

**GEO 4411/5417**  
**Advanced Cartographic Design**  
**Spring 2023**

**COURSE INSTRUCTOR**

E-mail: [REDACTED]

Office Hours: Tuesday and Thursday, 2:30 pm—3:30 pm, and by appointment, [REDACTED]

**LAB INSTRUCTOR**

Heather Swienton, ELA 393

E-mail: has41@txstate.edu

Office Hours: Tuesday, 12:30-2:30 p.m., and by appointment, ELA 393

**LECTURES** Thursday, 5:00 p.m. – 6:50 p.m., ELA 315

**LABS** Thursday 7:00 – 9:50 p.m., ELA 120

**TEXTBOOKS**

*Required:* “Adobe InDesign CC Classroom in a Book” by Kelly Kordes Anton, ISBN: 978-0134310008.

*Recommended:* “Adobe Illustrator Creative Cloud Revealed” (1st ed.) by Chris Botello, ISBN: 978-1305262614 (available in bookstore, same as used in GEO 3411), or equivalent. Additional reading material will be made available at the library, on CANVAS, or handed out in class.

**CATALOG DESCRIPTION:** This advanced course in cartography focuses on thematic map design. The objective is to produce a series of well-designed, professional grade maps (or an atlas) that students can use to build a cartographic portfolio. Theoretical concepts and principles will be introduced using practical examples and written assignments.

**LEARNING OUTCOMES**

Knowledge

1. Students will learn to create maps and develop an understanding of the cartographic production process
2. Students will learn techniques and representation methods for the display and analysis of spatial data
3. Students will demonstrate an understanding of the principles of professional cartographic design

Skills

1. Students will design and create a set of thematic maps at the level of a professional cartographer.
2. Students will utilize map design principles such as symbolization, contrast and balance, and the use of color to visualize spatial data.
3. Students will learn how to create a set of thematic maps in a team-based work setting.

The Department of Geography’s Learning Outcomes for all departmental programs may be reviewed at [https://gato-docs.its.txstate.edu/department-of-geography/student-learning-outcomes/learningoutcomes2020\\_2021.pdf](https://gato-docs.its.txstate.edu/department-of-geography/student-learning-outcomes/learningoutcomes2020_2021.pdf).

**PREREQUISITES:** GEO 3411 with a grade of “C” or higher, or equivalent introductory cartography course. 4411/5417 requires significant computer file management skills and the ability to work within a Windows computer environment without assistance. A basic knowledge of GIS is strongly recommended.

**COURSE DESCRIPTION AND STRUCTURE:** This course reflects on the theoretical principles of cartography, a discipline concerned with the making of maps. During the lectures, we will: a) learn about different types of thematic maps; b) emphasize concepts and principles of good cartographic design; c) learn the fundamentals of effective and efficient visual communication; d) study and implement the cartographic production process; e) learn to conduct group project work in a collaborative and diverse setting. Students in the course will utilize Adobe InDesign, Adobe Illustrator, and other geoinformation applications to create a set of professional-

grade maps. More specifically, students will work in small groups to produce a fully developed atlas on a topic of their choice. Graduate students taking this course as GEO 5417 may, under certain circumstances, work individually; if working in a group, graduate students will lead the group and will be responsible for the final report accompanying the atlas.

**COURSE POLICIES:** Students are **expected** to regularly attend all classes. Missing class will almost certainly result in a poor grade for the course. Student participation to class discussions is strongly encouraged and expected as is a courteous, respectful, and engaged class behavior. Please note that students missing the midterm will be given a make-up exam on the day of the final only, and only in exceptional and documented circumstances. Late work will only be graded if it is submitted within 5 days of the due date. Please note that each late day, including Saturdays and Sundays, will be subject to a 10% reduction in the final assignment grade. For example, an assignment that is due on Tuesday but is submitted on Sunday is five days late. Consequently, the final mark of the assignment will be reduced by 50%. Exception to this rule will be granted only in exceptional and documented circumstances.

## LAB POLICIES

All lab assignments will use computer software to reinforce concepts discussed in the lectures. Although lab time is provided for the completion of the assignments and the final project, students should expect to spend **additional time** working on these tasks outside of scheduled lab sessions. **This is especially true of the final project.** Lab instructors will be available to assist students during lab times, office hours, and additional appointments as needed

## GRADING

|                                |                                                                      |
|--------------------------------|----------------------------------------------------------------------|
| Midterm Exam:                  | 250 points                                                           |
| Final Project:                 | 550 points                                                           |
| <i>Proposal:</i>               | 25 points                                                            |
| <i>Progress report:</i>        | 25 points                                                            |
| <i>Peer-review assessment:</i> | 50 points (small groups option)                                      |
| <i>Atlas:</i>                  | 450 points (small groups option); 500 points for individual projects |
| Lab assignments:               | 200 points                                                           |
| <u>TOTAL</u>                   | <u>1000 points</u>                                                   |

Note: there is no final exam in this course

The final grade letter will be determined as follows:

- A = 900 – 1000 points
- B = 800 – 899 points
- C = 700 – 799 points
- D = 600 – 699 points
- F = less than 600 points

## UNIVERSITY POLICIES

- **ADA Statement:** Students with special needs (as documented by the Office of Disability Services) that will require compensatory arrangements must contact the instructor no later than the 4<sup>th</sup> class period to discuss specific arrangements and logistics. Students who have not already done so will be required to contact the Office of Student Disability Services located at LBJ 5-5.1 (512.245.3451). Texas State is dedicated to providing these students with necessary academic adjustments and auxiliary aids to facilitate their participation and performance in the classroom.
- **Academic Testing for Students with Disabilities:** The Academic Testing for Students with Disabilities office administers in-class academic exams and quizzes with approved testing accommodations for students who are registered with the Office of Disability Services (ODS) at Texas State University. The university has revised its policies for academic testing for students with disabilities. Please see <https://www.txstate.edu/temc/services/atstd.html> for up-to-date information.

