

Map Our Changing World (CM)

GEOG - 1800 001

Course Description

Social and environmental changes are occurring at alarming rates. Geographic data and mapping technology has revolutionized how we identify, quantify, analyze, interpret, and communicate change. Applying mapping technology has become an essential decision-making skill set in visualizing data, understanding and explaining complex situations, and communicating shared meaning.

Semester: All

Course Student Learning Outcomes

- Apply the use of geographic data, geographic inquiry, mapping technology, and other geographic representations and technologies to create, construct, analyze, and communicate information.
- Identify how geographic inquiry can be used to communicate shared meaning using cartographic principles within the discipline.
- Analyze how mapping technology is used to communicate spatial information visually and with other multimodal technologies such as web-maps, mobile apps, and story maps.
- Analyze the complexities and challenges of communicating uncertainty in geographic data.
- Determine how implicit and explicit biases and assumptions occur when communicating geographic data and information.
- Evaluate how mapping technology is used to compare, interpret, analyze, and communicate physical or cultural environments using cartographic principles, geographic inquiry, and scientific reasoning.

- Explain how critical cartography theory critiques how mapping technology has been used to maintain social, economic, and geopolitical power structures.
- Analyze the spatial organization of people, places, and environments on Earth's surface.

Course Prerequisites

None

General Education Information

CM

This course fulfills the above requirement for the General Education Program at Salt Lake Community College. It is designed not only to teach the information and skills required by the discipline, but also to develop vital workplace skills and to teach strategies and skills that can be used for life-long learning.

General Education courses teach basic skills as well as broaden a student's knowledge of a wide range of subjects. Education is much more than the acquisition of facts; it is being able to use information in meaningful ways in order to enrich one's life.

While the subject of each course is important and useful, we become truly educated through making connections of such varied information with the different methods of organizing human experience that are practiced by different disciplines. Therefore, this course, when combined with other General Education courses, will enable you to develop broader perspectives and deeper understandings of your community and the world, as well as challenge previously held assumptions about the world and its inhabitants.

Required Text or Materials

Title: Introduction to Geospatial Technologies

ISBN: 1319249515

Authors: Bradley A. Shellito

Publisher: W. H. Freeman

Edition: 5th or 6th

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Help Forum: Cartographic Principles	Discussion	0
	Help Forum: Connecting Data to the Map	Discussion	0
	Help Forum: Earth Observing Systems	Discussion	0
	Help Forum: Geospatial Data and GIS	Discussion	0
	Help Forum: Global Positioning Systems	Discussion	0
	Help Forum: Imagery from Space	Discussion	0
	Help Forum: Imagery of Earth	Discussion	0
	Help Forum: Introduction to Geospatial Technology	Discussion	0
	Help Forum: Location Apps	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
	Help Forum: Remote Sensing of Earth	Discussion	0
	Help Forum: Spatial Analysis	Discussion	0
	Help Forum: Spatially Representing Earth	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
8/29/25	1.1 Assignment ArcGIS Online Accounts	Assignment	5
9/5/25	1.2 Assignment ArcGIS Online Basics	Assignment	20
9/5/25	1.3 Assignment Get Information from a GIS Map	Assignment	20
9/5/25	1.4 Quiz It's a Geospatial World Out There	Quiz	10
9/12/25	2.1 Assignment Explore an Interactive Map	Assignment	5
9/12/25	2.2 Assignment Explore an Interactive App	Assignment	5
9/12/25	2.3 Assignment Explore a 3D App	Assignment	5

