



GEOG 2113, Introduction to GIS Fall 2018

Instructor: Bakama BakamaNume

Section # and CRN: PO1, 10939

Office Location: WOOL 302

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Office Hours: MWF 9-9:50, 11-11:50, 2-3:30

Mode of Instruction: Face to Face

Course Location: WOOL 202

Class Days & Times MWF 10-10:50

Catalog Description: An introduction to the fundamentals of Geographic Information System (GIS) and the science and art of making maps. The course introduces students to the basic principles of using GIS as tool for managing and analyzing spatial data.

Prerequisites:

Co-requisites: None

Required Texts: Tim Ormsby, Eileen Napoleon, Robert Burke, Laura Feaster, and Carolyn Groessl, Laurel Bowden (2010) *Getting To Know ArcGIS*. Esri Press. The book comes with a free demo version of ArcGIS 10, and a sequence of GIS lab exercises.

Recommended Texts: Chainey, S. and Ratcliffe, J. (2006) *GIS and Crime Mapping*, Chichester, West Sussex, England: John Willey

Student Learning Outcomes:
Course Outcomes/Objectives

Upon successful completion of this course, students will be able to:	Program Learning Outcome # Alignment	Core Curriculum Outcome Alignment
Understand the basic components and principles of GIS	N/A	Social Responsibility and Communication
Gain hands-on experience in using microcomputers for map production and design	N/A	Critical thinking and empirical quantitative skills
Appreciate the importance of mapping in science and society	N/A	Social Responsibility

Major Course Requirements

Method of Determining Final Course Grade

Course Grade Requirement	Value	Total
1) Weekly Assignments/Exercises	15 points each	130
2) Map Poster	90 points each	90
3) 2 Quizzes	30 points each	60
4) Test	35 points	35
5) Final Exam	55	55
6) Class Participation	30	30

Total: 400

Grading Criteria and Conversion:

- A = 400 – 351 points
- B = 350 – 301 points
- C = 300 – 251 points
- D = 250 – 200 points
- F = 199 points

Detailed Description of Major Assignments:

Assignment Title or Grade Requirement	Description
150 points	Chapter Exercises for learning the GIS software – described in the text book
90 points	Map Poster Project on individual topics to demonstrate student GIS competency

Course Procedures or Additional Instructor Policies

Taskstream

Taskstream is a tool that Prairie View A&M University uses for assessment purposes. At least one of your assignments is **REQUIRED** to be submitted as an "artifact," an item of coursework that serves as evidence that course objectives are met. More information will be provided during the semester, but for general information, you can visit Taskstream via the link in eCourses.

You must follow the exercise steps outlined in the text and hand in the work you are required to hand in. The map posters will be done on large paper and you are advised to use a large printer. Examples of the finished works will be shown in class.

Week One

Topic Description

Readings
Assignment

Introduction to GIS

ArcGIS Desktop
Display Map Data
Chapters 1 and 2
Computer lab familiarity

Week Two

Topic Description

Readings
Assignment

Exploring ArcMap and ArcCatalog
Chapters 3 and 4
Exercises 3a, 3b, 3c and 4a, 4b, and 4c

Week Three	
Topic Description	Symbolization features and raster Classifying features and raster
Readings	Chapters 5 and 6
Assignment	Exercises 5a-5d Exercises 6a- 6d
Week Four	
Topic Description	Labeling Features Querying Data Chapters 7 and 8 Quiz 1 Exercises 7a -7d Exercises 8a-8c
Readings	Chapters 7 and 8
Assignment	Quiz 1 Exercises 7a -7d Exercises 8a-8c
Week Five	
Topic Description	Joining and relating tables Selecting features by location Preparing data for analysis Chapters, 10 and 11 Exercises 9a-9b, and 10a-10b, and 11a-11d Test 1
Readings	Chapters, 10 and 11
Assignment	Exercises 9a-9b, and 10a-10b, and 11a-11d Test 1
Week Six	
Topic Description	Analyzing Spatial Data Projecting data in ArcMap Building geodatabases Chapters 12, 13, and 14 12a-12c, 13a-13b, and 14a-14c
Readings	Chapters 12, 13, and 14
Assignment	12a-12c, 13a-13b, and 14a-14c
Week Seven	
Topic Description	Creating features Editing features and attributes Chapters 15 and 16 Exercises 15a and 15b, 16a- 16c
Readings	Chapters 15 and 16
Assignment	Exercises 15a and 15b, 16a- 16c
Week Eight	
Topic Description	Geocoding addresses Making Maps from templates Chapters 17 and 18 Exercises 17a-17c and 18a-18c Quiz 2/Assignment
Readings	Chapters 17 and 18
Assignment	Exercises 17a-17c and 18a-18c Quiz 2/Assignment
Week Nine	
Topic Description	Making Maps for presentation Creating Models Chapters 19 and 20 Exercises 19a-19d, and 20a-20c
Readings	Chapters 19 and 20
Assignment	Exercises 19a-19d, and 20a-20c

