



Proposal to the Senate Educational Policy Committee

PROPOSAL TITLE: Change the Name of the Undergraduate Major from Geography to Geography and Geographic Information Science and revise portions of major

SPONSOR: Bruce Rhoads, Professor and Head, Department of Geography, 333-1880, brhoads@illinois.edu

COLLEGE CONTACT: Steven R. Leigh, Associate Dean, 333-1350, sleigh@illinois.edu

BRIEF DESCRIPTION: 1) The Department of Geography seeks to change the name of its undergraduate major to Geography and Geographic Information Science. Faculty in the department voted 9-2 in favor of this name change. 2) Revise the Geography core curriculum to include GEOG 379: Introduction to GIS as a required course in place of GEOG 371: Spatial Analysis, a current core requirement; 3) Addition of or changes to several courses in the Geographic Information Science, Human Geography and Physical Geography concentrations to reflect the change in the core requirements and to include new courses in the Course Catalog.

JUSTIFICATION: This proposal complements a companion proposal seeking to change the name of the Department of Geography to the Department of Geography and Geographic Information Science. The change in the name of the undergraduate major would maintain consistency between the name of the department and the name of the major. Changing the name of the major will also help us achieve a number of goals. First, the discipline of geography has recently undergone transformation to the extent that Geographic Information Science (GIScience) is now a distinct, highly recognized field of knowledge that emphasizes the development and application of various techniques to manage, process, and analyze geographical information. For the past decade the department has increasingly placed emphasis on GIScience research and teaching. We already have a concentration in GIScience at the undergraduate level and a GIS program at the graduate level. We currently are in the process of hiring a new faculty member in GIScience and plan to continue to develop and expand our capabilities in GIScience in the future. Thus, the name change would reflect more accurately the academic focus of our major. Because we already have a concentration in GIScience, no curriculum changes are needed to accommodate the change in the name of the major. A rigorous curriculum already exists for majors who want to focus on GIScience. Moreover, by retaining Geography in the name of the major we also are accommodating other concentrations in our major (general geography, human geography, physical geography) that are not specifically focused on GIScience, but that connect to it in important ways. A second goal of the name change is to rebrand the major to attract new majors that specifically are seeking an academic program in GIScience. Over the past decade, the demand for employment in GIScience has grown enormously. Current demand for GIScience professionals in the public and private sectors currently exceeds the supply and this situation is

anticipated to exist well into the future. The University Consortium of Geographic Information Science has identified a clear need for more university programs in GIScience to meet this demand. This assessment is consistent with the development of a Geospatial Competency Model by the U.S. Department of Labor that outlines skill requirements to meet growing industry demands for GIScience professionals. Students are seeking opportunities for university-level training in GIScience to pursue careers as GIScience professionals; by renaming the major we will increase our visibility as an educational center of excellence in GIScience and also provide majors focusing in GIScience with a degree that clearly identifies their training in this important new field. Through the name change, the department is being responsive to trends within the broader academic discipline, to changing student needs, and to emerging professional opportunities.

To reflect this name change, the department will now require all students in the major to take at least one course in GIS – GEOG 379: Introduction to GIS, which is being added to the core requirements. GEOG 379 will replace GEOG 371: Spatial Analysis, which is being changed to an optional course for majors, with the exception of the Geographic Information Science concentration, where GEOG 371 will be required. The other proposed changes are simply additions of newly approved courses now listed in the Course Catalog to the list of courses for concentrations in Human Geography, Physical Geography and Geographic Information Science (GEOG 370: Water Planet, Water Crisis; GEOG 412 Geotech and Society; GEOG 465: Sustainability and Transp.; Geog 481: Intl Environ Cooperation.

BUDGETARY AND STAFF IMPLICATIONS:

- a. Additional staff and dollars needed
The changes will not require additional staffing or major expenditures. The only anticipated costs are those related to generating new supplies (e.g. letterhead) and promotional materials (website revisions, flyers and brochures) for the department and those costs can be covered under the current operating budget.
- b. Internal reallocations (e.g., change in class size, teaching loads, student-faculty ratio, etc.)
The changes will not involve changes in class size, teaching loads, or student-faculty ratio.
- c. Effect on course enrollment in other units and explanations of discussions with representatives of those departments
The changes will not affect course enrollment in other units.
- d. Impact on the University Library (*A letter of acknowledgement from the University Librarian must be included for all new program proposals.*)
No anticipated impact.
- e. Impact on computer use, laboratory use, equipment, etc.
No anticipated impact.

