NATURAL RESOURCE CONSERVATION (B.S.NAT.RESC.COMSV.)

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>FOR 221</td>
<td>Principles of Ecology</td>
<td>3</td>
</tr>
<tr>
<td>FOR 375</td>
<td>Introduction to Spatial Analysis for Natural Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>NR 101</td>
<td>Exploring Natural Resources</td>
<td>2</td>
</tr>
<tr>
<td>NRS 125</td>
<td>Introduction to Conservation and Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>NRS 235</td>
<td>Society and Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>NRS 310</td>
<td>Social Science Methods</td>
<td>3</td>
</tr>
<tr>
<td>NRS 311</td>
<td>Public Involvement in Natural Resource Management</td>
<td>4</td>
</tr>
<tr>
<td>NRS 383</td>
<td>Natural Resource and Ecosystem Service Economics</td>
<td>3</td>
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<td>NRS 387</td>
<td>Environmental Communication Skills</td>
<td>3</td>
</tr>
<tr>
<td>NRS 498</td>
<td>Internship</td>
<td>1-6</td>
</tr>
<tr>
<td>STAT 251</td>
<td>Statistical Methods</td>
<td>3</td>
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<td>Select one of the following:</td>
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<tr>
<td></td>
<td>MATH 143 College Algebra</td>
<td>3</td>
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<tr>
<td></td>
<td>MATH 160 Survey of Calculus</td>
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<td>MATH 170 Calculus I</td>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td></td>
<td>Emphases</td>
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<tr>
<td></td>
<td>Select one of the following emphases:</td>
<td>50-72</td>
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<tr>
<td></td>
<td>Conservation Planning and Management (p. 1)</td>
<td></td>
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<tr>
<td></td>
<td>Conservation Science (p. 2)</td>
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</table>

Total Hours 87-115

A. Conservation Planning and Management Emphasis

To graduate a student must earn an average GPA of 2.30 or higher in all NRS courses.

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td></td>
<td>Select one of the following:</td>
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<tr>
<td></td>
<td>NRS/FOR 472 Remote Sensing of the Environment</td>
<td></td>
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<td></td>
<td>NRS/REM 440 Restoration Ecology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NRS 478 LIDAR and Optical Remote Sensing Analysis</td>
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</table>

Total Hours 12-18

Courses to total 120 credits for this degree
Students must submit a contract for a minimum of 12 credits, completed through prior consultation and approval from the faculty advisor. Courses taken to fulfill major requirements above cannot be double counted for contract courses. All contract courses must be upper division (University of Idaho 300-, 400-, or 500-level courses). Students may fulfill their contract requirement by completing a University approved minor, certificate, or approved study abroad experience. Students are encouraged to make choices that strengthen their expertise and demonstrate proficiency in an area of professional interest.

B. Conservation Science Emphasis.

To graduate, a student must earn an average GPA of 2.00 or higher in all courses taught in the College of Natural Resources (https://catalog.uidaho.edu/colleges-related-units/natural-resources/) and complete an approved professional work experience in natural resources.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>NRS 364</td>
<td>Politics of the Environment</td>
<td>3</td>
</tr>
<tr>
<td>or NRS 462</td>
<td>Natural Resource Policy</td>
<td></td>
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</tbody>
</table>

Select one writing course:

- ENGL 207 Persuasive Writing
- ENGL 208 Personal & Exploratory Writing
- ENGL 313 Business Writing
- ENGL 316 Environmental Writing
- ENGL 317 Technical Writing

Select one of the following:

- NRS 475 Local and Regional Environmental Planning
- NRS 476 Environmental Project Management and Decision Making
- NRS 490 Wilderness and Protected Area Management

Select one of the following:

- CHEM 101 Introduction to Chemistry
- CHEM 101L Introduction to Chemistry Laboratory
- CHEM 111 General Chemistry I
- CHEM 111L General Chemistry I Laboratory

Select one of the following:

- BIOL 114 Organisms and Environments
- BIOL 115 Cells and the Evolution of Life
- BIOL 115L Cells and the Evolution of Life Laboratory

**Natural Resource Science Restricted Electives**

Select 33 credits of Natural Resource Science Restricted electives from the following (at least 15 credits must be at the 400-level):

