



Proposal to the Senate Educational Policy Committee

PROPOSAL TITLE: Revision of the BALAS: Geography and Geographic Information Science, Department of Geography and Geographic Information Science

SPONSOR: Julie Cidell, Associate Professor of Geography and Geographic Information Science, 244-4665, jcidell@illinois.edu

COLLEGE CONTACT: Karen Carney, Associate Dean, College of Liberal Arts and Sciences, kmcarney@illinois.edu, 3-1350

BRIEF DESCRIPTION:

Our goal is to allow students more flexibility in fulfilling requirements for the major. We propose the following changes:

1. Revise the core requirements for the major by a) reducing the number of required core courses from four to three, while adding several 200-level courses to the list of available options to meet this requirement; and b) enabling students to choose either GEOG 371 (Spatial Analysis) or GEOG 379 (Introduction to Geographic Information Systems) instead of requiring GEOG 379.
2. Within the Geographic Information Science concentration, provide students more choice by allowing them to select five courses from a longer list of Geography and GIS courses, and specifically requiring just three courses instead of five, as we do now.
3. Provide more flexibility to all students pursuing the BALAS in Geography and Geographic Information Science by eliminating the supporting coursework requirement in all concentrations. This reduces the minimum required major course work from 42-57 to 35-37 hours, depending on the concentration chosen.

JUSTIFICATION: Currently, as part of their core requirements, majors must complete GEOG 100 or GEOG 103, and two additional Geography courses at the 100-level (chosen from GEOG 101, 104, 105, 106, or 110). However, because many of our majors declare in their sophomore or junior years, we do not think it is in their best interests to have to complete three 100-level courses when they may be capable of more advanced-level coursework. Thus we have added two 200-level courses to the list of options, and reduced the number of entry level courses students must take from three to two. The two-course requirement is important to maintain a proper intellectual balance for our majors between physical and human geography. Also, in light of our new department name, Geography

and Geographic Information Science; increasing interest from students and majors in GIS courses and degree programs; and the growing job opportunities available in GIS across multiple disciplines, we want students to have the option of taking either GEOG 371 or GEOG 379, since we consider spatial analysis along with geographic information systems to fall under the broader umbrella of geographic information science.

The changes in the Geographic Information Science concentration will better meet students' needs by requiring them to complete coursework in computer science (which has been approved by representatives from Computer Science and Informatics) along with courses in physical or human geography to broaden their expertise in both techniques and subject matter. Replacing required courses with more course options allows students to choose a program that better fits their interests and also allows for more flexibility in terms of scheduling classes based on faculty availability.

Our removal of the 12 hours of supporting coursework from all concentrations will give students more flexibility in fulfilling additional coursework outside the major. Students who wish to complete multiple majors or minors will now have more room in their programs to do so.

BUDGETARY AND STAFF IMPLICATIONS:

- a. Additional staff and dollars needed

None.

- b. Internal reallocations (e.g., change in class size, teaching loads, student-faculty ratio, etc.)

None.

- c. Effect on course enrollment in other units and explanations of discussions with representatives of those departments

None. The additional CS requirement for our GIS track will result in no more than ten students a year taking a 100-level course in that department. Should that number increase substantially, the issue can be revisited at a future date. E-mails expressing approval of this change from Computer Science and Informatics are attached.

- d. Impact on the University Library

None.

- e. Impact on computer use, laboratory use, equipment, etc.

None.

DESIRED EFFECTIVE DATE: Fall 2014

Proposed changes highlighted in Green

STATEMENT FOR PROGRAMS OF STUDY CATALOG:

Geography and Geographic Information Science

www.geog.illinois.edu

Head of Department: Sara McLafferty

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

Students in Geography and Geographic Information Science must complete both the core courses in geography 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 of at least 35 hours of Geography and Geographic Information Science courses are required for the major.

General education: Students must complete the [Campus General Education](#) requirements.

Minimum hours required for graduation: 120 hours

Departmental distinction. All students majoring in geography 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 in geography. Students should consult their advisers 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 courses ¹ :
	ATMS 100–Introduction to Meteorology (same as GEOG 100)
	GEOG 103–Earth's Physical Systems
	GEOG 222- Big Rivers of the World

3-4	Select one of the following 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
	GEOG 210- Contemp Social & Env Problems
4	Choose one of the following courses:
	GEOG 371-Spatial Analysis
	GEOG 379–Introduction to GIS
10-12	Required total core hours

1. Students in the Physical Geography Concentration may fulfill the core by completing ATMS 100 and GEOG 103 and one of the five courses: GEOG 101, 104, 105, 106 and 110, with GEOG 371 or 379 not required.

For all concentrations: Students are strongly encouraged to elect GEOG 473. Students are also encouraged to elect one or more of the following techniques courses as part of their coursework: GEOG 280, 371, 373, 390, 473, 476, 477, 478, 479, and 480.