Due Date	Assignment Name	Assignment Type	Points
9/12/25	2.4 Assignment Explore Arcade Expressions in a Web Map	Assignment	5
9/12/25	2.5 Assignment Explore Paris with ArcGIS Online	Assignment	5
9/12/25	2.6 Quiz Where in the Geospatial World Are You?	Quiz	10
9/19/25	4.1: Finding Your Location with GPS	Quiz	10
9/19/25	4.2 Oversee Snowplows in Real-Time	Assignment	10
9/19/25	4.3 Location Privacy	Discussion	15
9/26/25	Exam 1	Quiz	50
10/3/25	5.1 Assignment Access and Prepare Data for Mapping	Assignment	5
10/3/25	5.2 Assignment Map and Analyze Food Access	Assignment	10
10/3/25	5.3 Assignment Monitor Malaria Epidemics	Assignment	10
10/3/25	5.4 Assignment Mapping Hurricanes	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
10/3/25	5.5 Assignment Manage Data	Assignment	10
10/3/25	5.6 Quiz Geospatial Data and GIS	Quiz	10
10/10/25	3.1 Assignment The Power of Maps	Assignment	10
10/10/25	3.2 Assignment Make a Map of China	Assignment	10
10/10/25	3.3 Assignment Map the Highest Mountain	Assignment	10
10/10/25	3.4 Assignment Convert a List of Historic Places into a Map	Assignment	10
10/10/25	3.5 Quiz Getting Your Data to Match the Map	Quiz	8
10/17/25	6.1 Assignment Solve a Spatial Problem	Assignment	5
10/17/25	6.3 Assignment Map a Historic Cholera Outbreak	Assignment	5
10/17/25	6.4 Assignment Visualize Inequity in Toxic Exposure Risk	Assignment	10
10/24/25	6.5 Assignment Investigate and Share Election Results	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
10/24/25	6.6 Assignment Map Voter Data to Plan Your Campaign	Assignment	25
10/24/25	6.7 Quiz Using GIS for Spatial Analysis	Quiz	10
11/1/25	7.1 Assignment Symbolize by Size	Assignment	5
11/1/25	7.2 Assignment Create a Policy Map to Address Health Conditions	Assignment	10
11/1/25	7.3 Assignment Map and Chart Data	Assignment	15
11/1/25	7.4 Quiz Using GIS to Make a Map	Quiz	10
11/7/25	8.1: Getting There Quicker with Geospatial Technology	Quiz	10
11/7/25	8.3 Assignment Reveal Lake Shrinkage Due to Severe Drought	Assignment	10
11/7/25	8.4: Location-Based Tracking and Digital Privacy	Discussion	10
11/14/25	Exam 2	Quiz	50
11/21/25	10.1: How Remote Sensing Works	Quiz	10

Due Date	Assignment Name	Assignment Type	Points
11/21/25	9.1: Remotely Sensed Images from Above	Quiz	10
11/21/25	9.2: Image Interpretation	Quiz	30
12/5/25	11.1: Images from Space	Quiz	10
12/5/25	11.2: Getting Started with Imagery	Assignment	10
12/12/25	12.1: Earth's Climate and Environment from Space	Quiz	10
12/12/25	12.4: Visualizing Fire Damage	Assignment	10
12/12/25	12.5: Monitoring Fracking	Assignment	10
12/12/25	12.6: Assessing Hurricane Maria Damage	Assignment	10
12/15/25	Exam 3	Quiz	50

Brief Description of Assignments/Exams

Chapter Quizzes (Weighted 20 percent of total points)

The chapter quizzes will assess your understanding of the textbook chapters. The quizzes are composed of multiple-choice and multiple-answer questions. You will have 30 minutes to complete the 10-question quiz. You will also be allowed to take it twice, with the higher of the two quizzes counting for your score.

Total | 10 points per quiz

Assignments and Signature Assignment (Weighted 30 percent of total points)

Each assignment is designed to analyze physical and cultural environments' spatial and temporal patterns. Some of the activities will use the new [Google Earth](#) to an external site.; other assignments will have you using a web-based geographic information system called [ArcGIS Online](#). The assignments need to be timed and in quiz form for you to submit your answers easily.

NOTE: You will not need to purchase a license to ArcGIS Online. Rather, you will be provided with a username and password to access the software.

Total | Will vary based on the length and difficulty

Discussions (Weighted 15 percent of total points)

There will be multiple discussions throughout the course on a variety of current events related to geospatial technology. The discussion forums will be based on the material provided by the instructor.

For each discussion, you will need to respond to a few prompts based on the journal or video provided in the activity. After your primary post, you will need to respond to two peers in the class. Please make sure your posts and replies are authentic and respectful to others.

Total | 20 points per discussion

Exams (Weighted 30 percent of total points)

A total of three (3) exams will be given for the course. The exams will consist of fifty randomly selected questions. You will have seventy-five minutes to complete the exam and be allowed to take the exam twice. The higher of the two scores will count for your score. Those exams will be completed within Canvas.

Total | 100 points per exam

Grading Scale

A	100 - 94 percent
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A-	93 - 90 percent
B+	89 - 87 percent
B	86 - 84 percent
B-	83 - 80 percent
C+	79 - 77 percent
C	76 - 74 percent
C-	73 - 70 percent
D+	69 - 67 percent
D	66 - 64 percent
D-	63 - 60 percent
E	59 percent or lower

How to Navigate to Canvas

Online Tutoring

Students at SLCC have access to online tutoring through Canvas. From your Canvas course click Online Tutoring in the course navigation and follow the steps to set up an appointment. If this is your first time using the Online Tutoring we recommend you click "Take a Tour" to familiarize yourself with the service.

Note that students only receive 480 minutes of tutoring time each semester. After that we encourage you to use the resources found through this link:

<https://www.slcc.edu/tutoring/index.aspx>

If you have any additional questions reach out to elarningsupport@slcc.edu.

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements.

By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the [Institutional Syllabus](#) page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)