Official Course Description
Introduces mapping technologies and digital spatial data for solving geographical problems that focus on how to collect, manage, analyze, and communicate diverse spatial data. Topics include geographic information systems (GIS), remote sensing, spatial statistics, geovisualization, cartography, and web mapping.

Course Objectives
The goal of this course is to introduce the wide array of digital mapping and geospatial tools and technologies used in geography and other fields, which increasingly underpin contemporary digital society. Together, we will examine the use of geospatial data and technologies – including geographic information systems (GIS), remote sensing, and cartography – in everyday life with emphasis on their implications for social, economic, and environmental change.

Key application areas – including disaster management, autonomous vehicles, and precision agriculture – will be explored to both to help our thinking about how the tools of digital mapping represent the world, and also to bring into question those representations. This aspect of the course will also encourage you to consider the wider implications of these technologies, particularly ethical considerations related to privacy, surveillance and data ownership.

Course Learning Outcomes
The Department of Geography is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes to which they contribute, and the expected level of achievement.
Course Learning Outcomes

<table>
<thead>
<tr>
<th>Course Learning Outcomes</th>
<th>PLO(s)*</th>
<th>Level(s)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider how maps represent, create, and recreate places and spaces</td>
<td>1, 2</td>
<td>1</td>
</tr>
<tr>
<td>Describe how knowledge is produced through geospatial technologies and practices</td>
<td>1, 2</td>
<td>1</td>
</tr>
<tr>
<td>Describe geospatial technologies and practices</td>
<td>4, 5, 6</td>
<td>1</td>
</tr>
<tr>
<td>Recognize geospatial-related applications</td>
<td>4, 6</td>
<td>1</td>
</tr>
<tr>
<td>Apply industry standard software to perform basic mapping tasks</td>
<td>3, 6</td>
<td>1</td>
</tr>
<tr>
<td>Generate an applied mapping project</td>
<td>6, 7, 8</td>
<td>1</td>
</tr>
</tbody>
</table>

*PLOs = Program Learning Outcomes: 1 = reflect and communicate diverse human-environment perspectives, 2 = identify and explain human-environment processes, 3 = implement sampling, data collection, analyses and communication methods, 4 = analyze spatial and temporal aspects of human-environment systems, 5 = employ knowledge, arguments, and methodologies for solving human-environment problems, 6 = evaluate geospatial data and manipulate it to create cartographic products, 7 = communicate geographic concepts using oral, written, graphic, and cartographic modes, and 8 = demonstrate literacy skills.

**Levels: 1 = Introductory, 2 = Intermediate, and 3 = Advanced.

Prerequisites: No prerequisites required.

Learning Resources

There is no textbook for this course. Instead, a take home task will be assigned weekly, and can include readings, videos, news, and challenges. They will be introduced in lecture and posted on D2L. Please complete the weekly task, as they are developed to achieve the learning goals in this course, and will be tested throughout.

Grading (Weighting)*

- Tutorial (5 @ 6% each) 30%
- Weekly Online & In-Class Engagement 22%
- Term test 1 14%
- Term test 2 14%
- Final project: Storymap Proposal 5%
- Final project 15%

*See course schedule for details and due dates.

Notes: It is not essentially to pass each course component in order to pass the course.

There is not final exam for this course.

Policy on Late Assignments

All assignments will be submitted through D2L and, as a result, will be automatically time stamped. An assignment is considered late if the time stamp is later than the published due date/time indicated with the assignment. Assignments that are received within 1 minute to 24 hours of the due date will be assessed a 10% penalty. This means if your assignment receives a grade of 78% it will be entered as 68% (78 - 10= 68) on the grade sheet. If it is received between 24 and 48 hours it will be assessed a 20% penalty. If the assignment is received greater than 48 hours from the due date it will be assessed a penalty of 30%, and so forth.

Policy regarding rounding of final grades

In an effort to be fair to all students in the class, your individual grade will not be rounded up, regardless of how close you are to a grade break. In short, the final grade breaks are hard breaks. This policy minimizes ambiguity and ensures the grading is as fair and clear as possible.
Grading System
This course adopts the official grading scheme of the university (see F.1.1 Undergraduate Grading System in the University Calendar):

