Geography 572
Graphic Design in Cartography

Instructor
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Office Hours: Fridays (11:00am—1:00pm), or by appointment

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Lectures (444 Science Hall)
Wednesday/Friday 9:30–10:45am

Labs (380 Science Hall)
Section 301: Thursday 9:00–10:50am
Section 302: Thursday 11:00am–12:50pm

Course Overview

Geography 572 (G572) provides an in-depth examination of advanced themes and topics in **cartographic design**. G572 is an extension of the G370 course, but with a focus on cartographic design for the web rather than print and the intersection of cartographic design with graphic design, web design, and the digital humanities. Specifically, G572 integrates **theory** (new ways of critically examining cartography) and **practice** (cartographic implementation) emphasizing the design of web-delivered static maps, rather than the design of interfaces for manipulating these maps.

Learning Objectives

- *Critically examine* maps and mapping through transdisciplinary lenses by reading, writing, and actively discussing!

- *Translate* cartographic theory into cartographic practice through process, experimentation, critique, and feedback!
- *Enhance* your cartographic skillset through advanced cartographic techniques and technologies!
- *Create* an online web portfolio to show off your work!
- *Discover* your cartographic self and what mapping means to you!

Course Structure

Lecture Overview

The lecture component of the course explores the question **'How do maps work?'**. We will explore this question and map design through a variety of lenses, including: art, aesthetics, emotion, critical cartography, ethics, feminist theory, historical perspectives, visual storytelling, semiotics, visual perception and spatial cognition.
Each week during lecture, we will examine a particular lens or theme theoretically and in practice. *On Wednesdays*, we will think through and write about the assigned readings and actively discuss the topic's theoretical impact on cartographic design. I will fill in the missing pieces with structured lectures that will be posted online after class. *On Fridays*, we will put cartographic theory into practice with group activities and mapping exercises.

Lab Overview

The lab component (*Thursdays*) of the course teaches across the cartographic workflow for designing maps that 'work' on the web. Thus, the focus is not on a single technology or programming language, but rather effective navigation across a range of modern cartographic tools and techniques. Specifically, the four labs introduce strategies for integrating the ArcGIS Suite, Adobe Illustrator and Photoshop, Mapbox Studio, and responsive web design (HTML/CSS) to create elegant and intriguing map-based stories on the web. Following the series of lab assignments, you are required to design a **final project** map on a topic of your choosing. Creativity and ingenuity are strongly encouraged in the conceptualization and execution of the final project.

Course Requirements

The prerequisite for G572 is G370 (Introduction to Cartography); if you have taken a Cartography course on another campus, please meet with Meghan. Operational knowledge of ArcGIS and Adobe Illustrator is assumed; no experience with Photoshop, MapBox Studio, or web development is required.

Recommended Texts

I will post digital copies of assigned readings to our course's Canvas page. Hard copies of the primary texts used in our course will also be available on reserve in the Geography Library.

Recommended Software

ESRI ArcMap or QGIS, Adobe Illustrator & Photoshop Creative Cloud, and MapBox Studio (https://www.mapbox.com/mapbox-studio/). Contact Meghan for an ArcGIS 12-month Student License. A 12-month Adobe Creative Cloud student license available through DoIT for a student discount. Adobe also provides free 30-day trials.

Evaluation

Grade Weighting

Each evaluated item represents a percentage of the total course weight; final grades are assigned according the composite grade distribution of the course. Under university policy, final grades are assigned to graduate and undergraduate students using separate curves.