- **Fishery Science**
  - Select at least 6 credits from the following:
    - FISH 314 Fish Ecology
    - FISH 315 Fish Ecology Field Techniques and Methods
    - FISH 415 Limnology
    - FISH 418 Fisheries Management
    - FISH 422 Concepts in Aquaculture
    - FISH 424 Fish Health Management
    - FISH 430 Riparian Ecology and Management

- **Fire Ecology and Management**
  - Select at least 2 credits from the following:
    - FOR 326 Fire Ecology and Management

  - **Forestry and Renewable Materials**
    - Select at least 9 credits from the following:
      - FOR 220 Forest Biology & Dendrology
      - FOR 275 Forest Resource Sampling
      - FOR 330 Terrestrial Ecosystem Ecology
      - FOR 424 Silviculture Principles and Practices
      - FOR 430 Forest Operations
      - FOR 431 Low Volume Forest Roads
      - FOR 436 Cable Systems
      - FOR 462 Watershed Science and Management
      - FOR 468 Forest and Plant Pathology
      - FOR 472 Remote Sensing of the Environment
      - FSP 321 Properties of Forest and Sustainable Products
      - FSP 346 Biocomposites
      - FSP 348 Introduction to Lignocellulosic Chemistry
      - FSP 444 Primary Forest Products Manufacturing
      - FSP 450 Biomaterials Deterioration and Protection
      - FSP 491 Biomaterial Product and Process Development Lab
      - FSP/MKTG 495 Product Development and Brand Management

- **Rangeland Ecology and Management**
  - Select at least 6 credits from the following:
    - REM 341 Systematic Botany
    - REM 410 Principles of Vegetation Monitoring and Measurement
    - REM 411 Wildland Habitat Ecology and Assessment
    - REM 429 Landscape Ecology
    - REM 440 Restoration Ecology
    - REM 456 Integrated Rangeland Management
    - REM 459 Rangeland Ecology
    - REM 460 Integrated Field Studies in Rangelands

- **Wildlife Science**
  - Select at least 6 credits from the following:
    - WLF 314 Ecology of Terrestrial Vertebrates
    - WLF 315 Techniques Laboratory
    - WLF 370 Management and Communication of Scientific Data
    - WLF 440 Conservation Biology
    - WLF 448 Fish and Wildlife Population Ecology
    - WLF 482 Ornithology
    - WLF 492 Wildlife Management

**Total Hours**: 50-51

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

**Conservation Science Option**

1. Graduates will be able to communicate effectively. In particular, graduates will be able to create and practice effective oral, written, and graphic communication with diverse audiences, especially within interdisciplinary teams and with stakeholders in the fields of conservation and environmental science, planning, and management.
2. Graduates will be able to critically evaluate and integrate concepts and knowledge from ecological, social, economic and political perspectives. They will master basic concepts, apply key concepts and knowledge from social-ecological sciences, and effectively implement current research technologies (e.g., GPS, Remote Sensing, GIS, statistical packages, data collection and management, and environmental and social assessment techniques) individually and in teams to create, manage, and deliver outcomes relating to conservation and environmental science, planning, and management.

3. Graduates will be able to integrate and critically assess diverse viewpoints and perspectives that increase their ability to effectively manage natural resources and the environment. Graduates will also be able to demonstrate reflection and expanded levels of empathy as applied to professional goals through both independent and interdisciplinary team-based work in relation to a variety of societal activities and levels of governance.

4. Graduates will be able to define and apply sustainable natural resource management best practices as ethical and socially responsible; they will be able to examine ethical dilemmas and make ethically informed choices. Graduates will also be able to identify and evaluate the role of natural resource policy and regulation, economics, and markets, their development, and the application of frameworks used in conservation planning and management at various scales (from landscape to regional to international levels); they will also be able to connect the historical development of conservation and environmental philosophies with modern day methods that currently drive conservation and environmental policy, management, and planning.

5. Graduates will be able to synthesize ideas and information to identify, analyze, and address natural resource issues. They will critically evaluate and apply planning and management principles, processes, and best practices (e.g., appropriate theoretical and applied project frameworks, philosophies, policies, decision making, and strategic planning) using appropriate technologies (e.g. geospatial and data collection/analysis/management tools), and develop planning and management skills to productively address conservation and environmental issues across scales.