DESIRED EFFECTIVE DATE: August 16, 2012

STATEMENT FOR PROGRAMS OF STUDY CATALOG: Below is the complete revised listing for the next Programs of Study Catalog. Changes are marked by shading.

Geography and Geographic Information Science

Head of Department: Bruce Rhoads

Department Office: 220 Davenport Hall, 607 South Mathews, Urbana, (217) 333-1880

www.geog.illinois.edu

Students in Geography and Geographic Information Science must complete both the core courses in the major and one of the four concentrations in consultation with the Department's Undergraduate Advisor. This major is administered by the Department of Geography and Geographic Information Science.

Major in Sciences and Letters Curriculum

E-mail: geograph@illinois.edu

Degree title: Bachelor of Arts in Liberal Arts and Sciences

Minimum required major and supporting course work normally equates to 42-57 hours including at least 40 hours of Geography and Geographic Information Science courses.

General education: Students must complete the Campus General Education requirements.

Minimum hours required for graduation: 120 hours

Departmental distinction. All students majoring in Geography and Geographic Information Science who have maintained a University grade point average of 3.25 and who satisfactorily complete an independent project (GEOG 391) in their senior year will be eligible to graduate with distinction. Students should consult their advisors about distinction requirements as soon as they enter the major (no later than the end of their junior year).

Students must complete the core requirements listed below and select one concentration in consultation with an academic advisor.

Geography and Geographic Information Science Core

Hours	Requirements
3-4	Select one of the following two courses ¹ : ATMS 100–Introduction to Meteorology (same as GEOG 100) GEOG 103–Earth's Physical Systems
6-7	Select two of the following five courses: GEOG 101–Geog of Developing Countries GEOG 104–Social and Cultural Geography GEOG 105-The Digital Earth

	GEOG 106–Geographies of Globalization
	GEOG 110–Geography of Intl Conflicts
4	GEOG 379 – Introduction to GIS
13-15	Required total core hours

1. Students in the Physical Geography Concentration may choose to complete both GEOG 100 and 103 and one of the five courses: GEOG 101, 104, 105, 106 and 110.

For all concentrations: Students are strongly encouraged to elect GEOG 473. Students are encouraged to elect techniques courses as part of their programs: GEOG 280, 371, 373, 390, 473, 476, 477, 478, 480 or 479.

General Geography Concentration

Hours	Requirements
<u>25-27</u>	Geography and Geographic Information Science courses, selected from 200- to 400-level courses, of which 6 hours must be at the 300 or 400 level
12	Supporting courses selected with the approval of the Department’s Undergraduate Advisor

NOTE: Students must have at least 40 hours in the major, including core courses.

Geographic Information Science Concentration

Hours	Requirements
3	SOC 280- Intro to Social Statistics (same as GEOG 280)
4	GEOG 371 – Spatial Analysis
4	GEOG 473- Map Compilation and Construct
3	GEOG 477- Introduction to Remote Sensing
3	GEOG 479- Advanced Geog Info Systems
9-11	Select a minimum of three courses from the following: GEOG 205- Business Location Decisions GEOG 412-Geospatial Tech & Society PATH 439- Health Applications of GIS (same as GEOG 439) GEOG 460- Anal & Interp Aerial Photo GEOG 468- Biological Modeling GEOG 469- Spatial Ecosystem Modeling GEOG 476- Applied GIS to Environ Studies GEOG 478- Techniques of Remote Sensing GEOG 480 – Principles of GIS GEOG 489–Programming for GIS
12	Supporting courses selected with the approval of the Department’s Undergraduate Advisor. The Department recommends that electives among offerings in

computer science and math be chosen in consultation with the advisor.

