Geography 183 – Cartographic Representation
Fall 2018 – Course Overview & Policies

Instructor: Dr. Alicia Cowart
alicia@berkeley.edu
Office: 515A McCone Hall
Office hours: Thurs 10:30am – 12:30pm
by appointment

Class Meetings:
Mon & Wed at 12:30pm – 3:30pm
CAGE Lab, 535 McCone Hall

The Course: This course is designed as an introduction to cartographic methods, design, interpretation, and history. Students will learn to map qualitative and quantitative data and master the basic principles of visual presentation of information and to prepare maps for publication. These goals will be accomplished through lectures and by learning the cartography industry's standard computer programs. Students will learn to interpret and critique thematic maps and learn map editing techniques. Students will also become familiar with the history of cartography and the political implications of mapping. This course will primarily focus on preparing static maps for print.

Grading: Grading for the course will be based on in-class and out-of-class assignments, a midterm exam, and a final project. See the Assignments & Grading Policies document for more information.

Texts: *Principles of Map Design* by Judith A. Tyner and *Designing Better Maps: A Guide for GIS Users* (1st or 2nd ed.) by Cynthia A. Brewer. Both books are relatively inexpensive and attainable online or at the bookstore. They are also on 2-hour reserve in the Earth Science & Map Library in the basement of McCone Hall. Additional readings will be provided on bCourses. Reading assignments are to be completed prior to class on the day they appear in the schedule and you are expected to be able to discuss the material in class.

Attendance: Lectures and computer labs are mandatory. Missing class lectures and computer labs will be detrimental to your learning and consequently your final grade. If you have physical or mental health issues that may interfere with your attendance or prompt arrival, please discuss these with the instructor BEFORE an attendance issue arises. There are organizations on campus that can help with communicating these concerns and the instructor can only be flexible if she knows an issue exists.

Tardiness: If you routinely arrive late to class, you will be asked to meet with the instructor. Continued tardiness will result in point loss for the course at the rate of 10 points per late arrival.

Enrollment: This class is offered every semester and fulfills the Geography Department's methodology requirement and is an elective for the GIS minor in the College of Natural Resources and College of Environmental Design.

Equipment: Each student is required to carry a portable data storage device or have reliable cloud storage for their work. Do not leave your work on workstation desktops—it will be deleted!

Software: The course primarily uses Adobe Illustrator CC 2018. As a UCB student, you are allowed one download of this software. Go to s.berkeley.edu. We will also use ArcGIS, QGIS, and AGOL. All software is provided on lab stations. If you're interested in a one-year student license of ArcGIS, email your request to the instructor (alicia@berkeley.edu). Note: The CAGE lab is currently running ArcGIS 10.6. If you use ArcGIS in another lab on campus that is running a newer version of the software, be sure to save your files as ArcGIS 10.6 so that they will open on our lab computers.

Lab Assistance: There will be several lab interns to assist students with computer assignments. The lab interns will each choose a two-hour session when they will be available every week. The interns' names and CAGE help hours will be posted on the CAGE Lab door and on bCourses. The instructor will also be available for lab help on a limited basis. Keep in mind that the instructor has other obligations within the Geography Department and is not available for lab help at all times that she is present in McCone Hall.

Cheating and Plagiarism: Cheating and Plagiarism will not be tolerated. While you should assist each other in problem solving and sharing information, it is a violation of the campus Student Conduct Policy to copy work or turn in another's work as your own. If you turn in another's work, you will automatically receive an F as your final grade for the course. If you knowingly give your work to another to turn in as their own, you will also automatically receive an F as your final grade for the course. If you inadvertently provide your work to another by leaving it on a computer desktop or otherwise allow access, you will receive zero points for the work in question.

A successful effort to deceive and thwart my digital forensics skills will require more work on your part than just doing the assignment.

CAGE Lab Rules

Lab Access: Students will be allowed access to the CAGE Lab using their Cal ID card. The lock mechanism on the CAGE Lab door has memory and logs entries. Students may also be issued a key to the building (McCone Hall). Your McCone Hall key must be turned in by the end of the semester. **Keys are due the last day of final presentations!**

To retain your lab access code beyond the end of the semester, see the instructor.

Food & Drink: No food or beverage is allowed in the CAGE Lab at any time. Spill-proof water bottles are allowed – to-go cups are not! Place your food/drink on the table outside the door while you are in the lab and take it with you when you leave!

Mobile devices: Keep them in your pocket, purse, or backpack with the sound turned off during class.

Hygiene: Always wash your hands prior to entering the lab to help keep the desks, computers, screens, keyboards, and mouses clean (yes, mouses – mice are animals). If you think you may have a cold, please wipe down the keyboard and mouse after you use it. All keyboards and mouses may be wiped with a small amount of windex. Let the interns take care of cleaning the computer screens.

Items not allowed in the cartography lab:

Food of any kind

Bicycles and watercraft

Guests without special permission

Audible music

Unauthorized software

Grading for the course will be based on in-class and out-of-class assignments, a midterm exam, and a final project (with multiple components). The breakdown of points is listed below.

The total number of points available in the class is 1,000.

