Fayetteville State University
College of Arts and Social Science
Department of Government and History
Geography 320—Introduction to Geographic Information Systems
FALL 2014

I. Locator Information:
Instructor: Dr. Rakesh Malhotra
Course # and Name: GEOG 320 Intro. to GIS
Semester Credit Hours: 3 hrs
Day and Time Class Meets: 3:45 – 5:00 TR
Office Location: Lyons Science 212-A
Office hours: 10:00 AM – 11 AM; 5 PM – 6 PM (TR)
Email address: rmalhotr@uncfsu.edu

The following statement should appear on the first page of each course syllabus:

FSU Policy on Electronic Mail: Fayetteville State University provides to each student, free of charge, an electronic mail account (username@uncfsu.edu) that is easily accessible via the Internet. The university has established FSU email as the primary mode of correspondence between university officials and enrolled students. Inquiries and requests from students pertaining to academic records, grades, bills, financial aid, and other matters of a confidential nature must be submitted via FSU email. Inquiries or requests from personal email accounts are not assured a response. The university maintains open-use computer laboratories throughout the campus that can be used to access electronic mail. Rules and regulations governing the use of FSU email may be found at http://www.uncfsu.edu/PDFs/EmailPolicyFinal.pdf

II. Course Description: An introductory course covering the theory and application of Geographic Information Systems (GIS) This course includes an overview of general principles of GIS and practical experience in its use. The second half of the course will be devoted to developing a GIS project to apply skills learned in the classroom / laboratory exercises.

III. Disabled Student Services: In accordance with Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act (ACA) of 1990, if you have a disability or think you have a disability to please contact the Center for Personal Development in the Spaulding Building, Room 155 (1st Floor); 910-672-1203.


V. Student Learning Outcomes
Upon completion of this course, students will:
• Understand and apply GIS concepts
• Work with map projections
• Gather and work with GIS data (vector and raster)
• Understand the key components of vector GIS (points, lines, polygons, topology)
• Work independently to apply GIS to their field of interest
• Create maps and conduct basic analyses using GIS data
• Understand the relationship between GIS, remote sensing and GPS technologies
• Work with GIS software to manipulate data layers

VI. Course Requirements and Evaluation Criteria
a. Grading Scale
The university grading scale applies:
   A = 92% - 100% - Exceptionally High
   B = 83% - 92% - Good
   C = 73% - 82% - Satisfactory
   D = 64% - 72% - Marginally Passing
   F = 63% or less - Failing

b. Attendance Requirements:
   Students are expected to attend the classes punctually. In Case You (students) Are Late or Absent:
   i. Official document is required for your absence excuse.
   ii. 15 minutes late to class and leaving class 15 minutes earlier will be considered to be absent unless you get prior approval by the instructor.
iii. It is your responsibility to withdraw the class according to the deadline published in the catalog. **You may get “FN” grade (FN = FAILURE DUE TO NON-ATTENDANCE) without “WN” submission;**


v. NEW TYPE OF GRADE: INTERIM GRADES – (New name for “midterm grade,” with additional purposes). Interim grades will be assigned from the first week of the semester until the deadline for class withdrawals. Interim grades are used for informational and warning purposes only; they are not part of your permanent transcript and have no effect on your GPA. Instructors may assign interim grade of F to warn students of poor academic performance or they may assign “X” (NO SHOW) or “EA” (EXCESSIVE ABSENCES) grades. After midterm, faculty will assign all students an interim grade of A – F to inform students of their academic status as of midterm.

vi. Children are not permitted in the classroom. Guests must have prior approval by the instructor.

vii. It is your responsibility to get the course notes, handouts, and assignments should you miss class or be late;

**c. Graded Assignments and Value of Each Assignment.** Students will be evaluated (graded) as indicated below:

*Attendance/Participation/Quizzes/Assignments: 30%*

Major Assignment/Class Project: 35%

Exam 35% (Chapter Exams)

Final Examination: 15% (Included in Exams)

**There is no “I” (incomplete) grade for this course.**

**GRADING ASSIGNMENTS ARE SUBJECT TO CHANGE**

d. Policy on Missed or Late Assignments

Students are expected to take or submit assignments/tests on the date specified on the instructor’s request. The instructor reserves the right to deduct points for late assignment or not to accept late work. There is **NO MAKEUP for midterm and final exam.**

e. Other

**Cell Phone and Electronic Entertainment Devices** (Read carefully): NO LIVE CELL PHONES are permitted in the classroom (except with prior permission of the instructor). Likewise, no electronic game, CD player or other amusement or entertainment devices are permitted in the classroom. Any student coming to class with a live phone or entertainment devices WILL BE asked to leave the class promptly. We want the learning process to be carried out with as little interruptions and distractions as possible.

**No Grade Change for the Class:** unless the grade was submitted to university in error from the instructor. However, you have the right to appeal your grade to university:

http://www.uncsfu.edu/pltet/FINALfinalpartI1104.pdf (Page 53: Grade Appeal)

**Grade Change and Appeal:** (Read carefully): Please read the grade change policy from FSU:

http://www.uncsfu.edu/pltet/FINALfinalpartI1104.pdf (Page 53: Changing a Grade)

**Plagiarism/Cheating:** Students are expected to uphold the school’s standard of conduct relating to academic honesty. Students assume full responsibility for the content and integrity shall be that a student’s submitted work, examinations, reports, and projects must be that of the student’s own work. Students shall be guilty of violating the honor code if they: (1) Represent the work of others as their own; (2) Use or obtain unauthorized assistance in any academic work; (3). Modify, without instructor approval, an examination, paper, record, or report for the purpose of obtaining additional credit; (4). Give unauthorized assistance to other students; (5). Misrepresent the content of submitted work. The penalty for violating the honor code is severe. Any student violating the honor code is subject to receive a failing grade for the course and will be reported to the Office of Student Affairs. If a student is unclear about whether a particular situation may constitute an honor code violation, the student should meet with the instructor to discuss the situation.

**VII. Course Outline:**

- Week 1 – 2: GIS Basics, Online courses: ArcGIS / 15 minute map
- Week 3 – 4: GIS software (open sources, proprietary), GIS Data (obtaining and using)
- Week 5 – 6: GIS data types (raster / vector) and GIS data storage (geodatabases, shapefiles)
- Week 7 – 8: Working with Spatial Data, Tabular Data
- Week 9 – 10: Editing GIS data, Server based data storage
- Week 11 – 12: Georeferencing, Geocoding, Geoprocessing
- Week 13: Model Builder
- Week 14 – 16: GIS Project

**Note:** **THE ABOVE ORDER MAY CHANGE UPON NOTIFICATION OF THE INSTRUCTOR**

**VIII. Teaching Strategies:** The principal teaching strategies will consist of working with online courses (http://campus.esri.com) that will be combined with lectures, discussions and literature review. Students will be required to complete regular assignments and laboratory exercises to support materials covered in class. The course will emphasize student understanding of key concepts, theories, and methods applied to GIS. Invited seminars
presented by working professionals will support conceptual learning. As a graduate student is it critical to be able to think and communicate both orally and in writing. Therefore, course is structure allow student to develop the skills to read, analyze, and discuss scientific literature based on a class project.

**IX. Bibliography:** The instructor may assign additional readings beyond the textbook during the semester. These items may be on reserve in the library and/or the appropriate citation to obtain the readings will be given to students.