Human Geography Concentration

Hours	Requirements
<u>25-27</u>	200-to 400-level Geography and Geographic Information Science courses (of which at least 6 hours must be at the 300 or 400 level) selected from the following: GEOG 204 - Cities of the World GEOG 205 - Business Location Decisions GEOG 210 - Contemp Social & Env Problems GEOG 224 - Geog Patterns of Illinois GEOG 310–Political Geography ESE 320-Water Planet, Water Crisis (same as GEOG 370) GEOG 371-Spatial Analysis GEOG 373 - Spring Field Course GEOG 381–Environmental Perspectives GEOG 384 - Population Geography GEOG 390 - Individual Study GEOG 391 - Honors Individual Study GEOG 394 - Special Topics Social Geog GEOG 410 - Geography of Dev and Underdev GEOG 412-Geospatial Tech & Society ATMS 421–Earth Systems Modeling (same as GEOG 421) LA 427–Amer Vernacular Cultural Land (same as GEOG 427) GEOG 438–Geography of Health Care PATH 439–Health Applications of GIS (same as GEOG 439) UP 446–Sustainable Planning Seminar (same as GEOG 446) GEOG 455 - Geog of Sub-Saharan Africa GEOG 465 - Sustainability & Transp GEOG 466-Environmental Policy GEOG 467 - Dynm Simul of Nat Res Problems GEOG 468 - Biological Modeling GEOG 469–Spatial Ecosystem Modeling GEOG 471 - Recent Trends in Geog Thought GEOG 473 - Map Compilation and Construct GEOG 476–Applied GIS to Environ Studies GEOG 477 - Introduction to Remote Sensing GEOG 478 - Techniques of Remote Sensing GEOG 479 - Advanced Geog Info Systems GEOG 481-Intl Environ Cooperation GEOG 483 - Urban Geography

≥12 Supporting courses selected with approval of the Department's Undergraduate Advisor

Physical Geography Concentration

Hours	Requirements
25-27	200- to 400-level Geography and Geographic Information Science courses (of which at least 6 hours must be at the 300 or 400 level) selected from the following: GEOG 210 - Contemp Social & Env Problems GEOG 222–Big Rivers of the World ESE 320-Water Planet, Water Crisis (same as GEOG 370) GEOG 371-Spatial Analysis GEOG 373 - Spring Field Course GEOG 381–Environmental Perspectives GEOG 390 - Individual Study GEOG 391 - Honors Individual Study NRES 401–Watershed Hydrology (same as GEOG 401) GEOG 406 - Fluvial Geomorphology GEOG 408–Watershed Analysis GEOG 412-Geospatial Tech & Society ATMS 421–Earth Systems Modeling (same as GEOG 421) GEOG 460–Anal & Interp Aerial Photo GEOG 467 - Dym Simul of Nat Res Problems GEOG 468 - Biological Modeling GEOG 469–Spatial Ecosystem Modeling GEOG 471 - Recent Trends in Geog Thought GEOG 473 - Map Compilation and Construct GEOG 476–Applied GIS to Environ Studies GEOG 477 - Introduction to Remote Sensing GEOG 478 - Techniques of Remote Sensing GEOG 479 - Advanced Geog Info Systems GEOG 480 – Principles of GIS GEOG 481-Intl Environ Cooperation
12-14	All students taking this concentration must take the following courses: MATH 220 - Calculus or MATH 221 - Calculus I Select one of the following: PHYS 101 - College Physics; Mech & Heat or PHYS 211 - Univ Physics; Mechanics Select one of the following: CHEM 102 - General Chemistry I and

CHEM 103 - General Chemistry Lab I
or
CHEM 104 - General Chemistry II and
CHEM 105 - General Chemistry Lab II

For All Concentrations

Twelve hours of 300- and 400-level courses in the major must be taken on this campus.

All foreign language requirements must be satisfied.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office before the end of the fifth semester (60-75 hours). Please see your advisor.

CLEARANCES:

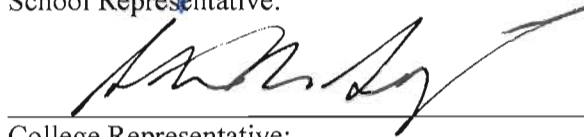
Signatures:


Unit Representative:

2/4/2011
Date:


School Representative:

2/4/11
Date:


College Representative:

2/3/11
Date:

Provost Representative:

Date:

Educational Policy Committee Representative:

Date:

**Senate Educational Policy Committee
Proposal Check Sheet**

PROPOSAL TITLE (Same as on proposal): Change the name of the Undergraduate Major from Geography to Geography and Geographic Information Science and revise portions of major

PROPOSAL TYPE (Please select all that apply below):

A. Program and degree proposals

1. This proposal is for a graduate program or degree

Yes No

2. **Degree** proposal (e.g. B.S.A.E., M.S.C.E.)