Week Ten to Thirteen

Topic Description	Work on term projects and poster
Readings	Research
Assignment	Projects

Week Fourteen to Sixteen

Topic Description	Presentations
Readings	Presentations
Assignment	Presentations

Week Fifteen **End of Course Examination (See <http://www.pvamu.edu/registar>)**

Student Support and Success

John B. Coleman Library

The library and its partners have as their mission to provide resources and instructional material in support of the evolving curriculum, as a partner in Prairie View A&M University's mission of teaching, research, and service and to support the University's core values of access and quality, diversity, leadership, relevance, and social responsibility through emphasis on ten key areas of service. It maintains library collections and access both on campus, online, and through local agreements to further the educational goals of students and faculty. <https://www.pvamu.edu/library/> Phone: 936-261-1500

The Learning Curve (Center for Academic Support)

The Learning Curve offers Tutoring via peer tutoring. The services include workshops (i.e., Save My Semester, Recalculate Your Route), seminars (i.e., Tools You Can Use: TI-84), group review sessions (i.e., College Algebra Topic Reviews, GRE Preparation), group study opportunities (i.e., TSIA, HESI, Study Break, Exam Cram), and test-taking strategies (How to take Notes, Study Buddy, 5 Day Study Guide). The Learning Curve is a nationally certified tutoring program through the National Tutoring Association. The peer tutors are trained and certified by the coordinator each semester. Location: J.B. Coleman Library Rm. 207F. Phone: 936-261-1561

The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS)

The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS) is designed to help Prairie View students in their second year and beyond navigate towards graduation by providing the following services: Academic Advisement, Targeted Tutorials for Personalized Learning, Campus-Wide Referrals, and Academic & Social Workshops. Location: J.B. Coleman Library Rm. 306. Phone: 936-261-1040

Writing Center

The Writing Center provides student consultants on all aspects of the writing process and a variety of writing assignments. Writing Center consultations assist students in such areas as prewriting, brainstorming, audience awareness, organization, research, and citation. Students taking on-line courses or courses at the Northwest Houston Center or College of Nursing may consult remotely or by email. Location: Hilliard Hall Rm. 121. Phone: 936-261-3724.

Student Counseling Services

The Student Counseling Services unit offers a range of services and programs to assist students in maximizing their potential for success: short-term individual, couples, and group counseling, as well as crisis intervention, outreach, consultation, and referral services. The staff is licensed by the State of Texas and provides assistance to students who are dealing with academic skills concerns, situational crises, adjustment problems, and emotional difficulties. Information shared with the staff is treated confidentially and in accordance with Texas State Law. Location: Owens-Franklin Health Center Rm. 226. Phone: 936-261-3564

Testing

The Department of Testing administers College Board CLEP examinations, the HESI A2 for pre-nursing majors, LSAT for law school applicants and MPRE for second-year law students, the Experiential Learning Portfolio option,

the Texas Success Initiative (TSI) Assessment, which determines college readiness in the state, and exam proctoring, among other service such as SAT and ACT for high school students. Location: Delco Rm. 141. Phone: 936-261-4286

Office of Diagnostic Testing and Disability Services

As a federally-mandated educational support unit, the Office of Disability Services serves as the repository for confidential disability files for faculty, staff, and students. For persons with a disability, the Office develops individualized ADA letters of request for accommodations. Other services include: learning style inventories, awareness workshops, accessibility pathways, webinars, computer laboratory with adapted hard and software, adapted furniture, proctoring of non-standardized test administrations, ASL interpreters, ALDs, digital recorders, livescribe, Kurtzweil, and a comprehensive referral network across campus and the broader community. Location: Evans Hall Rm. 317. Phone: 936-261-3585

Veteran Affairs

Veterans Services works with student veterans, current military and military dependents to support their transition to the college environment and continued persistence to graduation. The Office coordinates and certifies benefits for both the G.I. Bill and the Texas Hazlewood Act. Location: Evans Hall Rm. 323. Phone: 936-261-3563

Office for Student Engagement

The Office for Student Engagement delivers comprehensive programs and services designed to meet the co-curricular needs of students. The Office implements inclusive and accessible programs and services that enhance student development through exposure to and participation in diverse and relevant social, cultural, intellectual, recreational, community service, leadership development and campus governance. Location: Memorial Student Center Rm. 221. Phone: 936-261-1340

Career Services

Career Services supports students through professional development, career readiness, and placement and employment assistance. The Office provides one-on-one career coaching, interview preparation, resume and letter writing, and career exploration workshops and seminars. Services are provided for students at the Northwest Houston Center and College of Nursing in the Medical Center twice a month or on a requested basis. Distance Learning students are encouraged to visit the Career Services website for information regarding services provided. Location: Evans Hall Rm. 217. Phone: 936-261-3570

University Rules and Procedures

Disability Statement (Also See Student Handbook):

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Evans Hall, Room 317, or call 936-261-3585/3.

