

University Council Athens, Georgia 30602

March 4, 2004

## UNIVERSITY CURRICULUM COMMITTEE - 2003-2004

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Graduate Student Representative - Mr. Jeffrey K. Lake

Undergraduate Student Representative – Ms. Heather W. Sheppard

#### Dear Colleagues:

Attached is a request from the College of Arts and Sciences to add a proposed course, GEOG 2011-2011L: Introduction to Geographic Information Science to Area D III of the Core Curriculum for the University. This request will be an Agenda Item for the March 26, 2004 UCC meeting.

Sincerely,

William K. Vencill, Chair

University Curriculum Committee

cc: Dr. Arnett C. Mace. Jr.

Dr. Delmer D. Dunn



Department of Geography Telephone (706) 542-2856 Fax (706) 542-2388 http://www.ggy.uga.edu/

Franklin College of Arts and Sciences

Room 204 Geography/Geology Building Athens, Georgia 30602-2502 USA

January 22, 2004

Delmar Dunn 203 Old College CAMPUS

Dear Dr. Dunn:

I am writing to you to request that our recently submitted course GEOG 2011-2011L "Geographic Information Science" be approved as an Area D course once it gets formal approval as a new course. This same course is currently being taught at Gainesville College (there it is identified as GISC 2011) where it is considered an Area D course for the University of Georgia system. Our new course has exactly the same title, and the objectives and outline mimic that of the GISC2011 at Gainesville College.

If you have any questions please do not hesitate to contact me.

Sincerely,

Andy Herod Professor

Chair, Geography Dept Curriculum Committee

## The University of Georgia New Course Application

#### 1. COURSE ID: GEOG 2011-2011L

#### 2. TITLES

Course Title: Introduction to Geographic Information Science

Course Computer Title: INTRO GIS

Non-Credit Lab or Discussion Group Computer Title: INTRO GIS LAB

## 3. COURSE DESCRIPTION (must be 50 words or less)

Introduction to principles and applications of Geographic Information Science (GIS). Examines spatial data retrieval, accuracy, management, visualization, and analysis. Emphasis on interdisciplinary nature of GIS and relevance to society. Involves computer examples and exercises that emphasize real- world problem solving.

#### 4. GRADING SYSTEM

A-F (Traditional)

## 5. CREDIT HOURS AND LECTURE/LAB/DISCUSSION HOURS

| $\mathbf{F}$          | IXED | VARIABLE |
|-----------------------|------|----------|
| Credit Hours          | 3    |          |
| Lecture Hours         | 2    |          |
| Hours in Lab per week | 2    |          |

## 6. NON-TRADITIONAL FORMAT(if lecture/lab hours or lecture/discussion hours are fewer than credit hours, please justify)

#### 7. REPEAT POLICY

Course cannot be repeated for credit

## 8. DUPLICATE CREDIT STATEMENT(do not list quarter course IDs)

The course will not be open to students who have credit in the following courses:

GEOG 4370-4370L

GEOG 6370-6370L

## 9. REQUIRED PREREQUISITES

none

## 10. PREREQUISITE OR COREQUISITE COURSES

none

## 11. COREQUISITE COURSES

none

## 12. PRIMARY DELIVERY MECHANISM (select only one):

Lecture

#### 13. COURSE WILL BE OFFERED

Every Year - Fall Spring

## 14. DESIRED EFFECTIVE SEMESTER AND YEAR

Semester following UCC approval

# 15. ADDITIONAL INFORMATION REQUIRED FOR THE SYLLABUS COURSE OBJECTIVES OR EXPECTED LEARNING OUTCOMES

Expectations of Students:

- 1. Understanding of Geographic Information Science (GIS), including capabilities and limitations;
- 2. Understanding of database structure and management;
- 3. Ability to query and sort multiple data sets to solve specific real-world problems;
- 4. Ability to represent data sets in real space;
- 5. Understanding problems encountered when correlating data from multiple sources;
- 6. Understanding of coordinate systems and map projections;
- 7. Understanding of interdisciplinary GIS applications.

Students will be evaluated by their ability to understand and use GIS by examinations in lecture and evaluation of laboratory projects

#### TOPICAL OUTLINE

TOPICAL OUTLINE

Week

Topics Covered

Introduction to GIS data and systems Spatial Concepts I 3 Spatial Concepts II: Map Projections Digital Mapping: Raster vs. Vector Getting GIS Data Creating GIS Data Manipulation of GIS Data The GIS Database I The GIS Database II 10 Spatial Analysis I 11 Spatial Analysis II 12 The Global Positioning System 13 Projects

#### UNIVERSITY HONOR CODE AND ACADEMIC HONESTY POLICY

UGA Student Honor Code: "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." *A Culture of Honesty*, the University's policy and procedures for handling cases of suspected dishonesty, can be found at <a href="https://www.uga.edu/ovpi">www.uga.edu/ovpi</a>. Every course syllabus should include the instructor's expectations related to academic integrity.

