Climatology  
GEOG 435  Climate Change Mitigation

Total Hours 68

Courses to total 120 credits for this degree

1  Either CHEM 275 or CHEM 277 may be used as a technical breadth elective.
2  PHYS 112/PHYS 112L or PHYS 212/PHYS 212L may be used as a technical breadth elective.

C. Physical Science 2 Option
This option is only available to students in Coeur d’Alene and Idaho Falls.

Code  Title  Hours
ENVS 497  Senior Research  3
CHEM 112  Principles of Chemistry II  4
CHEM 112L  Principles of Chemistry II Laboratory  1
ENGL 317  Technical Writing  3
PHYS 111  General Physics I  3
PHYS 111L  General Physics I Lab  1
MATH 160  Survey of Calculus  4
or MATH 170  Analytic Geometry and Calculus I

Select one of the following: 4
GEOG 100  Physical Geography
& 100L  and Physical Geography Lab
GEOG 101  Physical Geology
& 101L  and Physical Geology Lab

Select Advisor-Directed breadth electives, including at least one course from the first four areas and 9 credits from the technical area: 24

Ecology:
BIOL 314  Ecology and Population Biology  
FOR 221  Principles of Ecology  
REM 221  Principles of Ecology  

Natural Resource Economics and Sociology:
ECON 201  Principles of Macroeconomics  
ECON 202  Principles of Microeconomics  
ECON 272  Foundations of Economic Analysis  
INTD 415  Impact of Technology on Society  

Management:
ENVS 436  Principles of Sustainability  
ENVS 479  Introduction to Environmental Regulations  
FOR 426  Global Fire Ecology and Management  
GEOG 424  Hydrologic Applications of GIS and Remote Sensing

History, Philosophy, and Political Science:
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 484</td>
<td>History of Energy</td>
<td></td>
</tr>
<tr>
<td>HIST 461</td>
<td>Idaho and the Pacific Northwest</td>
<td></td>
</tr>
<tr>
<td>POLS 364</td>
<td>Politics of the Environment</td>
<td></td>
</tr>
<tr>
<td><strong>Technical:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 114</td>
<td>Organisms and Environments</td>
<td></td>
</tr>
<tr>
<td>CHEM 253</td>
<td>Quantitative Analysis</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 254</td>
<td>and Quantitative Analysis: Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 275</td>
<td>Carbon Compounds</td>
<td></td>
</tr>
<tr>
<td>CHEM 277</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>ENVS 428</td>
<td>Pollution Prevention</td>
<td></td>
</tr>
<tr>
<td>ENVS 429</td>
<td>Environmental Audit</td>
<td></td>
</tr>
<tr>
<td>ENVS 498</td>
<td>Internship</td>
<td></td>
</tr>
<tr>
<td>GEOG 385</td>
<td>GIS Primer</td>
<td></td>
</tr>
<tr>
<td>GEOL 309</td>
<td>Ground Water Hydrology</td>
<td></td>
</tr>
<tr>
<td>GEOL 375</td>
<td>Geology of National Parks</td>
<td></td>
</tr>
<tr>
<td>MATH 175</td>
<td>Analytic Geometry and Calculus II</td>
<td></td>
</tr>
<tr>
<td>PHYS 112</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; 112L</td>
<td>and General Physics II Lab</td>
<td></td>
</tr>
<tr>
<td>PHYS 212</td>
<td>Engineering Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; 212L</td>
<td>and Laboratory Physics II</td>
<td></td>
</tr>
<tr>
<td>REM 407</td>
<td>GIS Application in Fire Ecology and Management</td>
<td></td>
</tr>
<tr>
<td>REM 440</td>
<td>Wildland Restoration Ecology</td>
<td></td>
</tr>
<tr>
<td>REM 459</td>
<td>Rangeland Ecology</td>
<td></td>
</tr>
<tr>
<td>SOIL 205</td>
<td>The Soil Ecosystem</td>
<td></td>
</tr>
</tbody>
</table>

Select 4 Advisor-approved depth electives in any area unless otherwise noted from at least two of the following areas:

**Water:**
- CE 433 Water Quality Management
- ENVS 450 Environmental Hydrology
- FISH 540 Wetland Restoration
- GEOL 309 Ground Water Hydrology
- HYDR 414 Ground Water-Surface Water Interactions

