Syllabus for Florida GIS Applications

Course Number, Title, and Prerequisites

Course Number: GEO4930-03/-04

Course Title: Florida GIS Applications

Credit Hours 3 semester hours

Prerequisites: Computer Cartography or Introductory GIS or equivalents

Instructor and TA Contact

Instructor: Dr. Tingting Zhao (tzhao@fsu.edu)

Lab assistant: Mr. Lee Hartman

Course Description

This course will introduce you to applications of GIS to environmental and social sciences. Topics include GIS applications in resources management, urban planning, disaster management, and demographic analysis, all with the focus on major issues present in Florida (such as tourism, housing development, hurricane and flood hazards, and ageing population). Students will learn a variety of GIS functions to solve real-world problems through lab exercises.

Required Course Materials

Textbooks: Allen, D. W. 2010. GIS Tutorial 2: Spatial Analysis Workbook (2nd Edition, for ArcGIS 10). ESRI Press

Other Required Reading: Electronic materials posted weekly on the Blackboard course website.

Course Requirements

Students are required to have a copy of the textbook, which provides a license of ArcGIS software. You must also have access to a Windows Operating System, since the current ArcGIS doesn't work with Linux or Mac. You will NOT be able to work on lab assignments without the ArcGIS software.

Students are also required to have a copy of Microsoft Office and Adobe Reader.

You must have a FSU email account so as to receive electronic postings of class announcements. You may acquire your email account on-line through FSU Academic Computing and Network Services.

Because of file sizes, students are encouraged to use broadband Internet connections. Phone modems will require long download times.

Course Policies

All course materials will be distributed and collected through the Blackboard course website.

Materials are organized by weeks. **The reading/lab assignment is due by 5 pm on Friday of the same week it is being assigned.** Late submission takes 20% off the full credit per day.

Submit your finished lab report in Word document format and through the assignment tool, the same place where you download the lab data and instruction. Your assignment will NOT be graded through any other submission methods, including Digital Dropbox.

Grading

Your grade will be determined based on combined performance of homework assignments.

Honor Code Statement

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "be honest and truthful and…[to] strive for personal and institutional integrity at Florida State University" (Academic Honor Policy, http://www.fsu.edu/~dof/honorpolicy.htm).

Americans with Disabilities Act

During the first week of class, students needing academic accommodations should: 1) register with and provide documentation to the Student Disability Resource Center; and 2) bring a letter to the instructor from the Student Disability Resource Center, indicating the need for academic accommodations. For more information about services available to FSU students with disabilities, contact

Student Disability Resource Center
97 Woodward Avenue, South
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
sdrc@admin.fsu.edu

Course Calendar

(Subject to change)

Week	Reading Topic	Reading/Lab Assignment
1	GIS and applications	1: GIS (reading)
2	Data and projection	2: Data and projection (reading)
3	Applications in resource management: Recreation	3: Joining the data (lab)
4	Applications in resource management: Wetland I	4: Geodatabase I (lab)
5	Applications in resource management: Wetland II	5: Geodatabase II (lab)
6	Applications in urban planning: Rezoning	6: Buffer analysis (lab)
7	Applications in urban planning: Smart growth	7: Center calculation (lab)
8	Applications in urban planning: Housing location	8: Spatial weighting (lab)
9	Applications in disaster management: Flooding	9: Map algebra (lab)
10	Applications in disaster management: Emergency response I	10: Nearest distance (lab)
11	Applications in disaster management: Emergency response II	11: Network analysis (lab)
12	Application in demographic analysis: Ageing and demographic changes	12: Spatial autocorrelation and cluster analysis (lab)