

Geography 4360 Cartography and Remote Sensing
MW 2:30 to 3:55 PM
CAS 106
Fall 2023

Instructor: Dr. E. Cory Sills, Associate Professor
Office: CAS 142

Office hours: MTW 11:10 am to 12:10 pm

In Person, By Appointment or

Via Zoom link: <https://uttyler.zoom.us/j/88447286640?pwd=NFhhRjlHWWhpEWnB3cmNUMFpOdnFhQT09>

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Communications: I encourage you to visit office hours or directly after class via zoom. This is a good opportunity for you to look over your exams, ask questions, or seek clarification. If you cannot attend my office hours, you may set-up an alternative time. I will respond to your emails within 24 hours on weekdays and 48 hours on weekends. **In your email, include your first and last name and the course title Geography 4360, Cartography, or Geog 4360.**

Required texts:

1. Making Maps: A Visual Guide to Map Design for GIS, 3rd edition, by John Krygier and Denis Wood. You may access this book for free through the UT Tyler library <https://libguides.uttyler.edu/c.php?g=1066647&p=8075197>
2. Additional readings will be posted on Canvas.

Catalogue description: Map interpretations and construction and applications of geographic information systems and remote sensing methods.

Course objectives: This course will introduce you to the fundamentals of cartography (map design) and analysis. Maps are powerful tools for conveying information, presenting complex data, evaluating spatial relations, and presenting geographical information in effective ways.

Learning Objectives:

1. Understand and apply of fundamental cartographic concepts.
2. Evaluate and critique mapping data and its application.
3. Examine the role of cartography in understanding space and place.
4. Classify data by using the appropriate principles of map design.
5. Design and develop a map project using GIS.

Course format: This is a face to face, in person class, with materials posted to the online learning management platform Canvas. The class lectures are supplemented by the required text, current events, videos, demonstrations, discussions, guest lectures, and maps. Lectures and readings will not necessarily cover the same ground. Indeed, they are intended to supplement each other rather than to completely overlap. I strongly recommend that you attend every lecture and carefully study the assigned readings. I encourage relevant questions and comments during the lecture and through email. A question you have other students might also have, and thoughtful remarks will make the course more interesting for everyone, including myself.

Class Etiquette: I expect everyone in the classroom to be **respectful** of each other and treat everyone with dignity – each of us brings different opinions and experiences some of these might be dissimilar to your own. I expect comments to be positive and objective and not judgmental and rude.

Grading: The course grade will be based four map tutorials, two exams (mid-term and final), attendance and participation, and a map report that will consist of three parts: topic assignment, report, and presentation.

Map Tutorials: There will be four map tutorials to help you learn a GIS software program. These will be started and completed in class. You may work alone, in pairs, or groups of three. The tutorials will be due the week after they are posted. See the schedule and Canvas for due dates.

Exams: The exams will cover material from class including slides, discussions, presentations, guest lectures, readings, and videos. The midterm will cover material from the first part of the course; the final will cover material from the second part of the course including the presentations. Exams could include multiple choice, true/false, and short answer questions dealing with major issues raised in the course.

Mapping Project: Throughout the semester, you will work on and complete a mapping project. You will develop a topic for a thematic map, find data for the thematic map, design the thematic map, submit a written report, and present your map and report to the class. You will use a GIS software program to create your map. GIS can be used to combine different layers of data (variables) to produce a map. You can combine some or all of the map layers (variables) to produce a map. By week 8 you will develop a question or thesis that you want to explore, analyze, and/or explain using some type of map, broadly defined. The map will be produced, and a report will be written to discuss the decisions you made, the methods you used, and what you have learned from the outcome. More details and expectations for the report will be posted on Canvas.

Topic: Topics for your map project will be due the 8th week of the semester. You will submit your topic in paragraph format on Canvas. Topics should be more specific than general; for example, the topic of ‘sports’ is too general, whereas ‘professional sports stadiums’ is a better topic, and ‘economics of professional sports stadiums’ is likely even better. Brainstorm ideas by asking questions that you want to know the answers to. Details about what to include in your topic submission will be posted on Canvas.

Map Report: You will submit a map report due November 27 by the beginning of class. The report will detail your experience creating the map including your topic/thesis, data acquisition, methods, results, and what you learned from the outcome. Details about what to include and the format of the map report will be posted on Canvas.

Presentation: Presentations will begin the last week of class. I will pass out a presentation sign-up sheet later in the semester. Presentations should be between 5 and 10 minutes in length. You will need to present and describe your rationale and cartographic choices. Details about what to include and the format of the presentation will be posted on Canvas.

Class Attendance and Participation: You are expected to come prepared to class by reading beforehand and participating in class activities and discussions.

