College of Arts and Sciences

Department of Geography

GEOG 2200.01: Mapping Our World

Course schedule: MW 11:10AM - 12:30PM

Instructor: Huyen Le, Ph.D. (le.253@osu.edu)

Credit hours: 3.0

TA: Megan Lindstrom
(lindstrom.42@buckeyemail.osu.edu)

Class location: Derby Hall 140 (basement)

Office hours

With TA (1070 Derby Hall): 10-11 AM Mon & Wed or by appointment.

With instructor (1110 Derby Hall): 10:30 AM – 12PM Fri or by appointment

After Spring break

Class meeting: M 11:10 AM - 12:30 PM via Zoom

Office hours: MW 10-11 AM (TA) and F 10:30 AM – 12PM (Instructor) via Zoom

Table of Contents

Course description

Maps use a powerful language to show patterns that are not apparent in other data presentations. Corporations, government, media, and researchers use maps and geographic information technology to understand and visualize data on for example natural resources, flows of trade, historical events, property management, and diseases.

In this course, we will explore what makes spatial information special, how and why maps are such a powerful tool to understand an increasingly complex world, and how modern technology is currently transforming the art and science of map-making. In hands-on fieldwork, practical exercises and discussions, students will develop the knowledge, skills, and dispositions that constitute geographic information literacy. The main goal is to give students a geovisual literacy foundation (including spatial quantitative reasoning methodologies) so students can realize the value of geographic knowledge and develop their ability to analyze real-world, critical problems such as understanding international markets, demographic patterns, business locations, social and equity issues, transportation and infrastructure, natural disaster recovery and responses, and much more.

Upon successful completion of this course, students will be able to:

1. employ basic methods of spatial data-gathering, presentation, and interpretation;
2. interpret map symbology in order to analyze and critically evaluate the spatial structure of and relationships among spatial phenomena;
3. demonstrate familiarity with some basic concepts of descriptive and inferential statistics in order to understand some unique properties of spatial statistics;
4. apply statistical ideas to seek explanations for unusual or interesting patterns on maps;
5. evaluate the impact of spatial data sampling, uncertainty and scale on map use;

General education: data analysis

This course meets the requirements of the General Education category *Data Analysis*. The intent of the Data Analysis GE is to enable students to deal with problems of data gathering, presentation, and interpretation. Students should develop an understanding of problems of measurement, be able to deal critically with numerical and graphical arguments, gain an understanding of the impact of statistical ideas in daily life and specific areas of study, and recognize the uses and misuses of statistics and related quantitative arguments.

GE Goals for Data Analysis: Students develop skills in drawing conclusions and critically evaluating results based on data.

Expected Learning Outcomes: Students understand basic concepts of statistics and probability, comprehend methods needed to analyze and critically evaluate statistical arguments, and recognize the importance of statistical ideas.

This course meets these goals and objectives by exposing students to the problems of data gathering, presentation, and interpretation, in the context of spatial, statistical maps.

Textbooks

Required texts:

1. Monmonier, M (1996) *How to Lie with Maps*. Second edition. University of Chicago Press. *(3rd edition is fine)*.
2. Wheelan, C. (2013) *Naked Statistics: Stripping the Dread from the Data.* W. W. Norton & Company.

Other readings will be uploaded on Carmen Canvas.

Recommended texts:

3. Kimerling, A.J., Buckley A. R., Muehrcke, P.C., Muehrcke, J.O. (2016). *Map Use: Reading Analysis, Interpretation.* Eighth edition. ESRI Press.
4. Gimond, M (2019). *Introduction to GIS and Spatial Analysis*. Retrieved from https://mgimond.github.io/Spatial/index.html

I highly recommend you checking maps in news outlets including, but not limited to, the New York Times (with discounted student subscription), Washington Post, and Citylab.

Class schedule

An updated class schedule can be found here: Link to Google Docs.

