Instructions: Please use one form for each request/action. Clearly mark all changes using Track Change or strikethroughs for deletions and underlines for additions. Following the approval of the appropriate college curriculum committee, a single representative for the college will e-mail the completed form to the Office of the Provost and Executive Vice President, provost@uidaho.edu for approval and then submission to the Academic Publications Editor in the Registrar’s Office for review by the University Curriculum Committee (UCC).

Deadline: This form must be submitted to the Office of the Provost and Executive Vice President by December 15th for inclusion in the next available General Catalog and to be available for scheduling beginning with the next summer semester.

Submission Information
This section must be completed

<table>
<thead>
<tr>
<th>College:</th>
<th>CNR – University wide program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department/Unit:</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>Dept/Unit Approval Date:</td>
<td>December 1, 2015</td>
</tr>
<tr>
<td>College Approval Date:</td>
<td>NA – university-wide program</td>
</tr>
<tr>
<td>CIP code (Consult Institutional Research):</td>
<td></td>
</tr>
<tr>
<td>Primary Point of Contact (Name and Email):</td>
<td>Robert L. Mahler <a href="mailto:bmahler@uidaho.edu">bmahler@uidaho.edu</a></td>
</tr>
</tbody>
</table>

Program Component Request
Leave blank if not adding, discontinuing, or modifying a program component which consists of option, emphasis, minor, academic certificate less than 30 credits, or teaching endorsement

Clearly mark all changes to existing program components by using Track Change or strikethroughs for deletions and underlines for additions.

<table>
<thead>
<tr>
<th>Create New:</th>
<th>Modify:</th>
<th>X</th>
<th>Discontinue:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Level:</td>
<td>Undergraduate Level:</td>
<td>X</td>
<td>Law Level:</td>
</tr>
<tr>
<td>Credit Requirement:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option:</td>
<td>Add new option: Biophysical Science Option</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Emphasis:

Minor:

Academic Certificate less than 30 credits:

Teaching Endorsement (Major/Minor):
| Overview of Program Component: Provide a brief narrative description | This is to provide a new option that will be available greater than 50% through distance delivery for place bound students. All courses in the depth areas are available online. 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. |
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>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engl 317 Technical Writing</td>
<td>3 cr</td>
</tr>
<tr>
<td>EnvS 497 Senior Research</td>
<td>3-4 cr</td>
</tr>
<tr>
<td>Math 170 Analytic Geometry and Calculus I</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

One of the following (3 cr):
- Phys 111 General Physics
- Biol 250 General Microbiology

One of the following (4 cr):
- Geog 100, Geog 100L Physical Geography and Lab
- Geol 101, Geol 101L Physical Geology and Lab

Advisor-directed depth courses (48 credits), including at least one course from each of the six following depth areas (all are available online):

**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 Ecology
- REM 410 Principles of Vegetation Measurement and Assessment
- REM 440 Wildland Restoration Ecology
- REM 459 Rangeland Ecology
- WLF 440 Conservation Biology

**Energy**
- EnvS 483 Water and Energy Systems
- 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 (3 cr)
EnvS 428  Pollution Prevention (3 cr)
EnvS 484  History of Energy (3 cr)
FCS 411  Global Nutrition (3 cr)
IndT 415  Impact of Technology on Society (3 cr)

Courses to total 120 credits for this degree.

Name or Degree Change Only Requests
Leave blank if not making a name and/or degree change. This section can be completed for changes to the name of: degree, major, minor, option, emphasis, certificate, teaching endorsement

Current Name:  
New Name:  
Current Degree:  
New Degree:  
Other Details:  

Financial Impact
This section must be completed

<table>
<thead>
<tr>
<th>Greater than $250,000 per FY:</th>
<th>Less than $250,000 per FY:</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief Description of financial impact:</td>
<td>The university will offer the depth area courses required for this new option at a distance. Currently, all of the depth courses are available in a distance format or are scheduled to be completed January 1, 2017. The University invested $87,771 for development of the 11 remaining distance courses.</td>
<td></td>
</tr>
</tbody>
</table>

Rationale and Assessment Information
This section must be completed

Rationale for approval of this request as appropriate; include an explanation of how the department will manage the added workload of the new program component and any relevant assessment information that applies, describe whether the program component, curriculum, and admission requirements remain the same, describe the rationale for a name change or degree designation change:
The University of Idaho has a goal to increase enrollment by 50% over the next 10 years, some of which will come from distance education. This Biophysical Science Option in the BS Environmental Science degree program is an integral part of this potential distance education enrollment increase. The on-campus Environmental Science Program is successful and has high enrollment. Market analysis indicates that distance enrollment numbers would also be large for this program. This will be one of only four environmental science programs available nationally through distance delivery. The University of Idaho’s Division of Distance and Extended Education is assisting with the design, marketing and assessment of this program.

Admissions and assessment procedures currently follow University guidelines and will remain the same for this new option.

Distance Education Availability
This section must be completed

To comply with the requirements of the Idaho State Board of Education (SBOE) and the Northwest Commission on Colleges and Universities (NWCCU) the University of Idaho must declare whether 50% or more of the curricular requirements of a program may be completed via distance education. If the program component is to be offered via distance education, additional or different formwork may be required. Contact provost@uidaho.edu for assistance.

The U.S. Department of Education defines distance education as follows:
Distance education means education that uses one or more of the technologies listed below to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor, either synchronously or asynchronously. The technologies may include--

(1) The internet;
(2) One-way and two-way transmissions through open broadcast, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communications devices;
(3) Audio conferencing; or
(4) Video cassettes, DVDs, and CD-ROMs, if the cassettes, DVDs, or CD-ROMs are used in a course in conjunction with any of the technologies listed in paragraphs (1) through (3).

Can 50% or more of the curricular requirements of this program component be completed via distance education? Yes* X No

*If Yes, can 100% of the curricular requirements of this program component be completed via distance education? Yes No x
Geographical Area Availability
This section must be completed

Identify the geographical area(s) this program component can be completed in:

<table>
<thead>
<tr>
<th>Moscow</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coeur d'Alene</td>
<td></td>
</tr>
<tr>
<td>Boise*</td>
<td></td>
</tr>
<tr>
<td>Idaho Falls*</td>
<td></td>
</tr>
<tr>
<td>Other** Location(s):</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Programs offered in regions 3, 4, and/or 5 may require additional formwork from the State Board of Education. Contact the Office of the Provost and Executive Vice President for additional information.

**Note: If Other is selected identify the specific area(s) this program component will be offered.

Office of the Registrar Information

| Implementation Effective Date: |  |
| Date Received by the Office of the Provost and Executive Vice President: |  |
| Date Received by UCC Secretary: | 1/15/16 |
| UCC Item Number: | UCC-16-033f |
| UCC Approval Date: |  |
| Faculty Senate Item Number: |  |
| Faculty Senate Approval Date: |  |
| General Policy Report Number or Faculty Meeting Date: |  |
| Office of the President Approval Date: |  |
| State Board of Education Approval/Acknowledgement Date: |  |