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.

COLLEGE (check one):	Arts and Sciences	Х	Business		Education	
Proposal Submitted By: Jodie Hayob-Matzke			Date Prepared: 11/27/18			
Department /Program:	Earth and Environmental Sciences (EESC)					

1. 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. If the proposal involves changes in course credit hours as a part of the program change, "Change_Course_Credits" proposal forms for each course with revised credit hours 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 2019				

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):					

<u>REQUIRED ATTACHMENTS FOR ALL PROPOSALS FOR PROGRAM CHANGE OR FOR NEW PROGRAMS NOT</u> <u>REQUIRING STATE APPROVAL:</u>

- 2. Rationale statement (Why is this additional program needed? What purposes will it serve?)
- 3. 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.) If the proposal involves changes in course credit hours as a part of the program change, "Change_Course_Credits" proposal forms for each course with revised credit hours must also be submitted.
- 4. Catalog Copy (Provide the complete Catalog Description for the proposed new program)
- 5. Any change that impacts another Department must have a written statement (such as a copy of an email) from the Chair(s) agreeing to the change.

Jodie Hayd	
Department Chair Approval*:	Date: 11/27/18
CCC Chair Approval:	Date <u>: 1/21/2019</u>
Dean Approval: Kent & Multzin	Date : 1/24/2019

*COB and COE proposals approved by the Associate Dean.

BEFORE consideration by the UCC, the proposal must be approved the three levels noted above. Approval by the UCC, UFC, and Provost** are noted on the proposal "status history" at the UCC web site.

**Provost approval is required in cases of proposals for new concentrations, new minors, new majors that do not involve a new degree, or program changes involving changes to credit hours of courses in the program's requirements.

Program Change Proposal Cover Sheet (September 2018)

Rationale statement (Why is this program change needed? What purposes will it serve?)

Proposed changes to GEOLOGY major:

1. Require an introductory GIS (geographic information systems) course. This content is critical for the success of our Geology majors in the workforce and post-graduate studies; GIS software provides analytical, organizational, and visualization capabilities that will enhance the training of our Geology majors. GIS technology is prominently used by geoscientists in all sectors. Currently, an introductory GIS course is required for our Environmental Geology, Environmental Science-Natural Track, and Environmental Science-Social Track majors. Adding a GIS course to our Geology major will make this major consistent with our other programs, and will ensure that our Geology majors have basic training in this important skill.

Any of the following courses (which are considered equivalent introductory courses to the GIS certificate, for example) will satisfy an introductory GIS requirement: EESC 205, GEOG 250, or GISC 200.

2. Reduce the number of major elective credits from 12 to 10; this change will make the total number of credits required for the Geology major more consistent with the Environmental Geology major.

3. Limit the number of credits for the following courses that may count in the Geology major as follows:

- EESC 481 Readings (1-2): limit the number of credits that may count in the major to 2 credits. (Expedited course change proposal approved by CAS Curriculum in November, 2018.)
- EESC 491 Individual Study (1-4): limit the number of credits that may count in the major to 4 credits. (Expedited course change proposal submitted separately).
- EESC 493 Honors Research (4): limit the number of credits that may count in the major to 4 credits. (Expedited course change proposal submitted separately).

Placing credit limits on these courses that emphasize individual experiences will ensure that our Geology majors complete sufficient coursework in content areas that will better prepare them for the work place and/or graduate studies.

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.)

No library resources are needed to implement the GIS requirement; additionally, no impacts to the use of Jepson spaces are anticipated. No new equipment or technology is needed to implement requirement of a GIS course. We anticipate enrollments in EESC 205, GEOG 250, and/or GISC 200 might increase slightly as a result of the proposed change. However, a good proportion (perhaps half) of our Geology majors already choose to take one of these three introductory GIS courses as an elective in the major.

Implementation of credit limits for EESC 481, 491, and 493 will have no impacts on resources at UMW.

Catalog Copy (Provide the complete Catalog Description for the proposed new program)

Requirements for Geology Major

Forty-two (42) credits, to include EESC 111, 112, 240, 301, 302, 311, 412, and either EESC 205 or GEOG 250 or GISC 200; and an additional ten (10) credits in other Earth and Environmental Science courses including EESC 201, 210, 211, 307, 313, 315, 325, 335, 340, 355, 360, 421, 481, 491,493, or 499*. CHEM 331 or 332 may be substituted for up to four (4) of these credits. **A maximum of 3 credits may count toward the major requirements.*

Any change that impacts another Department must have a written statement (such as a copy of an email) from the Chair(s) agreeing to the change.

Copied from an email from the Chair of Geography:

November 3, 2018

Dear CAS Curriculum Committee,

We understand that the Department of Earth and Environmental Science will be requiring an introduction to GIS course as part of the geology major going forward. We support this change, and I write to confirm that it will not impact resources.

Thank you,

Jachie Galleghu

Jackie Gallagher Chair, Department of Geography