

Map Design

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Office Hours Online by arrangement

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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 | 1. Getting Started with ArcGIS Online | End of class |
| 3 | 2. Getting Started with ArcPro | End of class |
| 4 | 3. Cartographic Creations in ArcPro | One week |
| 5 | 4. Georeferencing Historical Maps | End of Class |
| 6 | 5. Geospatial Data Submission Form https://forms.gle/nYSvViMSVBTLTfJm9 | One week |
| 7 | Final Project Assignment | NA |
| 8 | 6. Projections Submission Form https://forms.gle/HKRY29HMfvRTRSZF6 | One week |
| 9 | No lab short week at MSU | - |
| 10 | 7. Quantitative Map Symbology Submission Form https://forms.gle/4517kCK87S7GUujy7 | One week |
| 11 | 8. Adobe Illustrator for Cartography Submission Form: https://forms.gle/vEWD72SQU6AcJNaj6 | One week |
| 12 | 9. Mapbox Submission Form: https://forms.gle/WVjhRpG4ik9nvs7a6 | One week |
| 13 | No Lab- Short week by MSU | - |
| 14 | Catch Up on Final Project | - |
| 15 | Finish your Final Projects | |