- Assignments   525 points total
- Midterm   100 points
- Final Project   375 points total

Assignments	Points
In-class:	
ArcGIS Interface	25
Finding & Evaluating Data	25
Web Mapping	20
QGIS	20
Generalization	10
Out-of-class:	
Ai assignments (see below)	
Cognitive Map	25
Data Management in ArcGIS	50
Page Layout	50
Geospatial Tools	25
Adobe Illustrator (Ai) assignments:	
Ai-1	25
Ai-2	50
Ai-3	50
Ai-4	50
Ai-5	100
Final Project:	
Proposal	50
Draft I	50
Draft II	50
Text/Narrative	25
Final Map	200

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Because meeting deadlines is an essential component of learning and practicing our craft, deadlines are of paramount importance to your grade. Most assignments are due on the date stated in the course schedule at 12:30pm, unless otherwise noted.

- Late assignments will be marked down by 5 points per day late. Assignments turned in after the deadline on the same day will also have points deducted.
- If you are absent, it is your responsibility to make up missed work. If your absence causes you to miss a deadline, you must communicate a valid excuse to me prior to that deadline to avoid point deduction.
- Final projects and associated assignments may not be late.

If you have a disability that may interfere with your ability to turn in assignments on time, please communicate with me as soon as possible.

Cartographic Representation (Fall 2018)

Course Schedule

Day/Date	Lecture/Discussion	Activity/assignment	Reading Due	Assignments Due
Wed, Aug 22	Course Introduction			
Mon, Aug 27	What is a Map?	Cognitive Mapping / Intro to Ai / Ai-1	**Wood, Intro & Ch. 1** 📄; Tyner, Ch. 1	
Wed, Aug 29	History of Cartography	Ai-2	**Danzer, Ch. 2** 📄	Ai-1
Mon, Sep 3	HOLIDAY - NO CLASS			
Wed, Sep 5	Cognitive Map Presentations; Final Project Discussion	Bancroft Library Visit	**Solnit, Intro** 📄	Cognitive Map
Mon, Sep 10	AEMP Project Intro Modern Cartography & Computer Graphics	Ai-3	Brewer, p. 67-79 (1st ed: p. 30-37)	Ai-2
Wed, Sep 12	Lat/long; Projections; Scale	Projections Discussion; ArcGIS Interface	Tyner, Ch. 5 & 6	ArcGIS Interface (in class)
Mon, Sep 17	Cartographic Conventions & Generalization		Tyner, Ch. 7; **Monmonier, Ch. 3** 📄	Generalization (in class)
Wed, Sep 19	Geographic Data & Symbolization	Spatial Data & Data Management in ArcGIS	Tyner, Ch. 8 & 9	Ai-3
Mon, Sep 24	Guest: Susan Powell - Finding Data & Map Library Tour	Finding & Evaluating Data		Finding & Evaluating Data (in class)
Wed, Sep 26	Text & Typography	Ai-4	Brewer, Ch. 5 & 6 (1st Ed: Ch. 2 & 3)	Data Management
Mon, Oct 1	Color Theory & Printing	Ai-5 Part I	Brewer, Ch. 7 & 8 (1st Ed: Ch. 4 & 5)	

Day/Date	Lecture/Discussion	Activity/assignment	Reading Due	Assignments Due
Wed, Oct 3	Page Layout & Design	Page Layout	Brewer, p. 1 - 16 (1st ed: p. 3-17, 20-29)	Ai-4
Mon, Oct 8	Final Project Proposals	Presentations; Open Lab: Page Layout & Ai-5		Final Project Proposals
Wed, Oct 10	Guest - Susan Powell: Constructing a Data Model	Geospatial Tools		Ai-5 Part I
Mon, Oct 15	Mapping Technology and Web Cartography	Web Mapping	**Muehlenhaus, Intro** 📄	Page Layout; Web Mapping (in class)
Wed, Oct 17	Mapping with FOSS	FOSS exploration; QGIS		Geospatial Tools; QGIS (in class)
Mon, Oct 22	Midterm Review	Open Lab: Final Projects		
Wed, Oct 24	**Midterm**	Open Lab: Final Projects		
Mon, Oct 29	Final Projects	Ai-5 Part II		
Wed, Oct 31	Final Projects	Open Lab: Final Projects		
Mon, Nov 5	Draft I Presentations	Draft I Peer Review		Draft I
Wed, Nov 7	Final Projects	Open Lab: Final Projects		Ai-5 Part II
Mon, Nov 12	HOLIDAY - NO CLASS			
Wed, Nov 14	Map Text / Narrative Discussion	Open Lab: Final Projects		Map Text / Narrative
Mon, Nov 19	Final Projects	Open Lab: Final Projects		
Wed, Nov 21	NO CLASS			
Mon, Nov 26	Draft II Peer Review	Peer Review of Draft II / Course evals		Draft II (due at 10am)
Wed, Nov 28	Draft II Instructor Review; Final Project Edits	Open Lab: Final Projects		
Mon, Dec 3 (RRR week)	No Class Meeting	Printing		Final Project
Wed, Dec 5 (RRR week)	**Final Project Presentations**			Presentation