	Item	Weight	Description	Date(s)
Lecture	Free Writes	10%	Short, written reflections about assigned readings *completed in class*.	*Wednesdays*
	Objects	5%	Weekly map examples, graphics, articles, videos, etc. submitted online to curate discussion.	*Fridays*

	Activities	15%	Activities completed during lecture time, including short mapping exercises, group work, and class discussions.	*Throughout*
	Quizzes	10%	Activities completed during lecture time, including short mapping exercises, group work, and class discussions.	*4 Quizzes, Roughly Every Three Weeks*
Lab	Lab Assignments	40%	Four mapping assignments and progress check ins (5%).	*4 Labs, Throughout*
	Final Project	20%	Individual mapping project (proposal, critiques, check ins, and final map).	*Last three weeks of class*

Free Writes (10%)

Free Writes (10%): Each week, you will be assigned reading material (i.e. articles, blog posts, websites, videos, etc.) that directly relates to the cartographic theme of the week. In class, you will be asked to write a short reflection about the assigned readings and theme of the week. I will provide questions or prompts to get you thinking and writing. To receive full credit, come to class prepared having read or watched the assigned materials. Additionally, the free writes will encourage and help guide class discussion.

Grading: Free writes are meant to be low key and low stress. I am not looking for grand essays. Instead, I am looking for evidence that you've read and *attempted* to digest and apply the material. I will grade each submission on a *Check*, *Check +,* or *Check –* scale.

Check +	You have read the material and have provided engaging insight.
Check	You have read the material.
Check –	You have not read the material.
No Points	You were not in class and did not complete the free write.

Objects (5%)

Objects (5%): In this class, you will help curate course material by submitting map examples, graphics, articles, videos, or material related to the course. I will provide a prompt and you will submit a related object each week before class (usually Fridays). You will submit each object online to the course's Canvas discussion board. Come to class prepared to talk about your object!

Grading: All objects will be given full credit if they are submitted on time. You can not duplicate objects submitted by other students. As such, the sooner you submit, the better! Late submissions and lack of submission will result in no credit.

Lecture Activities (15%)

Lecture Activities (15%): Lecture activities take a variety of shapes, including class discussions of readings, critiques, peer feedback, group work, and mapping exercises. Fridays will be reserved for activities and will be generally held in Science Hall 380 (the lab room). The goal is to learn from each other and learn from "doing". In mapping exercises, for example, you will put cartographic themes from assigned readings, discussions, and my lectures to practice. Additionally, extra lab experience will benefit your skills development.

Grading: Lecture activities will be conducted during our assigned lecture time. As such, lecture activities are not assigned as additional lab homework. You will submit lecture activities at the end of each class online. I will grade each submission on a *Check*, *Check +,* or *Check –* scale.

Check +	You completed the requirements of the lecture activity and went above and beyond the requirements.
Check	You completed the requirements of the lecture activity.
Check –	You did not complete the requirements of the lecture activity.
No Points	You were not in class and did not complete the lecture activity.

Quizzes (10%)

Quizzes (10%): Quizzes will be completed in class and will be open note. There will be a total of 4 quizzes, roughly every three weeks. Quizzes will combine multiple choice, true/false, short answer, and short essays.

Grading: Each quiz will be worth 10 points.

Lab Assignments (40%)

Assignments (40%): Your ability to apply the mapping principles learned in lecture is evaluated through a series of four lab assignments. Each lab assignment relates to concepts and techniques introduced in lecture and builds on the last, meaning that you are responsible for properly applying previously learned mapping principles; a rubric is provided for each lab assignment to indicate how it is marked. All lab assignments must be uploaded to the course's online Canvas dropbox before the beginning of lab. In addition to each map produced in each lab, you will write and submit a brief reflection (1–2-pages submitted as a PDF) on your process as well as any discoveries and challenges faced in the lab exercise.

Five percent of your lab assignment grade will reflect progress check ins. Progress check ins are denoted on each lab assignment.

Grading: The penalty for a late lab assignment is **10%** of the total score per day late; submission of an assignment the day it is due, but after the deadline (e.g., following your lab that day), counts as one day late. Extensions will be discussed with Meghan and Pete on a needs-basis. Technical complications (e.g., computer errors, data issues) are not reasons for extension; be sure to back up copies of all of your work and version meticulously, as forgetting to save (or improperly saving over) your web map is the easiest way to lose your work and subsequently fall behind in the course. Plagiarism is not tolerated. As with other evaluated items, any offense results in a zero for the lab assignment and disclosure of the impropriety to the Department and University.

