

EFFECTIVE CATALOG YEAR 2010-2011

COLLEGE/SCHOOL/SECTION: College of Arts and Sciences/Public Affairs and Social Research/GEOG

 Course:
 Add:_X_ Delete: ____

 Number:
 GEOG 325X_3451

 Title :
 GIS for the Social Sciences

 (Check all that apply)
 SCH _4_ Description ___ Prerequisite _____

New Course to be used in: Major ____ Minor _X_ Elective _X_

It is proposed that a new four hour class and lab titled GIS for the Social Sciences be added as an elective in the minor in Geography and Urban Studies. The lecture and lab will focus on the mapping of the political, economic, and social features of places and an analysis of those maps utilizing ESRI ArcGIS 10.1 resources. This class will provide a hands-on technology experience suitable for minors in geography and majors in political science, criminal justice, sociology, and other social science disciplines.

The lab portion of the course will require a computer room with 25 computers (depending on the cap) and a multiuser license for ESRI ArcGIS 10.1 for Desktop. The cost for software for a single computer is \$1,500, but a multiuser license can be purchased for an estimated \$4,200.

GEOG 3351 GIS for the Social Sciences 4 SCH

Course Description:

This class examines the application of Geographic Information Systems techniques in social science research. The course will provide social scientists with an important analytical skill set that is becoming increasingly important in many professions. GIS is a very powerful tool and this class will present examples of how Geographic Information Systems can be used in the social sciences to conduct sociospatial research.

The class will focus on the integration of a spatial perspective in social research, analysis and policy development. Students will learn what GIS is and how it can be useful for collecting and analyzing both qualitative and quantitative data. This is also a class that will be useful for the community practitioner who is interested in integrating spatial information into the study of various social problems and issues in an effort to produce viable solutions and policies.

Course Objectives:

- 1. Introduce core concepts and analytical options available to social scientists using GIS.
- 2. Provide practical examples demonstrating how GIS may enhance social science analysis.
- 3. Understand how to assess, integrate and develop data that is compatible with GIS.

- 4. Learn how reality is created and institutionalized through mapping and GIS.
- 5. Introduce fundamental map analysis and GIS concepts and terminology.

6. Address topics of community, environment, and inequality in a spatial context.

Student Learning Outcomes:

1. Demonstrate a familiarity with ArcGIS® 10.1 software through completion of lab exercises.

2. Identify and apply primary and secondary sources of social science data.

3 Demonstrate development of a theoretical framework for sociospatial analysis based on the literature in the field.

4. Illustrate, through laboratory exercise and a class project, how primary and secondary science data can be mapped.

5. Complete a variety of GIS analyses (e.g. buffering, data-joining, layering, modeling, etc.) via computer laboratory exercises.

6. Complete a student-designed sociospatial analysis project.

7. Demonstrate the ability to conceptualize social issues in a spatial manner in the final project.

Approvals:	Signature	Date
Chair Department Curriculum Committee		
Chair Department		
Chair College Curriculum Committee		
Dean		