Map Design

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Course Description

Map design, layout, and usability. Typography and color theory. Techniques of map production, print and digital display.

Instructional Objectives

1. Know the principles of well-designed maps for various output media.
2. Articulate the value of graphics, including maps, to communicate information.
3. Use mapping and graphics software to create original maps that follow established cartographic design principles.

Required Texts None

Grading Criteria

Labs	50%
In-class Activities	20%
Final Project	30%

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

Final Exam Dec. 16, 2021 12:45 - 2:45 PM

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

Article 2.III.B.2 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, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, 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.

2021 Tentative Course Schedule

WK	Topic
1	Introduction
2	The Map
3	Basic Design Principles
4	The Visual Variables
5	Type
6	Projections
7	Scale and Generalization *No Lecture on Oct. 14*
8	Introduction to Programming for Geovisualization
9	(1) Map Types
10	Choropleth Maps
11	Proportional Symbol & Graduated Symbol Maps
12	Specialty Maps
13	(2) Iso-Maps
14	Ethics and Lying with Maps *No Lecture on Dec. 2*
15	Carto and GIS Careers
16	Finals Week- No class

Breaks to be aware of:

(1) Monday, 10/25 - Tuesday, 10/26

(2) Thursday, 11/25 - Friday, 11/26

A critical component of any geospatial technology course involves the acquisition of workforce skills. Selection, management, analysis, and display of geospatial information are all parts of the trade. This series of labs introduces a number of these skills that are integral to the cartographic workflow.

WK	Name	Duration
1	No Lab	-
2	Getting Started with ArcGIS Online	End of class
3	Getting Started with ArcPro	End of class
4	Cartographic Creations in ArcPro	One week
5	Georeferencing Historical Maps	End of Class
6	Geospatial Data Submission Form https://forms.gle/nYSvViMSVBTLTfJm9	One week
7	Projections Submission Form https://forms.gle/HKRY29HMfvRTRSZF6	One week
8	Final Project Assigned in Lecture/Lab	12/6/2021
9	Quantitative Map Symbology Submission Form https://forms.gle/4517kCK87S7GUujy7	One week
10	No Lab- Short week by MSU	-
11	Visualization with Mapbox	One week
12	Visualization in Python	One week
13	No Lab- Short week by MSU	-
14	Catch Up on Final Project	-
15	Finish your Final Projects	