

UNIVERSITY OF MARY WASHINGTON -- NEW COURSE 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	<input checked="" type="checkbox"/>	Business	<input type="checkbox"/>	Education	<input type="checkbox"/>
Proposal Submitted By: Ping YIN			Date Prepared: 11/2/2018			
Course Title: Special Topics in Geospatial Analysis						
Department/discipline and course number*:			Geography MSGA 571			
Prerequisites:			N/A			

*This course number must be approved by the Office of the Registrar before the proposal is submitted.

Number of credits:	4	Will this course meet for at least 700 contact minutes for each credit hour proposed? If no, provide a credit hour justification.	YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>
Will this be a new, repeatable "special topics" course? (Do you want students to be able to take this new course more than once if the topic changes?)			NO	<input type="checkbox"/>	YES	<input checked="" type="checkbox"/>

Date of first offering of this new course: FALL SEMESTER, year		Spring 2020	
Proposed frequency of offering of the course:		Annually in spring semester	
Proposed enrollment limit for the course:		18	
List the faculty who will likely teach the course:		Ping Yin, Marco Millones Mayer	
Are ANY new resources required?		NO	<input checked="" type="checkbox"/>
		YES	<input type="checkbox"/>
Document in attached impact statement			

**The earliest the course may be offered is the fall semester of the academic year FOLLOWING the year in which the course proposal is approved.

This new course will be (check all that apply):			
Required in the major	<input type="checkbox"/>	Required in the minor	<input type="checkbox"/>
Elective in the major	<input checked="" type="checkbox"/>	Elective in the minor	<input type="checkbox"/>
		General Elective	<input type="checkbox"/>
		General Education**	<input type="checkbox"/>

**AFTER the new course is approved, a separate proposal must be sent to the General Education Committee.

Catalog Description (suggested length – less than 50 words):	
This special topics course will focus on the applications of geographic information science (GIS) in a specific domain determined at the instructor's discretion, such as land use land cover change, public health, or environmental modeling.	

COURSE HISTORY:	Was this course taught previously as a topics or experimental course?	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
Course Number and Title of Previous Course		Semester Offered	Enrollment		
CHECK HERE if the proposed course is to be equated with the earlier topics or experimental offerings. If equated, students who took the earlier "topics" course will only be able to take the new course as a repeat (C- grade or lower).					
NOTE: If the proposed course has not been previously offered as a topics or experimental course, explain in the attached rationale statement why the course should be adopted even though it has not been tried out.					

REQUIRED ATTACHMENTS:

1. **Rationale Statement** – Why is this course needed? What purposes will it serve?
2. **Credit Hour Justification** (if required) – explain how this course will comply with the UMW Credit Hours Policy (D.5.3)
3. **Impact Statement** – Provide details about the Library, space, staffing, budget, and technology impacts created by adding this new course. Include supporting statements from the Library, IT Department, etc. **Any change that impacts another Department must have a written statement (such as an email) from the Chair(s) agreeing to the change.**
4. **Sample Syllabus**

Department Chair Approval*: Jackie Gallagher

Date: Nov 9 2018

CCC Chair Approval: 

Date: 12/03/2018

*COB and COE proposals approved by the Associate Dean. **BEFORE** consideration by the UCC, the proposal must be approved the two levels noted above. Approval by the UCC and UFC are noted on the proposal "status history" at the UCC web site.

Rationale Statement

The current curriculum of the Masters of Science in Geospatial Analysis (MSGA) program was approved in 2013-14 to accommodate the faculty available at that time. To meet the requirements for the degree, students have to complete all of the six courses offered as well as a capstone project: there are no electives. While Ping Yin was hired as the program began, he was not involved in creating it. With the addition of Marco Millones Mayer in 2016, faculty expertise has changed considerably since the program was devised. Given the rapid expansion of geospatial technology, and strong interest in the “4+1” program introduced in 2017, we are proposing to change our MSGA curriculum to provide more flexibility to students and to better leverage faculty expertise for students’ benefit.

As part of the change to the MSGA curriculum, we propose a new course: MSGA 571, Special Topics in Geospatial Analysis course, which will be an elective course. This course will focus on the applications of geographic information science in a specific topic domain determined at the instructor’s discretion, such as land use and land cover change analysis, public health, or environmental modeling. This course will benefit students by covering new topics not fully addressed by other MSGA courses; by enhancing students’ domain knowledge; and, by strengthening practical skills in geospatial technology to solve real-world problems. As with undergraduate courses, if one version of this course is taught three times, it will be converted into a regular course.

Impact Statement

No immediate impact is expected on teaching resources. Since this will be one of several elective courses, it need not be offered every semester or even every year. Elsewhere, we propose that the MSGA changes from having 6 required courses to 3 required courses, and 3 elective courses. MSGA 571 will be one of five listed electives, only three of which would be taught in any one year. This model introduces flexibility, as faculty can vary which graduate courses they teach and will thus be available to teach undergraduate courses. Unless the MSGA grows substantially, we do not anticipate any new resources.

No significant IT impact is anticipated, because MSGA 571 will use the same set of hardware and software as our existing MSGA courses (e.g., ArcGIS Desktop, ArcGIS Online, Terrset/Idrisi, and Envi).

We have not provided a syllabus since this is a special topics course, and the syllabus would vary each time. However, the course will meet from 6:00-9:30 pm one night per week and will have computer exercises given in a laboratory format.