- **Academic Honesty and Academic Integrity:** Honesty and integrity are essential university values. Please see the Code of Student Conduct at <http://www.dos.txstate.edu/handbook/rules/cosc.html> and the Honor Code at <http://www.txstate.edu/honorcodecouncil/Academic-Integrity.html> for definitions, policies, procedures, and sanctions.
- **The Bobcat Pledge:** Being part of our Bobcat community means we respect each other and commit to helping create a healthy and safe learning and working campus environment. Every student, faculty and staff member must take responsibility for practicing healthy behaviors and following the health and safety guidelines established by Texas State to prevent the spread of COVID-19 on campus and in the surrounding community. See also <https://www.txstate.edu/coronavirus/road-map/bobcat-pledge.html>.
- **Civility in the classroom:** Civility in the classroom is very important for the educational process and it is everyone's responsibility. If you have questions about appropriate behavior in a particular class, please address them with your instructor first. Disciplinary procedures may be implemented for refusing to follow an instructor's directive, refusing to leave the classroom, not following the university's requirement to wear a cloth face covering, not complying with social distancing or sneeze and cough etiquette, and refusing to implement other health and safety measures as required by the university. Additionally, the instructor, in consultation with the department chair/school director, may refer the student to the Office of the Dean of Students for further disciplinary review. Such reviews may result in consequences ranging from warnings to sanctions from the university. For more information regarding conduct in the classroom, please see AA/PPS 02.03.02, Section 03: Courteous and Civil Learning Environment at <https://policies.txstate.edu/division-policies/academic-affairs/02-03-02.html> and Code of Student Conduct, number II, Responsibilities of Students, Section 02.02: Conduct Prohibited at <https://studenthandbook.txstate.edu/rules-and-policies/code-of-student-conduct.html>.
- **Emergency Management:** In the event of an emergency, students, faculty, and staff should monitor the Safety and Emergency Communications web page at <https://safety.txstate.edu/>. This page will be updated with the latest information available to the university, in addition to providing links to information concerning safety resources and emergency procedures. Faculty, staff, and students are encouraged to sign up for the TXState Alert system.
- **The University Mission:** Texas State University is a doctoral-granting, student-centered institution dedicated to excellence and innovation in teaching, research, including creative expression, and service. See <https://universityplan2023.avpie.txstate.edu/overview/Texas-State-Mission--Goals--and-Initiatives-.html> for additional information.
- **Sexual Misconduct Reporting (SB 212):** Effective January 2, 2020, state law (SB 212) requires all university employees, acting in the course and scope of employment, who witness or receive information concerning an incident of sexual misconduct involving an enrolled student or employee to report all relevant information known about the incident to the university's Title IX Coordinator or Deputy Title IX coordinator. According to SB 212, employees who knowingly fail to report or knowingly file a false report shall be terminated in accordance with university policy and The Texas State University System Rules and Regulations. See also TSUS Sexual Misconduct Policy at <https://www.txstate.edu/oei/title-IX/TSUS-Sexual-Misconduct-Policy.html>.

## TENTATIVE COURSE OUTLINE – GENERAL DESCRIPTION OF SUBJECT MATTER

*NOTE: This outline is subject to modification. Students will be notified of any changes*

| <u>Date</u> | <u>Topic</u>                                                                                                               |
|-------------|----------------------------------------------------------------------------------------------------------------------------|
| January 19  | Lecture: Intro to the course; Group survey and Atlas proposal; History of cartography. <b><u>No lab this week</u></b>      |
| January 26  | Lecture: Basic cartographic design principles. Lab assignment 1                                                            |
| February 2  | Lecture: Cartographic projections. Lab assignment 2                                                                        |
| February 9  | Lecture: Atlases. Lab assignment 3                                                                                         |
| February 16 | Lecture: Bivariate and multivariate mapping and cartograms (part 1). Lab assignment 4                                      |
| February 23 | Lecture: Bivariate and multivariate mapping and cartograms (part 2).<br>Lab assignment 5. <b><u>Atlas proposal due</u></b> |
| March 2     | Lecture: Charts and diagrams. Lab assignment 6                                                                             |
| March 9     | Lecture: Color. Lab: Atlas work                                                                                            |
| March 16    | <b>Spring Break. No classes</b>                                                                                            |
| March 23    | Lecture: <b><u>Midterm exam</u></b> . Lab: Atlas work                                                                      |
| March 30    | Lecture: Typography and Lettering. Lab: Atlas work                                                                         |
| April 6     | Lecture: Book layout and printing. Lab: Atlas work. <b><u>Atlas progress report due</u></b>                                |
| April 13    | Lecture and lab: Atlas work                                                                                                |
| April 20    | Lecture: Course wrap-up and Atlas work. Lab: Atlas work                                                                    |
| April 27    | <b>Last day of class.</b> Lecture: Atlas project presentations and critiques. Lab: Atlas work                              |

### **FINAL PROJECT DUE:**

Final time period: Wednesday, May 3, 8:00 p.m. to 10:30 p.m.