General Geography Concentration

Hours	Requirements
25-27	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

Geographic Information Science Concentration

Hours	Requirements
4	Students must take one of these courses as part of the core requirements and the other as part of the GIS concentration requirements: GEOG 371- Spatial Analysis GEOG 379- GIS I: Intro to GIS Systems
4	GEOG 380- GIS II: Fundamentals of GIS
3	Select one of the following courses: INFO 103- Introduction to Programming CS 105- Intro Computing: Non-Tech Other Computer Science course approved by Department's Advisor
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 473- Map Compilation and Construction GEOG 476- Applied GIS to Environ Studies GEOG 477- Introduction to Remote Sensing GEOG 478- Techniques of Remote Sensing GEOG 479- Advanced GIS GEOG 480 – Principles of GIS GEOG 489–Programming for GIS
6-8	Select two additional Geography and Geographic Information Science courses from the Human Geography Concentration and/or Physical Geography Concentration course lists (see each concentration below).
26	Required total concentration hours

Human 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 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
	ESE320–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 Central & South Africa
	GEOG 465 - Transp and Sustainability
	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

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 - 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 - Princ Geog Information 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
37	Required total concentration hours

For All Concentrations

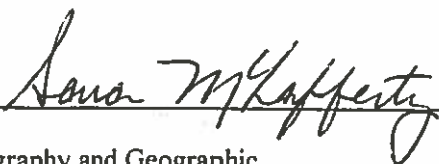
Twelve hours of 300- and 400-level courses in the major must be taken on this campus.

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 adviser.

CLEARANCES:

Signatures:



Geography and Geographic
Information Science Representative

10/30/12
Date:


School of ESE Representative

12/16/13
Date:


LAS College Representative

1/3/14
Date:

Appendix: (Proposed Curriculum Revisions)

For all majors:

Current Requirements:		Revised Requirements:	
Hours	Requirements	Hours	Requirements
3-4	Select one of the following two courses:	3-4	Select one of the following courses ¹ :
	ATMS 100–Introduction to Meteorology (same as GEOG 100)		ATMS 100–Introduction to Meteorology (same as GEOG 100)
	GEOG 103–Earth’s Physical Systems		GEOG 103–Earth’s Physical Systems
			GEOG 222- Big Rivers of the World
6-7	Select two of the following five courses:	3-4	Select one of the following 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		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 GEOG 210- Contemp Social & Env Problems
4	GEOG 379- Introduction to GIS	4	Choose one of the following courses: GEOG 371-Spatial Analysis GEOG 379–Introduction to GIS
13-15	Required total core hours	10-12	Required total core hours

For the GIS Concentration:

Current Requirements:		Revised Requirements:	
Hours	Requirements	Hours	Requirements
3	SOC 280- Intro to Social Statistics (same as GEOG 280)		
4	GEOG 371- Spatial Analysis	4	Students must take one of these courses as part of the core requirements and the other as part of the GIS concentration requirements: GEOG 371- Spatial Analysis GEOG 379- GIS I: Intro to GIS Systems
4	GEOG 473- Map Compilation and	4	GEOG 380- GIS II: Fundamentals of

	Construct		GIS
3	GEOG 477- Introduction to Remote Sensing	3	Select one of the following courses: INFO 103- Introduction to Programming CS 105- Intro Computing: Non-Tech Other Computer Science course approved by Department's Advisor
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 476- Applied GIS to Environ Studies GEOG 478- Techniques of Remote Sensing GEOG 480 – Principles of GIS GEOG 489–Programming for GIS	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 473-Map Compilation & Construction GEOG 476- Applied GIS to Environ Studies GEOG 477-Introduction to Remote Sensing GEOG 478- Techniques of Remote Sensing GEOG 479- Advanced GIS GEOG 480 – Principles of GIS GEOG 489–Programming for GIS
		6-8	Select two additional Geography and Geographic Information Science courses from the Human Geography Concentration and/or Physical Geography Concentration course lists (see each concentration below).
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.		
38	Total minimum hours for concentration	26	Total minimum hours for concentration

Cidell, Julie L

From: Cidell, Julie L
Sent: Thursday, October 18, 2012 7:44 PM
To: Garnett, Guy E
Cc: Pitt, Leonard B
Subject: Re: Geography and GIS curriculum changes

Wonderful. Thank you both, and I'll have the forms out to you in campus mail next week.