Assignments, exams, and grading

The grading will be based on your attendance, assignments, a midterm exam and a term paper. A final grade for the class will be awarded for each student and will be comprised of the following:

Type	Percentage of final grade	Date
Participation and in-class discussion	6%	-
In-class presentation	5%	Varied by group
Assignments	52%	Check Carmen and schedule
Midterm exam	12%	Mar 4
Term paper	25%	Check Carmen

Attendance and in-class discussion (6%)

Class attendance is required and accounts for 6% of the total grade. Students are expected to read the assigned reading before class and prepare questions related to the readings. These questions will be used in the class discussion.

Absence from class is only accepted in special cases (e.g., health issues, university obligations, family emergencies, etc.); students are expected to email the instructor to notify his/her absence before the class session.

In-class presentation (5%)

Each group of 4-6 students will present one chapter from Monmonier (1996) or one chapter from Wheelan (2013). The rest of the class will provide comments and questions.

Assignments (52%)

You will have multiple lab assignments throughout the semester. You will work on the lab exercise then summarize the results in a short memo. Examples of memo and rubric are available on Carmen Canvas.

Assignments are submitted by 11:59 PM on the due date posted on Carmen Canvas (usually a week after the assigned date). Email submissions of assignments will not be accepted. Late submissions are subject to penalties of 5% per day (i.e., homework submitted between 12:05 AM to 11:59 PM of the next day will receive 95% of its points).

Midterm exam (12%)

This exam is open-book and takes place in the same classroom during the regular class time.

Term paper (25%)

You are expected to consult with me during the semester about the topic, data gathering, and analysis (5%) and submit a halftime progress report (5%). You will share a short recording of your presentation with your classmates (5%) and upload your final paper (10%) for grading on Carmen Canvas. Instruction for the term paper is posted on Carmen Canvas.

Final grades

A	A-	B+	B	B-	C+	C	C-	D+	D	E
≥93%	90-92%	87-89%	83-86%	80-82%	77-79%	73-76%	70-72%	67-69%	60-66%	<60%

Students may opt for P/NP grade. A total score of 60% or higher is required to pass this class.

Incomplete grade is available upon request (email or schedule a meeting with me to discuss this option). You have up to 10 weeks after the end of this semester to finish the assignments and papers that are due after the spring break.

Deadline extension

You have <u>one</u> opportunity to extend your deadline <u>for one day</u> during the semester (you will indicate it in your submission to get the full credit). This extension will be applied to an assignment of your choice or the final term paper. **I suggest that you use this opportunity wisely and reserve it for the end of the semester when the workload is unusually high.**

In case of emergencies or illness (physically or mentally) or other personal hardships that impede you from completing an assignment, please notify me before the deadline so that we can arrange a new submission time. Extension is granted on a case-by-case basis.

Course technology

We will use ArcGIS Online and Microsoft Excel for the labs and assignments. Mobile apps will be used for at least one assignment. Students who do not have access to a mobile device or their mobile devices are not compatible with the apps will be assigned an alternative task.

To acquire an organization account for ArcGIS Online, please follow the instruction file on Carmen Canvas. Excel is available on the Derby Hall lab computers.

For help with your password, university email, Carmen Canvas, Top Hat, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at https://ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** http://ocio.osu.edu/selfservice
- **Phone:** 614-688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** 614-688-8743

Class etiquette

Students may use computers and/or other electronic devices for notetaking and quizzes (through Top Hat). Other uses of computers and electronic devices during class are *strongly discouraged* to avoid distractions to other students.

Diversity

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Academic integrity

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understood the University's *Code of Student Conduct*, and that all students will complete all academic and

scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages (COAM Home)
- *Ten Suggestions for Preserving Academic Integrity (Ten Suggestions)*
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

Special accommodations

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 098 Baker Hall, 113 W. 12th Ave.; telephone 292-3307, TDD 292-0901; https://slds.osu.edu/

Mental health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities.

The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental

health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614- 292-5766. CCS is located on the 4th Floor of the Younkin Success Center and the 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24-hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273- TALK or at suicidepreventionlifeline.org.