Academic Misconduct (See Student Handbook):

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of Academic Dishonesty:

1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. Fabrication: use of invented information or falsified research.

4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one's own work also constitutes plagiarism.

Nonacademic Misconduct (See Student Handbook)

The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual Misconduct (See Student Handbook):

Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Title IX Statement

Prairie View A&M University (PVAMU) is committed to supporting students and complying with the Texas A&M University System non-discrimination policy. It seeks to establish an environment that is free of bias, discrimination, and harassment. If you experience an incident of sex- or gender-based discrimination, including sexual harassment, sexual assault or attempted sexual assault, we encourage you to report it. While you may talk to a faculty member about an incident of misconduct, the faculty member must report the basic facts of your experience to Ms. Alexia Taylor, PVAMU's Title IX Coordinator. If you would like to speak with someone who may be able to afford you privacy or confidentiality, there are individuals who can meet with you. The Title IX Coordinator is designated to handle inquiries regarding non-discrimination policies and can assist you with understanding your options and connect you with on- and off-campus resources. The Title IX Coordinator can be reached by phone at 936-261-2123 or in Suite 013 in the A.I. Thomas Administration Building.

Class Attendance Policy (See Catalog for Full Attendance Policy)

Prairie View A&M University requires regular class attendance. Attending all classes supports full academic development of each learner whether classes are taught with the instructor physically present or via distance learning technologies such as interactive video and/or internet.

Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class during regular semesters and summer terms. Each faculty member will include the University's attendance policy in each course syllabus.

Student Academic Appeals Process

Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

TECHNICAL CONSIDERATIONS

Minimum Recommended Hardware and Software:

- Intel PC or Laptop with Windows 7; Mac with OS X; Smartphone or iPad/Tablet with Wi-Fi
- High speed Internet access
- **8 GB Memory**
- Hard drive with 320 GB storage space
- 15" monitor, 800x600, color or 16 bit
- Sound card w/speakers
- Microphone and recording software
- Keyboard & mouse
- Most current version of Google Chrome, Safari, Internet Explorer or Firefox

Note: Be sure to enable Java & pop-ups in the Web browser preferences

Participants should have a basic proficiency of the following computer skills:

- Sending and receiving email
- A working knowledge of the Internet
- Proficiency in Microsoft Word (or a program convertible to Word)
- Proficiency in the Acrobat PDF Reader
- Basic knowledge of Windows or Mac O.S.

Netiquette (online etiquette):

Students are expected to participate in all discussions and virtual classroom chats as directed. Students are to be respectful and courteous to others on discussions boards. Foul or abusive language will not be tolerated.

Technical Support:

Students should go to <https://mypassword.pvamu.edu/> if they have password issues. The page will provide instructions for resetting passwords and contact information if login issues persist. For other technical questions regarding eCourses, call the Office of Distance Learning at 936-261-3283

Communication Expectations and Standards:

Emails or discussion postings will receive a response from the instructor, usually in less than 48 hours. Urgent emails should be marked as such. Check regularly for responses.

Discussion Requirement:

Online courses often require minimal to no face-to-face meetings. However, conversations about the readings, lectures, materials, and other aspects of the course can take place in a seminar fashion. This will be accomplished by the use of the discussion board. The exact use of discussion will be determined by the instructor.

It is strongly suggested that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it/they should be copied and pasted to the discussion board.

Map Poster Project

You are required to design maps and produce a map poster on any topic of your choice. The maps in the poster should describe a research problem. The maps will show a distribution of geographic phenomena in relation to other factors. Such a problem could be crime rates and factors explaining the spatial variation in crime rates. You must have a minimum of four maps. In other words, you must use at least four explaining (independent) variables.

The study area will depend on availability of shape file (GIS data) for the region, place, or city.

Steps

1. Make a decision of what you want to research. This is your research problem. This step is similar to one you make before writing a term paper.
2. Carefully decide on what factors can be used to explain the spatial variation of the problem.
3. Write a short description of what you expect to find. See example from last year's posters.
4. Get the data for the variables.

5. Design several maps based on the data you collected
6. Describe in no more than two paragraphs what you have found. (This should be your abstract.)
7. Put your work together in poster form.

You must use some of the spatial analysis tools in the ArcGIS.

DUE DATE November 27, 2018