--Julie

On Oct 18, 2012, at 3:54 PM, Garnett, Guy E wrote:

> julie
>
> it sounds fine for INFO 103 too.
> I can sign for it.
>
> guy
>
>
> Guy Garnett
> garnett@illinois.edu
> Interim Director Illinois Informatics Institute:
> www.informatics.illinois.edu
> 3014 NCSA (MC-257)
> 1205 W Clark, Urbana IL 61801
>
> Associate Director for Research, eDREAM: www.edream.illinois.edu
> Chair, Illinois Informatics PhD Program:
> www.informatics.illinois.edu/display/infophd/Home
> Creativity and Computing Project Co-lead, IACAT:
> www.iacat.illinois.edu Associate Professor, School of Music University
> of Illinois, Urbana-Champaign
>
>
>
>
> On Oct 18, 2012, at 3:43 PM, "Pitt, Leonard B" <pitt@illinois.edu>
> wrote:
>
>> Judy, no problem getting approval from CS for you to require CS 105
>> as an option for your students - just send me the paperwork to sign.
>> For INFO 103, I'm not sure whether Judy Tolliver should be the
>> designated signer, or whether Guy Garnett should be - so I'll let
>> them duke it out :)
>>
>>

>>
>> On Thu10/18/12 Oct 18,3:00 PM, "Herzog, Stephen M"
>> <smherzog@illinois.edu>
>> wrote:
>>
>>> Hi Julie,
>>>
>>> It doesn't sound like a big impact for CS 105. I'm cc-ing Lenny
>>> Pitt, our Director of Undergraduate Programs to get his input.
>>>
>>> We don't actually control CS 103 - that belongs to the Informatics
>>> institute, but Lenny's had involvement with that course and would
>>> probably know a contact for you at Informatics.
>>>
>>> Let me know if you need anything after that.
>>>
>>> Steve
>>>
>>> Steve Herzog
>>> Coordinator of Undergraduate Programs Department of Computer Science
>>> University of Illinois
>>> 1210 Siebel Center
>>> 201 N. Goodwin Ave.
>>> Urbana, IL 61801
>>>
>>> Phone: (217) 265-6847
>>>
>>>
>>>> -----Original Message-----
>>>> From: Cidell, Julie L
>>>> Sent: Tuesday, October 16, 2012 1:07 PM
>>>> To: Herzog, Stephen M
>>>> Subject: Geography and GIS curriculum changes
>>>>
>>>> Dear Steve,
>>>>
>>>> I'm the Director of Undergraduate Studies in the Department of
>>>> Geography and GIS, and we're planning on instituting a change in
>>>> the GIS track of our major to require students to take a course
>>>> from your department (CS 103, 105, or an approved alternative). Are
>>>> you the person to contact about getting approval from your
>>>> department for this change? The number of additional students in
>>>> your courses would be very small, on the order of ten a year.
>>>>
>>>> Thank you,
>>>> Julie
>>>>
>>>> ---
>>>> Julie Cidell
>>>> Associate Professor
>>>> Director of Undergraduate Studies
>>>> Department of Geography and GIS

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

EP.14.22

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820



January 17, 2014

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 revise the Bachelor of Arts in Liberal Arts and Sciences in Geography and Geographic Information Science.

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

Sincerely,

Kristi A. Kuntz
Assistant Provost

Enclosures

c: K. Carney
J. Cidell
S. Marshak
S. McLafferty

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



RECEIVED
JAN 08 2014
Office of the Provost

January 3, 2014

Kristi Kuntz
Assistant Provost
Swanlund Administration Building
MC-304

Dear Kristi:

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 BALAS: Geography and Geographic Information Science, Department of Geography and Geographic Information Science

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 2014.

Sincerely,

A handwritten signature in black ink that reads "Karen M. Carney".

Karen M. Carney
Associate Dean

enclosure

C: Professor Sara McLafferty
Professor Julie Cidell
Professor Stephen Marshak



☐ New ☐ Revision ☐ Termination

Name of existing Illinois (UIUC) degree: _____

Name of non-Illinois partnering institution: _____

Location of non-Illinois partnering institution:

☐ State of Illinois ☐ US State: _____ ☐ Foreign country: _____

- B. ☐ Proposal to create a new academic unit (college, school, department, program or other academic unit):

Name of proposed new unit: _____

- C. ☐ Proposal to rename an existing academic unit (college, school, department, or other academic unit):

Current name of unit: _____

Proposed new name of unit: _____

- D. ☐ Proposal to reorganize existing units (colleges, schools, departments, or program):

1. ☐ Proposal to change the status of an existing and approved unit (e.g. change from a program to department)

Name of current unit including status: _____

2. ☐ Proposal to transfer an existing unit:

Current unit's name and home: _____

Proposed new home for the unit: _____

3. ☐ Proposal to merge two or more existing units (e.g., merge department A with department B):

Name and college of unit one to be merged: _____

Name and college of unit two to be merged: _____

Proposed name and college of new (merged) unit: _____

4. ☐ Proposal to terminate an existing unit:

Current unit's name and status: _____

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

Nature of the proposal: _____

Revised 10/2012