Make-up Policy: Make-up tests will be given with a legitimate reason and in rare circumstances. Students should contact the instructor **prior** to the exam and not after if they will miss the exam. Make-up exams will not be given except when there are exceptional circumstances (be prepared to provide documentation of your circumstance, such as a doctor’s note, police report, University-excused absence, *et cetera*).

Course weights:

- Map Tutorials (4) (4% each): 16%
- Mid-term: 20%
- Final: 20%
- Project Topic: 7%
- Map Reports: 25%
- Presentation: 7%
- Participation and Attendance: 5%

Total: 100%

- Grading scale: A 90-100% B 80-89.99% C 70-79.99%
 D 60-69.99% F 0-59.99%

Cell Phones/Laptops: Turn off your ringer and do not use your cell phone during class – this includes text messaging. If

you are expecting an important call, please put your phone on vibrate and sit close to the door. This action will help minimize any disturbance to the class. **I will not be recording this class. Any video, photographic or audio recordings of the class must be approved by me.**

University Policies and Information

Withdrawing from Class: Students are allowed to [withdraw](#) (drop) from a course through the University's [Withdrawal Portal](#). Texas law prohibits students who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. The number includes courses dropped at other 2-year or 4-year Texas public colleges and universities. Make sure to consider the impact withdrawing from any course has on your academic progress as well as the financial implications. We encourage you to consult your advisor(s) and financial aid for additional guidance. CAUTION #1: Withdrawing before census day does not mean students receive a full refund. Please see the [Tuition and Fee Refund Schedule](#). CAUTION #2: All international students must check with the [Office of International Programs](#) before withdrawing. All international students are required to enroll full-time for fall and spring terms.

Final Exam Policy: Final examinations are administered as scheduled. If unusual circumstances require that special arrangements be made for an individual student or class, the dean of the appropriate college, after consultation with the faculty member involved, may authorize an exception to the schedule. Faculty members are required to maintain student final examination papers for a minimum of three months following the examination date.

Incomplete Grade Policy: If a student, because of extenuating circumstances, is unable to complete course requirements by the end of the semester, then the instructor may recommend an Incomplete (I) for the course. The "I" may be assigned in lieu of a grade only when all of the following conditions are met: (a) the student has been making satisfactory progress in the course; (b) the student is unable to complete all course work or final exam due to unusual circumstances that are beyond personal control and are acceptable to the instructor; and (c) the student presents these reasons prior to the time that the final grade roster is due. The semester credit hours for an Incomplete will not be used to calculate the grade point average for a student. The student and the instructor must submit an Incomplete Form detailing the work required and the time by which the work must be completed to their respective department chair or college dean for approval. The time limit established must not exceed one year. Should the student fail to complete the work for the course within the time limit, the instructor may assign zeros to the unfinished work, compute the course average for the student, and assign the appropriate grade. If a grade has not been assigned within one year, then the Incomplete will be changed to an F or to NC, if the course was initially taken under the CR/NC grading basis.

Grade Appeal Policy: UT Tyler's Grade Appeal policy requires the completion of a Grade Appeal form for this action to take place. The grade appeal begins with the instructor of the course. If a student does not agree with the decision of the instructor, the student may then move the appeal to the department chair/school director for that course. If the student is still dissatisfied with the decision of the chair/director, the appeal moves to the Dean of the College offering that course, who has the final decision. Grade appeals must be initiated within sixty (60) days from the date of receiving the final course grade. The Grade Appeal form is found on the [Registrar's Form Library](#).

Disability/Accessibility Services: In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA), The University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If a student has a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or a history of modifications or accommodations in a previous educational environment, the student is encouraged to visit <https://hood.accessiblelearning.com/UTTyler> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact the student when the application has been submitted and schedule an appointment with the Assistant Director Student Accessibility and Resources/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at <http://www.uttyler.edu/disabilityservices>, the SAR office located in the University Center, # 3150 or call 903.566.7079."

Military Affiliated Students: UT Tyler honors the service and sacrifices of our military-affiliated students. If you are a student who is a veteran, on active duty, in the reserves or National Guard, or a military spouse or dependent, please stay in contact with your faculty member if any aspect of your present or prior service or family situation makes it difficult for you to fulfill the requirements of a course or creates disruption in your academic progress. It is important to make your faculty member aware of any complications as far in advance as possible. Your faculty member is willing to work with you and, if needed, put you in contact with university staff who are trained to assist you. Campus resources for military-

affiliated students are in the [Military and Veterans Success Center \(MVSC\)](#). The MVSC can be reached at MVSC@uttyler.edu or via phone at 903.565.5972.