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#### COMMENTS

| Comment By  | Comment Date   | Comment  |
|-------------|--|--|
| David Leigh | The second secon | This class is accepted an an "Area-D" class at Gainesville College, and we would like for it to be an "Area-D" class at UGA as well. |

## ORIGINATOR OF REQUEST

|                   | First Name           | Last Name                         | Email             |
|-------------------|----------------------|-----------------------------------|-------------------|
| Faculty<br>Member | David                | Leigh                             | dleigh@uga.edu    |
|                   | Department:Geography | School/College:Arts &<br>Sciences | Date:December 09, |

## ORIGINATING UNIT APPROVALS

**Department Head:** Vernon Meentemeyer **Date:** January 16, 2004

#### GENERAL EDUCATION CURRICULUM

Academic Affairs Policy Statement No. 14

#### 1. References

- a. Statutes of the University of Georgia, Article IV, Section 2.
- b. Bylaws of the University Council of the University of Georgia, Section IIIB4.

#### 2. Definitions

#### a. General Education

"As used by the University System [of Georgia], general education encompasses the educational experiences of all undergraduates regardless of their majors." (University System of Georgia, Student Learning Outcomes in General Education, 1994, p. iv)

#### b. <u>Basic Core of General Education</u>

A requirement of the Southern Association of Colleges and Schools Commission on Colleges is that each undergraduate degree program include a minimum of 30 semester hours of basic general education courses to "include at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics." In addition, the "institution must demonstrate that its graduates are competent in reading, writing, oral communication, fundamental mathematical skills and the basic use of computers." (Criteria for Accreditation, 1998, Sec. 4.2.2)

#### c. <u>University System Core</u>

In order to assure the transferability of the lower division core courses required by one institution to another University System of Georgia institution, the University System has stipulated the size and content of courses offered as the basic core of general education by its institutions:

- Area A. Essential Skills 9 semester hours.
- Area B. Institutional Options 4 to 5 semester hours.
- Area C. Humanities/Fine Arts 6 semester hours.
- Area D. Science, Mathematics, and Technology 10 to 11 semester hours.
- Area E. Social Sciences 12 semester hours.

#### d. <u>University of Georgia Core Curriculum</u>

The core curriculum provides the foundation for future studies by introducing students to a liberal education and providing instruction which engages both student intellect and curiosity. The University of Georgia's core curriculum should empower the student to participate in debate and advocacy of issues critical to community, state, and nation.

#### (1) Area A. Essential Skills - 9 semester hours

Language courses should contribute to the basic skills of critical reading and clear writing (as indicated by the ability to analyze an argument or a work of literature, and to present, in writing, a logical argument or an analysis of a work of literature.)

Quantitative courses should contribute to the basic skills of analyzing real-world phenomena using at a minimum the computational methods of arithmetic and algebra, as well as data collection and interpretation.

#### (2)Area B. Institutional Options - 4-5 semester hours

#### (3) Area C. Humanities/Fine Arts - 6 semester hours

Candidates should have developed the knowledge, vocabulary, and critical skills necessary to understand and analyze the power of literature and the other arts.

#### Area D. Science, Mathematics, and Technology 10-11 semester hours (4)

D.I. - Four-hour science course with laboratory

Scientific Literacy

The ability to understand the history, processes, and findings of scientific inquiry as well as to appreciate scientific explanations of natural and physical processes. This understanding should include the ability to make informed decisions on contemporary issues that have substantial scientific components.

#### D.II. - Three-hour science course with or without laboratory Scientific Literacy

The ability to understand the history, processes, and findings of scientific inquiry as well as to appreciate scientific explanations of natural and physical processes. This understanding should include the ability to make informed decisions on contemporary issues that have substantial scientific components.

#### D.III. - Three or four-hour mathematics, science, or technology courses Quantitative Literacy

Basic quantitative literacy and skills required to function effectively in contemporary society, including computational skills, the ability to interpret and present data, and the ability to apply quantitative reasoning to the solution of diverse problems in a variety of applied areas.

#### Area E. Social Sciences - 12 semester hours (5)

The ability to understand and to address issues related to the human condition. Knowledge and application competencies in such academic disciplines as psychology, history, sociology, political science, economics, and other areas related to living in a culturally diverse world.

#### 3. **Procedures**

- Matters related to objectives, goals, requirements, and general education are the a. responsibility of the University Council Curriculum Committee. Council consideration of these matters should follow consideration and recommendation by the Committee.
- b. The University Council Curriculum Committee will review proposals of courses from the faculties of the University which they view as appropriate for meeting the general education objectives.
- C. Courses recommended by the Committee for the inclusion in the general education curriculum of the University shall be forwarded through the Provost for approval by the University System of Georgia Council on General Education.