**Mathematics and Statistics:**
- MATH 175 Analytic Geometry and Calculus II
- MATH 275 Analytic Geometry and Calculus III
- MATH 310 Ordinary Differential Equations
- STAT 431 Statistical Analysis

**Management Tools (take three of the following):**
- ENVS 415 Environmental Lifecycle Assessment
- ENVS 428 Pollution Prevention
- GEOG 385 GIS Primer
- GEOG 475 Intermediate GIS
- GEOG 424 Hydrologic Applications of GIS and Remote Sensing
- INDT 364 Hazardous Materials
- INDT 448 Project and Program Management

**Environmental Policy and Regulations (Take three of the following):**
- ENVS 415 Environmental Lifecycle Assessment
- ENVS 428 Pollution Prevention
- ENVS 429 Environmental Audit
- ENVS 436 Principles of Sustainability
- ENVS 479 Introduction to Environmental Regulations
- ENVS 482 Natural Resource Policy and Law

**Energy Systems:**
- GEOG 453 Water and Energy Systems
- ENVS 484 History of Energy
- ENVS 485 Energy Efficiency and Conservation
- INDT 415 Impact of Technology on Society
- INDT 434 Power Generation and Distribution

**Sustainability Science:**
- ENVS 415 Environmental Lifecycle Assessment
- ENVS 428 Pollution Prevention
- ENVS 436 Principles of Sustainability
- FS 409 Principles of Environmental Toxicology
- INDT 457 Lean to Green Sustainable Technology

| **Total Hours** | 67 |

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

Either PHYS 112 / PHYS 112L or PHYS 212 / PHYS 212L may be used as a technical breadth elective.

**D. Social Science Option**

This option is suitable for students wishing to pursue careers in environmental professions such as environmental regulation, land use planning, environmental administration, and as a pre-law program for environmental law.

**Code** | **Title**                                           | **Hours** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 309</td>
<td>Rhetorical Style</td>
<td>3</td>
</tr>
<tr>
<td>or JAMM 428</td>
<td>Environmental Journalism</td>
<td></td>
</tr>
<tr>
<td>ENGL 316</td>
<td>Environmental Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 317</td>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>ENVS 497</td>
<td>Senior Research</td>
<td>4</td>
</tr>
<tr>
<td>GEG 100</td>
<td>Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEG 100L</td>
<td>Physical Geography Lab</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 101L</td>
<td>Physical Geology Lab</td>
<td>1</td>
</tr>
<tr>
<td>MATH 143</td>
<td>Pre-calculus Algebra and Analytic Geometry</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>or POLS 235</td>
<td>Political Research Methods and Approaches</td>
<td></td>
</tr>
</tbody>
</table>

Select Advisor-Directed breadth electives, including at least one course from the first four areas and 9 credits from the technical area:

**Ecology:**
- BIAL 314 Ecology and Population Biology
- FOR 221 Principles of Ecology
- GEOG 410 Biogeography
- REM 221 Principles of Ecology

**Natural Resource Economics and Sociology:**
- AGEC 451 Applied Environmental and Natural Resource Economics
- NRS 383 Natural Resource and Ecosystem Service Economics
- ENVS 428 Pollution Prevention
- ECON 385 Environmental Economics
- FOR 235 Society and Natural Resources

