



Proposal to the Senate Educational Policy Committee

PROPOSAL TITLE: Revision of the Professional Science Masters in Geographic Information Science

SPONSOR: Shakil Kashem, Teaching Assistant Professor, Department of Geography & Geographic Information Science, 300-3404, kashem1@illinois.edu

COLLEGE CONTACT: Karen Carney, Associate Dean, College of Liberal Arts and Sciences, 217-333-1350, kmcarney@illinois.edu

BRIEF DESCRIPTION:

The Department of Geography & Geographic Information Science proposes to change the course requirements for the Master's degree in Geography for students who are enrolled in the Professional Science Master's concentration in Geographic Information Science (GIS-PSM). The proposed change is to eliminate GEOG 471 and GEOG 491 as required courses for students in the GIS-PSM. The total number of credit hours required for the Master's degree will not change. In addition, under "Other Requirements," students no longer need to complete two research papers and oral and written examinations. Instead, they will be required to pass an evaluation administered by the GIS-PSM director and/or members of the GIS-PSM committee.

JUSTIFICATION:

The two courses that are being removed are not suitable for students in the Professional Science Master's program. GEOG 471 (Recent Trends in Geographic Thought) addresses paradigms in geographic thought (e.g. logical positivism, Marxism, post-structuralism) that influence how geographers view the world and how geographic research is conceived and conducted. In GEOG 491 (Research in Geography), students learn how to identify a research problem and conduct a research project, and they prepare an NSF-style research proposal. Both of these courses explicitly emphasize research epistemologies and methodologies and are therefore required for students in the traditional Master's and Ph.D. programs. The newly-established GIS-PSM, however, is a professional degree program that does not emphasize research. PSM students prepare for careers with businesses and organizations that use geospatial data and methods – a fast-growing business sector. Given the very different career goals of PSM students versus students in the research-based Master's program, departmental faculty strongly recommend that these two courses not be required for GIS-PSM students, since the content of the two courses is not relevant for PSM students' graduate education. Similarly, the two written research papers and written and oral examination, while entirely appropriate for traditional Master's and Ph.D. students, are replaced by an evaluation conducted by the GIS-PSM director and/or members of the GIS-PSM committee. PSM students will still be required to complete a total 32 credit hours of coursework, including at least 3 courses from the GIScience core, in addition to the 10 credit hours of Business courses that are required for all PSM students.

BUDGETARY AND STAFF IMPLICATIONS:

N/A. This proposed curriculum change has no resource implications. No additional staff or resources are required.

DESIRED EFFECTIVE DATE: Fall 2016

STATEMENT FOR PROGRAMS OF STUDY CATALOG:

Professional Science Master's in Geographic Information Science

Head of Department: Sara McLafferty
Computing Applications Building
605 E. Springfield Avenue
Champaign, IL 61820
E-mail: geograph@illinois.edu
PH: (217) 333-1880
<http://www.geog.illinois.edu/>

Faculty Coordinator: Sara McLafferty

Admissions: Susan Etter

Major: Geography

Degrees Offered: M.S.

Graduate Concentration: Professional Science Masters; Geographic Information Science (M.S. only)

Graduate Degree Program

This program is designed for careers in business management using geospatial technologies. Students build a flexible, cross-disciplinary expertise around a strong Geographic Information Science core, while acquiring business knowledge and professional skills. The business curriculum includes technology management, marketing, entrepreneurship, finance, project and/or process management. PSM students typically complete the program in 16 months, consisting of 3 full-time, on-campus semesters and a summer internship.

Admission

Candidates for admission must have a bachelor's degree from an accredited U.S. institution, or comparable degree from a recognized institution abroad with a GPA or 3.0 (4.0 scale) for the last 60 hours of undergraduate or graduate coursework. The Graduate Record Examination(GRE), test of English as a Foreign Language (TOEFL, IELTS, TSE) for non-native speakers of English, and letters of recommendation are required. Transfer credit from Illinois or other institutions is not permitted.

Master of Science in Geography, Professional Science Master's Concentration in Geographic Information Science

32 hours of coursework from departmental approved list (see attached) in consultation with the faculty coordinator.	32
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PSM Business Courses	10
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PSM 501	PSM Industry Seminar I ¹	0
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PSM 502	PSM Industry Seminar II	0
PSM 503	PSM Industry Seminar III	0
PSM 555	PSM Internship (Summer)	0
Total Hours		42

Other Requirements

Other requirements may overlap.

The PSM concentration is required.

Minimum hours required within the unit: 16

Minimum 500-level credit hours (8 in GEOG): 12

Evaluation conducted by the GIS-PSM Director and/or members of the GIS-PSM committee

Full-time enrollment (12 credit hours or higher) is required in fall and spring semesters; summer enrollment is required for the internship.

Minimum GPA: 3.0

¹PSM Seminars and Internship may be taken for 1 credit-hour, but may not be applied to the business or science credit hours required for the degree.

