GEO 426 Thematic Cartography

raechelportelli.github.io/cart2/geo426.html

Instructor Raechel Portelli, PhD

Lecture MW Mon: 12:45 PM - 2:45 PM Snyder Phillips Snyder Hall C301

Lab: Online, open lab GEO 219

This course serves as an introduction to web mapping and user-centered design for geospatial web-based applications. Students will be introduced to common web languages, HTML, CSS, and JavaScript as well as specific geospatial libraries for generating online geospatial visualizations. <u>Students are expected to have some programming experience prior to this class</u>.

Note, while there is a scheduled lab time, your assignments do not require you to physically be in the GEO building. You should plan on completing your assignments on your own laptop instead of lab computers.

Class Textbook: None. All assigned readings will be available online through the library or popular media.

Class software: Please make sure you have a text editor or code editor that you can use. Examples of these include: <u>Notepad++</u>, <u>SublimeText</u>, or <u>Visual Studio Code</u>. I will be using Visual Studio Code throughout the class.

You will also need to have a GitHub account.

Grades: Final grade will be based on the following

Final Project (Consecutive labs):	40%
Final Exam:	40%
User-Study Project:	20%

Final Grade Scale

91 to 100%	4.0
86 to 90%	3.5
81 to 85%	3.0
75 to 80%	2.5
70 to 74%	2.0
61 to 69%	1.5
50 to 60%	1.0

Less than 50% 0.0

Attendance Policy Following the MSU official attendance policy, no person is allowed to attend a class unless officially enrolled on a credit or non-credit basis with the appropriate fees paid. Students may be dropped from a course for non-attendance by a Dean's Drop after the fourth class period, or the fifth class day of the semester, whichever occurs first. See: https://reg.msu.edu/ROInfo/Notices/Attendance.aspx

Academic Honesty

From <u>Academic Integrity: MSU Policies, Regulations and Ordinances Regarding Academic Honesty and Integrity</u> (Michigan State University's Office of the Ombudsperson, Faculty FAQ, 2016):

<u>Article 2.III.B.2</u> of the SRR states: "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the Department of Geography, Environment, & Spatial Sciences adheres to the policies on academic honesty specified in General Student Regulation 1.0, <u>Protection of Scholarship and Grades</u>; the all-University Policy on <u>Integrity of Scholarship and Grades</u>; and <u>Ordinance 17.00</u>, Examinations.

Therefore, unless authorized by your instructor, the following are considered academic misconduct: falsification/fabrication, cheating, and sharing work. Specific examples of academic misconduct include, but are not limited to

- submitting forged or fraudulent excuses (written documents or otherwise) for an absence or missed due date(s),
- collaborating with another student on an assessment or using outside sources other than your own notes and textbook to complete a quiz or exam,
- using a copy of a current or past quiz or exam to aid in preparing for or completing your current quiz or exam, and
- providing a copy of course materials of any type to another student or making them available to other students on a website (or elsewhere).

Students who violate MSU regulations on Protection of Scholarship and Grades and engage in any type of academic misconduct will receive a failing grade in the course or on the assessment(s).

Faculty are required to report all instances in which a penalty grade is given for academic dishonesty. Students reported for academic dishonesty are required to take a course on the integrity of scholarship and grades and a hold will be placed on the student's account until such time as the student completes the course. This course is overseen by the Associate Provost for Undergraduate Education.

WK	LECTURE TOPIC	Lab	
1	Cartography Principles Review	Introduction to Github	
2	No Class Monday MLK Day History of Web Cartography	Introduction to HTML	
3	Introduction to WebMapping Concepts	Introduction to JS	
4	Web Mapping Tools	Introduction to Final Project	
5	User-Centered Design Concepts	Project	
6	User and Usability Research	Brief/Project Proposal	
7	Data Resources and Data Wrangling	User- Research	
8	Visual Design in Web Mapping	Experiment/Surv ey Design	
9	Interactivity in Web Mapping	Data Wrangling	
10	No Class Spring Break 3/7-3/11	-	
11	Human-Computer Interaction Perspective	Mapbox	
12	Geovisual Analytics	D3.JS	
13	Advanced Web Mapping Concepts	Final Project Work	
14	Current Trends in Cartographic Science		
15	Critical Cartography		
16	No Class Final Prep Week	User- Study Implementation	
17	Final Exam May 2, 2022 12:45PM-2:45PM Snyder Hall C301*	-	