Final Project (20%)

Final Project (20%): The final project is the cornerstone of G572, affording you the opportunity to apply the theoretical and practical knowledge acquired throughout the course on a cartographic project of your choosing. It is never too early to begin thinking about your final project topic, and, once selected, to begin assembling the needed geographic information. It is recommended to select a topic that aligns closely with your area of study or a personal interest; your enthusiasm for the mapped topic is sure to shine through to the final map product.

Grading: Late final projects are not accepted; you must submit the current state of your project (however complete it is) at the deadline to avoid a zero for the deliverables. Group projects are not allowed. Plagiarism is not tolerated; final project topics are researched to ensure you did not directly copy an existing map. As with other evaluated items, any offense results in a zero for that activity and disclosure of the impropriety to the Department and University.

Accessibility and Inclusivity

Accessibility

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform Meghan of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. I will work either directly with the you or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.

Inclusivity

This is an inclusive classroom. As such, we embrace all students, including and especially: people of color, LGBTQIA people, non-citizen residents (of any status) and Native Americans, Muslims, Jews, and members of all other faiths, atheists & agnostics, women, disabled people, and disaffected people. We will actively work to ensure that everyone is welcome and is invited to share their perspectives. We will respect and support one another.

*This syllabus is subject to change.

Week	Dates	Theme / Lens	Assignments Due
Week 1	6-Sep	Welcome and Course Overview	Readings
	8-Sep	History of Cartography and the Map	Object
		Welcome to Lab and Lab # 0	*Lab # 0 Due*
Week 2	13-Sep	Visual Storytelling	Readings
	15-Sep	Lecture Activity	Object
		Assign Lab # 1: Visual Storytelling	
Week 3	20-Sep	Visual Storytelling in Data Journalism	Readings
	22-Sep	Lecture Activity	Object
		Lab # 1 Work Period	
Week 4	27-Sep	Perception	Readings
	29-Sep	Lecture Activity	Object
		Lab # 1 Work Period	
Week 5	4-Oct	Cognition and Semiotics	Readings
	6-Oct	Lecture Activity	Object
		Assign Lab # 2: Terrain Mapping	*Lab # 1 Due*
Week 6	11-Oct	Cognition and Terrain (No Lecture)	Readings
	13-Oct	Time and Space / Uncertainty (No Lecture)	Object and Activity
		Lab # 2 Work Period	
Week 7	18-Oct	Visual Aesthetics and Art	Readings
	20-Oct	Lecture Activity	Object
		Lab # 2 Work Period	
Week 8	25-Oct	Visual Aesthetics and Emotion	Readings
	27-Oct	Lecture Activity	Object
		Assign Lab # 3: Web Portfolio and Branding	*Lab # 2 Due*
Week 9	1-Nov	Persuasive Maps and Mapping	Readings
	3-Nov	Lecture Activity	Object
		Lab # 3 Work Period	
Week 10	8-Nov	Critical Cartography	Readings
	10-Nov	Lecture Activity	Object
		Lab # 3 Work Period	
Week 11	15-Nov	Feminist Cartography	Readings
	17-Nov	Lecture Activity	Object
		Assign Lab # 4: Aesthetics	*Lab # 3 Due*
Week 12	22-Nov	Ethics and Mapmaking	Readings
	24-Nov	Thanksgiving–No Lecture	
		Thanksgiving–No Lab	
Week 13	29-Nov	Final Project Proposal Workshop	Final Project Proposal Due
	1-Dec	Final Project Work Period*	
		Final Project Work Period	*Lab #4 Due*
Week 14	6-Dec	Final Project Work Period*	
	8-Dec	Final Project Critique (50% complete)	Critique (50% complete)
		Final Project Work Period	
Week 15	13-Dec	Presentations (80% complete)–Last day of class	Presentations (80% complete)
	14-Dec	Study Day–No Lab	
Exams		Final Project Due: ?	