Financial Aid

Illinois PSM students may not hold assistantships or other tuition and fee waiver-generating appointments, but may be eligible for student loans. Statutory waivers and tuition scholarships are accepted.

For additional details and requirements refer to the department's Graduate Handbook and the [Graduate College Handbook](#).

CLEARANCES:

Signatures:

Sara McHafferty
Unit Representative:

9/23/15
Date:

[Signature]
School Representative:

9/24/15
Date:

Karen McCarney
College Representative:

1/27/16
Date:

[Signature]
Graduate College Representative:

2/2/16
Date:

Appendix A- Comparison of Current and Proposed Requirements

Current Requirements	Current Hours	Proposed Requirements	Proposed Hours
GEOG 471-Recent Trends in Geog Thought	4		
GEOG 491-Research in Geography	2		
26 hours of coursework from departmental approved list in consultation with the faculty coordinator.	26	32 hours of coursework from departmental approved list (see attached) in consultation with the faculty coordinator.	32
PSM Business Courses	10	PSM Business Courses	10
PSM 501- PSM Industry Seminar ²	0	PSM 501- PSM Industry Seminar ¹	0
PSM 502- PSM Industry Seminar II	0	PSM 502- PSM Industry Seminar II	0
PSM 503- PSM Industry Seminar III	0	PSM 503- PSM Industry Seminar III	0
PSM 555- PSM Internship (Summer)	0	PSM 555- PSM Internship (Summer)	0
Total	42	Total	42
Other requirements may overlap.		Other requirements may overlap.	
The PSM concentration is required.		The PSM concentration is required.	
Minimum hours required within the unit:	16	Minimum hours required within the unit:	16
Minimum 500-level credit hours (8 in GEOG):	12	Minimum 500-level credit hours (8 in GEOG):	12
Two written research papers and complete both a written and oral examination.		Evaluation conducted by the GIS-PSM director and/or members of the GIS-PSM committee	
Full-time enrollment (12 credit hours or higher) is required in fall and spring semesters; summer enrollment is required for the internship.		Full-time enrollment (12 credit hours or higher) is required in fall and spring semesters; summer enrollment is required for the internship.	
Minimum GPA:	3.0	Minimum GPA:	3.0

¹PSM Seminars and Internship may be taken for 1 credit-hour, but may not be applied to the business or science credit hours required for the degree.

Appendix B
Graduate GIScience Courses

GEOG 412 Geospatial Technologies and Society (3 hours)
GEOG 421 Earth Systems Modeling (4 hours)
GEOG 440 Business Applications of GIS (3 hours)
GEOG 439 Health Applications of GIS (3 hours)
GEOG 460 Analysis and Interpretation of Aerial Photography (4 hours)
GEOG 473 Digital Cartography & Map Design (4 hours)
GEOG 476 Applied GIS to Environmental Studies (3 hours)
GEOG 477 Introduction to Remote Sensing (3 hours)
GEOG 478 Techniques of Remote Sensing (4 hours)
GEOG 479 Advanced Geographic Information Systems (3 hours, repeatable)
GEOG 480 Principles of GIS (3 hours)
GEOG 489 Programming for GIS (4 hours)

GEOG 560 Spatial Epidemiology (4 hours)
GEOG 570 Advanced Spatial Analysis (4 hours)
GEOG 595 Advanced Studies in Geography: Recent Advances in GIS or Advanced Digital & Spatial Studies (4 hours)

Other GIS-related courses may be substituted with permission of the GIS-PSM Director

UNIVERSITY OF ILLINOIS
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EP.16.54

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820



February 3, 2016

Bettina Francis, Chair
Senate Committee on Educational Policy
Office of the Senate
228 English Building, MC-461

Dear Professor Francis:

Enclosed is a copy of a proposal from the College of Liberal Arts and Sciences to revise the Professional Science Masters in Geographic Information Science.

Sincerely,

A handwritten signature in cursive script that reads "Kathryn A. Martensen".

Kathryn A. Martensen
Assistant Provost

Enclosures

c: A. Elli
K. Carney
S. Kashem
J. Hart
A. McKinney

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

College of Liberal Arts and Sciences
Office of the Dean

2090 Lincoln Hall
702 S. Wright Street, MC-448
Urbana, IL 61801



January 27, 2016

Wojtek Chodzko-Zajko
Dean, Graduate College
204 Coble Hall MC-322

Dear Dean Chodzko-Zajko:

The Committee on Courses and Curricula, on behalf of the Faculty of the College of Liberal Arts and Sciences has voted to approve the following proposal:

Revision of the Professional Science Masters in Geographic Information Science

Please let me know if you have any questions on this proposal. This proposal is now ready for review by the Graduate College for proposed implementation Fall 2016.

Sincerely,



Karen M. Carney
Associate Dean

enclosure

C: Dr. Shakil Kashem
Professor Sara McLafferty
Professor Stephen Marshak