**Management:**
- OM 378 Project Management
NRS 311 Public Involvement in Natural Resource Management
FOR 484 Forest Policy and Administration
GEOG 411 Natural Hazards and Society
REM 456 Integrated Rangeland Management
History, Philosophy, and Political Science:
AGEC 477 Law, Ethics and the Environment
ENVS 484 History of Energy
HIST 424 American Environmental History
PHIL 351 Philosophy of Science
POLS 364 Politics of the Environment
Technical:
CHEM 253 Quantitative Analysis
& CHEM 254 and Quantitative Analysis: Lab
CHEM 275 Carbon Compounds
CHEM 277 Organic Chemistry I
ENVS 498 Internship
FOR 472 Remote Sensing of the Environment
GEOG 301 Meteorology
GEOG 313 Global Climate Change
GEOG 401 Climatology
GEOG 385 GIS Primer
GEOL 309 Ground Water Hydrology
GEOL 361 Geology and the Environment
MATH 175 Analytic Geometry and Calculus II
PHYS 111 General Physics I
& 111L and General Physics I Lab
PHYS 211 Engineering Physics I
& 211L and Laboratory Physics I
PHYS 112 General Physics II
& 112L and General Physics II Lab
PHYS 212 Engineering Physics II
& 212L and Laboratory Physics II
SOIL 205 The Soil Ecosystem
Select 5 Advisor-approved depth electives one of the following areas: 15
Policy and Law:
ENVS 479 Introduction to Environmental Regulations
PHIL 470 Philosophy of Law
POLS 364 Politics of the Environment
POLS 467 Constitutional Law
POLS 468 Civil Liberties
Administration and Planning:
ACCT 482 Enterprise Accounting
COMM 410 Conflict Management
NRS 386 Social-Ecological Systems
NRS 387 Environmental Communication Skills
ECON 385 Environmental Economics
FOR 484 Forest Policy and Administration
GEOG 330 Urban Geography
POLS 364 Politics of the Environment
POLS 451 Public Administration
POLS 454 Public Organization Theory
POLS 462 Natural Resource Policy
PSYC 416 Industrial/Organizational Psychology
Green Building and Community Design:
ARCH 151 Introduction to the Built Environment
ARCH 266 Materials and Methods
ARCH 463 Environmental Control Systems I
ARCH 464 Environmental Control Systems II
GEOG 435 Climate Change Mitigation
GEOG 486 Transportation, GIS & Planning
LARC 380 Water Conservation Technologies
LARC 480 The Resilient Landscape
Climate Change - Human Dimensions:
ECON 385 Environmental Economics
ENVS 479 Introduction to Environmental Regulations
ENVS 484 History of Energy
ENVS 485 Energy Efficiency and Conservation
GEOG 313 Global Climate Change
GEOG 435 Climate Change Mitigation
GEOG 455 Societal Resilience and Adaptation to Climate Change
NRS 383 Natural Resource and Ecosystem Service Economics
Select 48 credits of Advisor-directed breadth electives, including
at least one course from each of the following depth areas (all are available online): 48

Total Courses to total 120 credits for this degree

1 Either CHEM 275 or CHEM 277 may be used as a technical breadth elective.
2 Either GEOG 301 or GEOG 401 may be used as a technical breadth elective.
3 Either PHYS 111 / PHYS 111L or PHYS 211 / PHYS 211L may be used as a technical breadth elective.
4 Either PHYS 112 / PHYS 112L or PHYS 212 / PHYS 212L may be used as a technical breadth elective.

E. Biophysical Science Option

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 which are not available through distance delivery.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 250</td>
<td>General Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>or 111</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>ENGL 317</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 497</td>
<td>Senior Research</td>
<td>2-4</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GEOG 100</td>
<td>Physical Geography</td>
<td></td>
</tr>
<tr>
<td>&amp; 100L</td>
<td>Physical Geography Lab</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td></td>
</tr>
<tr>
<td>&amp; 101L</td>
<td>Physical Geology Lab</td>
<td></td>
</tr>
<tr>
<td>Select 48 credits of Advisor-directed breadth electives, including at least one course from each of the following depth areas (all are available online):</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>
Environmental Science (B.S.Env.S.)

Water and Soils:
- BE 452 Environmental Water Quality
- ENVS 446 Drinking Water and Human Health
- ENVS 450 Environmental Hydrology
- SOIL 205 The Soil Ecosystem
- SOIL 438 Pesticides in the Environment
- SOIL 446 Soil Fertility

Sustainability:
- ENVS 428 Pollution Prevention
- FCS 411 Global Nutrition
- FS 409 Principles of Environmental Toxicology
- FS 436 Principles of Sustainability
- GEOG 313 Global Climate Change
- INDT 415 Impact of Technology on Society

Ecology:
- FOR 426 Global Fire Ecology and Management
- REM 221 Principles of Ecology
- REM 410 Principles of Vegetation Measurement and Assessment
- REM 440 Wildland Restoration Ecology
- REM 459 Rangeland Ecology
- WLF 440 Conservation Biology

Energy:
- ENVS 484 History of Energy
- ENVS 485 Energy Efficiency and Conservation

Geographical Information Systems:
- GEOG 385 GIS Primer
- GEOG 424 Hydrologic Applications of GIS and Remote Sensing
- REM 407 GIS Application in Fire Ecology and Management

Social Science:
- IS 322 International Environmental Organizations
- ENVS 428 Pollution Prevention
- ENVS 484 History of Energy
- FCS 411 Global Nutrition
- INDT 415 Impact of Technology on Society

Total Hours: 64-66

Courses to total 120 credits for this degree.