New degree — please name the new degree: _____

Revision of an existing degree — please name the existing degree to be revised:

3. **Major** proposal (disciplinary focus, e.g., Mathematics)

New major — please name the new major: _____

Revision of an existing major — please name the existing major to be revised:
BALAS in Geography

4. **Concentration** proposal (e.g. Financial Planning)

New concentration — please name the new concentration: _____

Revision of an existing concentration — please name the existing concentration to be revised: _____

5. **Minor** proposal (e.g. Cinema Studies)

New minor — please name the new minor: _____

Revision of an existing minor — please name the existing minor to be revised: _____

6. Proposal for renaming an existing degree, major, concentration, or minor

degree major concentration minor

Please provide the current name: _____

Please provide the proposed new name: _____

7. Proposal for terminating an existing degree, major, concentration, or minor

Please name the existing degree, major, concentration, or minor: _____

8. Proposal for a multi-institutional degree between Illinois (UIUC) and a foreign institution

Please name the existing Illinois degree or program: _____

Please name the partnering institution: _____

- B. Proposal for renaming existing academic units** (college, school, department, or program)

Please provide the unit's current name: _____

Please provide the unit's proposed new name: _____

- C. Proposal for reorganizing existing units** (colleges, schools, departments, or programs)

- Change in status of an existing and approved unit (e.g. change from a program to department) — please indicate current unit name including status: _____

- Transfer an existing unit

Please provide the current unit's name and home: _____

Please provide the new home for the unit: _____

- Merge two or more existing units (e.g., merge department A with department B)

Please provide the name and college of unit one to be merged: _____

Please provide the name and college of unit two to be merged: _____

- Terminate an existing unit — please provide the current unit's name and status: _____

- D. Other educational policy proposals** (e.g., academic calendar, grading policies, etc.)

Please indicate the nature of the proposal: _____

UNIVERSITY OF ILLINOIS
AT URBANA - CHAMPAIGN

EP.12.03

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820



August 23, 2011

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

Dear Professor Miller:

Enclosed is a copy of a proposal from the College of Liberal Arts and Sciences to change the name of the Bachelor of Arts in Liberal Arts and Sciences in Geography to Geography and Geographic Information Science and revise portions of the major.

This proposal has been approved by the Committee on Courses and Curricula in the College of Liberal Arts & Sciences. It now requires Senate review.

Sincerely,

A handwritten signature in black ink that reads 'Kristi A. Kuntz'.

Kristi A. Kuntz
Assistant Provost

KAK/njh

Enclosures

c: A. Elli
S. Leigh
S. Marshak
B. Rhoads

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Dean

College of Liberal Arts and Sciences
294 Lincoln Hall
702 South Wright Street
Urbana, IL 61801-3631



August 3, 2011

Kritsi Kuntz
Assistant Provost
Swanlund Administration Building
MC-304

Dear Kristi:

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

Change the Name of the Undergraduate Major from Geography to Geography and Geographic Information Science and revise portions of major

Please address all correspondence concerning this proposal to me. This proposal is now ready for review by the Senate Educational Policy Committee for proposed implementation Fall 2012.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. R. Leigh'.

Steven R. Leigh
Associate Dean

enclosure

C: Professor Bruce Rhoads
Professor Stephen Marshak

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

University Library

Office of Dean of Libraries
and University Librarian
230 Main Library, MC-522
1408 West Gregory Drive
Urbana, IL 61801



September 21, 2011

Professor Gay Miller
Department of Pathobiology
College of Veterinary Medicine
2635 Vet Med Basic Sciences Bldg.
M/C 002

Dear Professor Miller:

Thank you for giving the University Library the opportunity to review the Department of Geography's proposal to the Senate Committee on Educational Policy to rename the Department of Geography the Department of Geography and Geographic Information Science, to rename the corresponding BALAS, and to revise the degree requirements for the same (EP.12.02 – 03). Based upon the proposal that we reviewed, the support of the programs as described appears to require little in the way of additional resources beyond those currently provided for library materials in this area.

The University Library does not believe there will be an immediate impact on its operations. However, if there are additional services or materials are required as the program develops, we will be happy to discuss securing the requisite resources with the program sponsors.

Sincerely,



Paula T. Kaufman

Juanita J. and Robert E. Simpson

Dean of Libraries and University Librarian

c: Thomas Teper
Bettina Francis
Jenny Johnson
Jennifer Roether
Scott Walter