Academic Honesty and Academic Misconduct: The UT Tyler community comes together to pledge that “Honor and integrity will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.” Therefore, we enforce the [Student Conduct and Discipline policy](#) in the Student Manual Of Operating Procedures (Section 8).

FERPA: UT Tyler follows the Family Educational Rights and Privacy Act (FERPA) as noted in [University Policy 5.2.3](#). The course instructor will follow all requirements in protecting your confidential information.

Recording of Class Sessions: Class sessions may be recorded by the instructor for use by students enrolled in the course. Recordings that contain personally identifiable information or other information subject to FERPA shall not be shared with individuals not enrolled in the course unless appropriate consent is obtained from all relevant students. Class recordings are reserved only for the use of students enrolled in the course and only for educational purposes. Course recordings should not be shared outside of the course in any form without express permission.

Absence for Official University Events or Activities: All courses follow the practices related to approved absences as noted by the Student Manual of Operating Procedures ([Sec. 1 -501](#)).

Absence for Religious Holidays: Students who anticipate being absent from class due to a religious holiday are requested to inform the instructor by the second class meeting of the semester.

Campus Carry: We respect the right and privacy of students who are duly licensed to carry concealed weapons in all courses. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index.php>.

Incidence of Scholastic Dishonesty: You will receive an automatic zero on the assignment. All cases of plagiarism or cheating will result in an automatic zero for the assignment!

What we cover in the lecture on a day-to-day basis may differ from the attached schedule. I will inform the class via email if topics change.

Course Schedule

Week	Day	Date	Tentative Lectures and Activities	Tentative Readings
1	M	21-Aug	Mapping the Course/Why Maps Matter?	Syllabus/Introduction of Textbook pages 13-17
1	W	23-Aug	History of Cartography and Map Design	
2	M	28-Aug	No in person class: Your professor has jury duty. Instead, see Canvas for video to watch and come prepared to discuss on Wednesday	Chapter 1: How to Make a Map
2	W	30-Aug	Purpose and Preparation of Maps Discuss the readings Census Date Friday Sept. 1	Chapter 2: What's your Map for? Read: Songlines and Navigation pdf on Canvas
3	M	4-Sept	NO CLASS Labor Day	
3	W	6-Sept	Data Management	Chapter 3: Mappable Data
4	M	11-Sept	Thematic Mapping	Chapter 4: Map Making Tools
4	W	13-Sept	Exploring a GIS program	
5	M	18-Sept	Geodesy, Map Projections, and Coordinate Systems	Chapter 5: Geographic Framework
5	W	20-Sept	Tutorial 1 (Due on Canvas by the beginning of class)	
6	M	25-Sept	What to include on a map and Principles of Map Design	Chapter 6: The Big Picture of Map Design
6	W	27-Sept	Tutorial 1 due on Canvas by the beginning of class Wrap up lectures Review for Midterm	

7	M	2-Oct	Midterm Exam	
7	W	4-Oct	Tutorial 2 (Due October 11 on Canvas by the beginning of class)	Chapter 7: The Inner Workings of Map Design
8	M	9-Oct	Map Classifications and Generalizations Map Project Topic Due on Canvas by the beginning class	Chapter 8: Map Generalization and Classification
8	W	11-Oct	Lecture topic TBA Tutorial 2 due on Canvas by the beginning of class	
9	M	16-Oct	Symbols and Symbology	Chapter 9: Map Symbolism
9	W	18-Oct	Tutorial 3 (Due October 25 on Canvas by the beginning of class)	
10	M	23-Oct	Lecture topic TBA	Chapter 10: Map Symbol Abstraction
10	W	25-Oct	Tutorial 3 due on Canvas by the beginning of class	
11	M	30-Oct	Adding Type, Labels, Picking Colors Last day to withdraw	Chapter 11: Words of Maps Chapter 12: Color on Maps
11	W	1-Nov	Tutorial 4 (Due November 8 on Canvas by the beginning of class)	
12	M	6-Nov	Lie with Maps	Read Mapping, Society and Technology Chapter 7 (link on Canvas) And Lying with Maps by Mark Monmonier (pdf on Canvas)
12	W	8-Nov	Lecture topic TBA Tutorial 4 due on Canvas by the beginning of class	
13	M	13-Nov	Content wrap-up	
13	W	15-Nov	No class: finish map project	
Thanksgiving Break November 20 to November 24				
14	M	27-Nov	Map Report Due on Canvas by the beginning of class Presentations of Final Maps	
14	W	29-Nov	Presentations of Final Maps	
15	M	4-Dec	No Class: Study Day	
15	W	6-Dec	Final Exam: TBA	