<table>
<thead>
<tr>
<th>Letter grade</th>
<th>%</th>
<th>GPA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>96-100</td>
<td>4.00</td>
<td>Outstanding performance</td>
</tr>
<tr>
<td>A</td>
<td>90-95</td>
<td>4.00</td>
<td>Excellent performance</td>
</tr>
<tr>
<td>A-</td>
<td>86-89</td>
<td>3.70</td>
<td>Approaching excellent performance</td>
</tr>
<tr>
<td>B+</td>
<td>81-85</td>
<td>3.30</td>
<td>Exceeding good performance</td>
</tr>
<tr>
<td>B</td>
<td>77-80</td>
<td>3.00</td>
<td>Good performance</td>
</tr>
<tr>
<td>B-</td>
<td>71-76</td>
<td>2.70</td>
<td>Approaching good performance</td>
</tr>
<tr>
<td>C+</td>
<td>65-70</td>
<td>2.30</td>
<td>Exceeding satisfactory performance</td>
</tr>
<tr>
<td>C</td>
<td>62-64</td>
<td>2.00</td>
<td>Satisfactory performance</td>
</tr>
<tr>
<td>C-</td>
<td>59-61</td>
<td>1.70</td>
<td>Approaching satisfactory performance</td>
</tr>
<tr>
<td>D+</td>
<td>55-58</td>
<td>1.30</td>
<td>Marginal pass. Insufficient preparation for subsequent courses in the same subject</td>
</tr>
<tr>
<td>D</td>
<td>50-54</td>
<td>1.00</td>
<td>Minimal Pass. Insufficient preparation for subsequent courses in the same subject.</td>
</tr>
<tr>
<td>F</td>
<td>0-49</td>
<td>0.00</td>
<td>Failure. Did not meet course requirements</td>
</tr>
</tbody>
</table>

Supplementary Fees
No supplementary fee has been assessed for this course.

For additional detailed course information posted by the instructor, visit the course Desire2Learn page online at https://d2l.ucalgary.ca/d2l/home.

SUPPLEMENTAL INFORMATION

Principles of Conduct
The University Calendar includes a statement on the principles of conduct expected of all members of the university community (including students, faculty, administrators, any category of staff, practicum supervisors, and volunteers), whether on or off university property. This statement applies in all situations where members of the university community are acting in their university capacities. All members of the university community have a responsibility to familiarize themselves with the principles of conduct statement, which is available at: www.ucalgary.ca/pubs/calendar/current/k.html.

Plagiarism, Cheating, and Student Misconduct
The University of Calgary is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect.

Academic dishonesty is not an acceptable activity at the University of Calgary, and students are strongly advised to read the Student Misconduct section in the University Calendar at: www.ucalgary.ca/pubs/calendar/current/k-3.html. Often, students are unaware of what constitutes academic dishonesty or plagiarism. The most common are (1) presenting another student’s work as your own, (2) presenting an author’s work or ideas as your own without adequate citation, and (3) using work completed for another course. Such activities will not be tolerated in this course, and students suspected of academic misconduct will be dealt with according to the procedures outlined in the calendar at: www.ucalgary.ca/pubs/calendar/current/k-5.html.
Instructor Intellectual Property

Freedom of Information and Protection of Privacy
Freedom of Information and Protection of Privacy (FOIP) legislation in Alberta disallows the practice of having students retrieve assignments from a public place, such as outside an instructor’s office, the department office, etc. Term assignments will be returned to students individually, during class or during the instructor’s office hours; if students are unable to pick up their assignments from the instructor, they must provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

Human subjects
Not applicable.

Internet and electronic communication device information
There are not restrictions on the use of laptops and tablets in class if they are used to take notes or find information relevant to the class, and if there is no disturbance or distraction of other students or the instructor. Phones must be turned off during class, unless you have previously identified yourself to the instructor as a health care or law enforcement professional.

Posting of Grades and Picking-up of Assignments
Graded assignments will be returned by the instructor or teaching assistant personally during scheduled lecture or laboratory periods, unless they are made available electronically through the course D2L webpage. Grades and assignments will not be available at the Department of Geography’s main office.

Academic Accommodations
It is the student’s responsibility to request academic accommodations, according to the university policies and procedures listed in the University Calendar.

The student accommodation policy can be found at: www.ucalgary.ca/access/accommodations/policy. Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf.

Students needing an accommodation based on a protected ground other than disability should communicate this need, preferably in writing to their instructor or the Department Head (email: david.goldblum@ucalgary.ca).

Documentation for Absences or Missed Course Assessments
Students who are absent from class assessments (tests, participation activities, or other assignments) should inform the instructor as soon as possible. Instructors may request that evidence in the form of documentation be provided. If the reason provided for the absence is acceptable, instructors may decide that any arrangements made can take forms other than make-up tests or assignments. For example, the weight of a missed grade may be added to another assignment or test. For information on possible forms of documentation, including statutory declarations, please see https://www.ucalgary.ca/pubs/calendar/current/m-1.html
Copyright Legislation
All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplines under the Non-Academic Misconduct Act.

Wellness and Mental Health Resources
The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness, and academic success and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support, or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, https://www.ucalgary.ca/wellnesscentre/services/mental-health-services) and the Campus Mental Health Strategy website (http://www.ucalgary.ca/mentalhealth/).

Contact Information for Student and Faculty Representation
- Student Union VP Academic 403-220-3911, suvpaca@ucalgary.ca
- Students Union Representatives for the Faculty of Arts – 403-220-3913, arts1@su.ucalgary.ca, arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca
- Student Ombuds Office information can be found at: www.ucalgary.ca/ombuds/

Campus Safewalk
Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day, to any location on Campus, including the LRT station, parking lots, bus zones, and university residences. Contact Campus Security at 220-5333 or use a help phone, and Safewalkers or a Campus Security officer will accompany you to your campus destination.