UNIVERSITY OF MARY WASHINGTON – PROGRAM CHANGE PROPOSAL

Electronically submit this completed form with attachments in one file to the Chair of the College Curriculum Committee.

<table>
<thead>
<tr>
<th>COLLEGE (check one):</th>
<th>Arts and Sciences</th>
<th>Business</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal Submitted By: Chuck Whipkey</td>
<td>Date Prepared: 2/2/2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department /Program: Earth and Environmental Sciences/Environmental Science major (social Science and Natural Science tracks)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: for any program change entailing the addition any new courses, or revisions to existing courses, separate proposal for those course actions must also be submitted.

PROPOSAL TO CHANGE EXISTING PROGRAM (check no than one of the following)

| Revise requirements for existing major | x |
| Revise requirements for a concentration within an existing major |
| Revise requirements for an existing degree program |
| Revise requirements for existing certificate program |
| Revise requirements for existing minor |
| Implementation Date: FALL semester, year: | Fall 2015 |

REQUIRED ATTACHMENTS FOR CHANGES TO EXISTING PROGRAMS:

1. Rationale statement (Why is this program change needed? What purposes will it serve?)
2. Impact Statement (Provide details about the Library, space, budget, technology, and impacts created by this program change. Supporting statements from the Library, IT Department, etc. evaluating the resource impact and feasibility of the program change are required.)
3. Catalog Copy (Provide the existing Catalog Description and the complete statement of the proposed new Catalog description that reflects the program changes)

PROPOSAL TO CREATE NEW PROGRAM NOT REQUIRING STATE ACTION

(check no more that one of the following)

| New concentration within existing major | Name: |
| New minor | Name: |
| New Major but NOT a new degree* | Name: |

*Use ONLY for interdisciplinary majors that will be grouped as part of the "Special Majors/General Liberal Arts and Sciences" degree (CIP Code 24.0101) or reported as a BLS degree (CIP Code 24.0199)

Implementation Date (semester and year): Fall 2015

REQUIRED ATTACHMENTS FOR NEW PROGRAMS NOT REQUIRING STATE APPROVAL:

1. Rationale statement (Why is this additional program needed? What purposes will it serve?)
2. Impact Statement (Provide details about the Library, space, budget, technology, and impacts created by this program change. Supporting statements from the Library, IT Department, etc. evaluating the resource impact and feasibility of adding the new program are required.)
3. Catalog Copy (Provide the complete Catalog Description for the proposed new program)

Department Chair Approval: Chuck Whipkey Date: 2/2/2015
CCC Chair Approval: Chuck Whipkey Date: 2/2/2015
Dean Approval: 2/12/15
UCC Chair Approval: Date: 2/12/15

*Provost Approval: Date: 
*Required only in cases of proposals for new concentrations, new minors, or new majors that do not involve a new degree
This is a proposal to delete GEOG 250, *Introduction to Geographic Information Systems and Cartography*, from the list of elective courses in the Environmental Science Social Science and Natural Science tracks.

**Rationale:** The Environmental Science Majors (both the Social Science and Natural Science tracks) require an introductory Geographic Information Systems (GIS) class. UMW offers three intro GIS classes, EESC 205, GISC 200, and GEOG 250, any one of which can be used to fulfill the requirement. Although the three courses have a somewhat different focus, they all are essentially introductions to GIS.

In addition to being one of the GIS options listed above, GEOG 250 has been an elective in the Environmental Science major for more than 15 years. In the past, GEOG 250 was primarily a cartography course but it has evolved to become, to a large extent, an introduction to GIS (which is why it is now an option for our GIS requirement). However, our department believes GEOG 250 is now too duplicative of our other required GIS options to be allowed to remain as an elective. We are therefore requesting that GEOG 250 be formally removed as an elective in our majors (although we want the class to remain as one of the options to fulfill our GIS requirement).

**Impact:** No impact is expected in our department or the Geography Department.

**Current catalog text (GEOG 250 elective is highlighted):**

Requirements for the Environmental Science Major — Natural Science Concentration (ESNT)
Forty (40) or forty one (41) credits, including:

EESC 110, 315, and 460; EESC 205 or GEOG 250 or GISC 200; BIOL 311 or 322 or EESC 323; CHEM 211 or 253 or 254 or 331 (331 must be taken with 332) or EESC 325; GEOL 111 and 112A; and 12 credits from courses in the Natural Sciences Elective Track list.

Major Electives for the Natural Sciences Track:


Requirements for the Environmental Science Major — Social Science Concentration (ESSO)
Thirty-eight (38) or thirty-nine (39) credits, including EESC 110 and 460; EESC 205 or GEOG 250 or GISC 200; BIOL 210; CHEM 211 or 253 or 254 or 331 and 332 (331 must be taken with 332) or EESC 325; ECON 331; GEOL 111 and 112A; and 12 credits from courses in the Social Sciences Elective Track list.

Major Electives for the Social Sciences Track:

GEOL 210 and 211 (must be taken concurrently and count as one elective), 313, 315, 325, 355, 360, 493; GISC 351; PHIL 330; PSCI 350B, 354A, 355, 362, 366; SOCG 313, 404.

Catalog text if the proposed change is approved. The only change is the removal of GEOG 250 from the elective lists.

Requirements for the Environmental Science Major — Natural Science Concentration (ESNT)
Forty (40) or forty one (41) credits, including:

EESC 110, 315, and 460; EESC 205 or GEOG 250 or GISC 200; BIOL 311 or 322 or EESC 323; CHEM 211 or 253 or 254 or 331 (331 must be taken with 332) or EESC 325; GEOL 111 and 112A; and 12 credits from courses in the Natural Sciences Elective Track list.

Major Electives for the Natural Sciences Track:


Requirements for the Environmental Science Major — Social Science Concentration (ESSO)
Thirty-eight (38) or thirty-nine (39) credits, including EESC 110 and 460; EESC 205 or GEOG 250 or GISC 200; BIOL 210; CHEM 211 or 253 or 254 or 331 and 332 (331 must be taken with 332) or EESC 325; ECON 331; GEOL 111 and 112A; and 12 credits from courses in the Social Sciences Elective Track list.

Major Electives for the Social Sciences Track: